



Regaining your quality of life: **STEP BY STEP** Knee Replacement

Patient's Name:

File number:

- ☐ We recommend that you begin reading this document as soon as possible.
- ☐ Prepare for each scheduled appointment by reading the appropriate section and completing the related tasks.
- ☐ Periodically review this document before, during and after your hospital stay.
- ☐ Bring this document with you at every appointment with a health care professional or health care team.

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YOUR PROGRAM AND GENERAL INSTRUCTIONS

Pre-Admission

Date: _____ Time of scheduled appointment: _____

Where to go: 4th floor, Wing "C", Hôpital de Hull, CISSS de l'Outaouais

Stop using the following medications before your surgery:

- ☐ Stop using oral contraceptives 4 weeks before surgery.
- ☐ Stop taking any supplements not prescribed by your physician and any natural products at least 21 days before surgery. You can, however, continue to take your multivitamins.
- ☐ Stop taking Coumadin _____ days before your surgery, and take _____
- ☐ Stop taking Plavix _____ days before your surgery, and take _____

Take the following medications on the morning of your surgery:

- ☐ With a sip of water, take **the following medications** which were authorized at the pre-admission visit: _____

Surgery:

Date: _____ Time of arrival: _____

Where to go: 4th floor, Wing "C", Hôpital de Hull, CISSS de l'Outaouais

If you are unable to be present on the determined day, please notify the reception staff or the surgical planning staff at 819 966-6064 AS SOON AS POSSIBLE.

Hospital discharge: Expected date: _____ Time of departure: 2 h after the announcement

Get staples removed on: _____

Stop taking anticoagulants on: _____

Outpatient physiotherapy appointment:

Date: _____ Time of scheduled appointment: _____ Where to go: _____

Follow-up appointment with the orthopaedic surgeon at the Orthopaedic Clinic (return the DVD)

Date: _____ Time of scheduled appointment: _____

Where to go: 1st floor, Wing "C", Hôpital de Hull, CISSS de l'Outaouais

For more information, please contact the Pre-Admission Clinic or the appropriate professional to answer your question, Monday to Friday:

- Pre-Admission Clinic nurse: 8:00 a.m. to 4:00 p.m. **819 966-6301**
- Reception or surgical planning: 8:00 a.m. to 4:00 p.m. **819 966-6064**
- Occupational therapist, physiotherapist: 8:00 a.m. to 3:00 p.m. **819 966-6047**
- Orthopaedic Clinic nurse/orthopaedic surgeon: 7:30 a.m. to 3:30 p.m. **819 966-6022 or 6200 ext. 333967**
- Access desk CLSC: **819-966-6531**

INTRODUCTION

As discussed at the Orthopaedic Clinic, your orthopaedic surgeon will perform your total knee replacement. This guide is an information and teaching tool. Its objective is to adequately prepare you for your surgery as your active participation and involvement are key to the success of the operation.

Several practitioners (nurses, physiotherapists, physical rehabilitation therapist, occupational therapists, physicians) will help you with your rehabilitation and with resuming your daily activities. Other consultants (social worker, dietician) will visit you, as required. Your recovery will depend on your state of health, your motivation, **your personal efforts** and your ability to resume your normal activities. You will have to ask someone to help you and accompany you, and that person will become **your personal motivator, your coach**.

The advice provided in this document is for reference only. The professionals involved in your care will provide you with customized, timely instructions. Don't worry if you are often asked the same questions during your visits at the hospital; this is normal procedure, as each professional must individually evaluate your state of health in order to establish your individualized and customized care plan with you.

In this document, a square ☐ precedes the "things to do or to avoid" before and after your surgery. You should regularly consult the list of things to do.

- ☐ **You must read this document regularly, before, during and after your stay in the hospital. Therefore, you must bring this document with you at each visit with the care team, including the morning of your surgery.**

YOUR ROLE

Beyond the expertise of your orthopaedic surgeon, **you play the most important role** in your surgery and your recovery. You expect the best results possible from the operation, so you have to prepare for it¹.

Asking questions about the surgery, your stay in the hospital and your return home will help to alleviate your fears and increase your motivation, confidence and participation in your personal recovery when you return home.

The first step of your preparation will be to identify someone close to you who will be able to accompany you to your various appointments and help you through the whole continuum of your surgery, from your preoperative preparation to your convalescence.

¹ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

You should be aware that your needs following surgery will be different than your needs prior to surgery. We will guide you through all the steps of this adventure, but you must be at the heart of the process, understanding what is expected of you, actively participating and following through.

If no one will be available to assist you upon your return home after surgery, it may be necessary to move in with a relative who can take you in during your convalescence period, until you are able to return home. If necessary, you may consider making arrangements with a convalescent home. This requires visiting the convalescent home and making reservations prior to your surgery. Otherwise, your surgery could be delayed to insure a well-organized home discharge.

THE ROLE OF YOUR COACH

This support person will accompany you throughout the process, from the information sessions to your return home. She will encourage you in your daily activities and in your exercises. She will be your memory, your escort, your trainer, your motivator and your support. She could stay with you when you return home, perhaps for several days. Her presence could be continuous at the beginning, and then be reduced gradually according to your condition and your needs. She could run errands (groceries...), given that you won't be able to drive your car for 6 to 8 weeks, prepare meals, help with housekeeping, as well as driving you to your appointments. **This person will be your guide, but will not do what only you can do.**

If your mother tongue is not English or French, it is even more important for you to be accompanied by a person whom you trust. This person can communicate on your behalf with the care team.

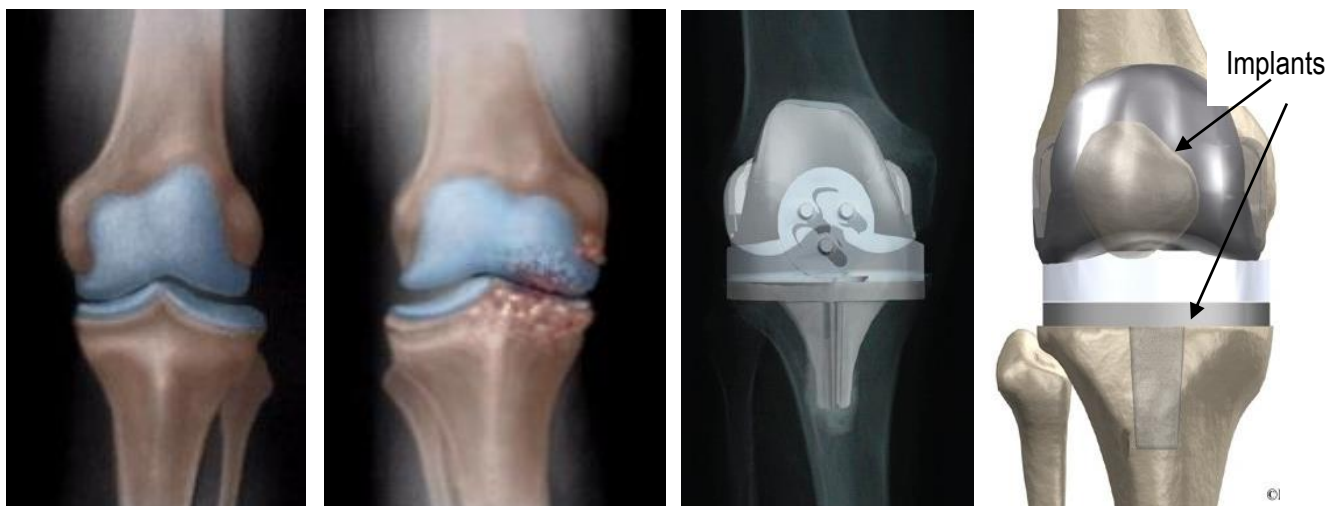
We recommend you be accompanied by **only one person**, ideally **your coach**. This way, you will be supported and have the reinforcement required to better understand all the information that we will provide throughout the process. You can consult them if necessary.

UNDERSTANDING YOUR PATHOLOGY AND THE PROPOSED SURGERY

Knee arthroplasty is a surgical procedure consisting of replacing the painful and damaged articular surfaces in your knee with metallic or plastic artificial parts. Generally, arthroplasty is performed when conventional treatments (medication and exercise) fail to reduce pain and improve articular function.

The knee joint prosthesis has four objectives:

1. To eliminate or reduce pain when other treatments are no longer efficient;
2. To improve articular mobility;
3. To improve function;
4. To ensure joint stability or correct a deformity.



Healthy knee²

Osteoarthritic knee

Knee with prosthetic replacement

The knee joint is made up of three articular surfaces: the femoral, the tibial and the patellar (kneecap) surfaces. The femoral and tibial surfaces are more likely to be problematic because they bear the weight of your body. However, depending on your problem, the surgeon may also replace the patellar component (under the kneecap).

The femur or thigh bone descends to the knee which articulates with the tibia, which rises from the ankle.

Normally, after your convalescence, you will walk better than before your surgery and you will experience less pain. The mobility and strength you gain from your rehabilitation will allow you to progressively resume your normal activities while avoiding excessive impact or torsion to your new knee.

The result of the knee implant will depend on the quality of the muscle and bone structure, as well as on pre-existent articular mobility. These elements vary considerably according to the problem, age and function prior to surgery.

DURATION OF HOSPITAL STAY

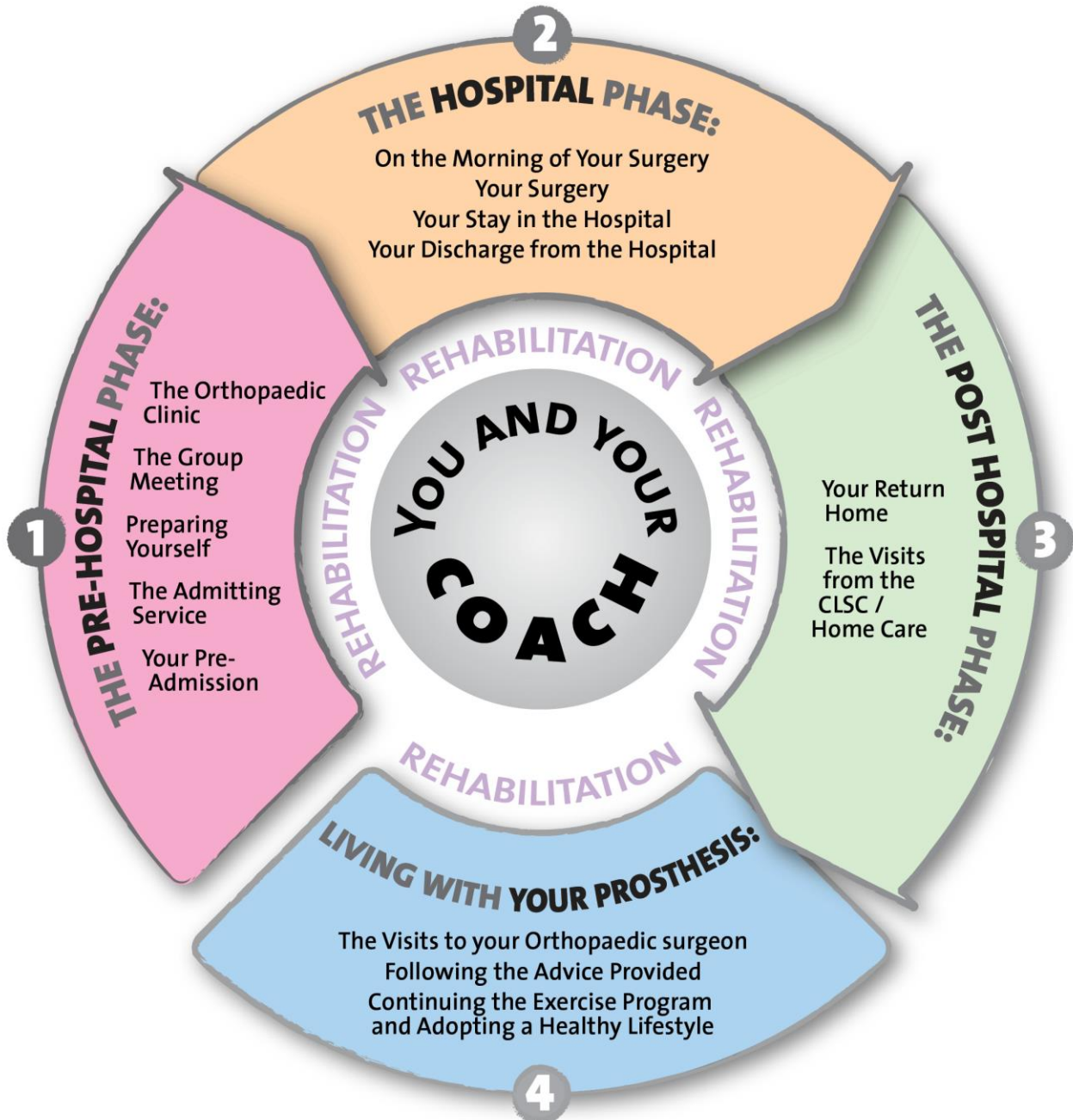
Planning your discharge from hospital begins as soon as you visit the Orthopaedic Clinic. You will be asked to fill in a form indicating the person or persons who will take care of you and support you when you return home.

At every step of your pathway (*i.e.*, group meeting, admitting service or surgical planning service, pre-admission clinic, and hospital stay), we will ensure that your discharge plans are maintained.

The duration of your hospital stay will depend on your health and your recovery. For most people who undergo surgery such as yours, **the duration of stay is 1-2 days. Therefore, if you have the operation on a Monday, you should return home on or before Wednesday morning.** If your state of health requires supplemental care, it will be provided by the care team.

² Orthogate website: <http://www.eorthopod.com/eorthopodV2/index.php/ID/bc6117f6c5f98a17135e5aac6c0cf6d7>

YOUR PROGRAM PATHWAY



This is the continuum proposed for all phases of the care plan:

PHASES	ACTORS	OBJECTIVES	YOUR REHABILITATION
PRE-HOSPITAL	You and your coach	Optimizing your health and your physical condition. Preparing your home and your return home. Addressing your questions, fears and concerns.	
	The group meeting	Providing you with all the information necessary for your preparation and your safe return home; initiating a structured educational process in order to optimize your health. Addressing your questions, fears and concerns.	
	The Admitting Service or Surgical Planning service	Planning the dates of your pre-admission appointment and surgery. Specifying your needs during your stay in the hospital. Validating your discharge arrangements.	
	Pre-Admission clinic	Evaluating your state of health and your functional particularities (by various members of the care and medical teams). Addressing your questions, fears and concerns, and planning your discharge from the hospital.	
HOSPITAL Duration of Stay: 2 to 3 days	You and your coach	Collaborating with the care team. Performing all required exercises. Maintaining constant communication with the care and medical teams.	
	Day surgery	Receiving you and preparing you on the morning of your surgery.	
	Surgery Department	Performing the surgery. Ensuring immediate post-surgical care and monitoring.	
	Orthopaedic Unit	Receiving you when your medical condition is stabilized. Providing, jointly with the rehabilitation team, postoperative care and support, such as: reducing pain as much as possible, encouraging your mobilization, treating your wound. Screening and preventing complications. Preparing for your return home.	
POST-HOSPITAL	You and your coach	Performing all required care and exercises. Fostering optimal recovery of your function. Ensuring prevention and monitoring of complications. Maintaining constant communication with the care and medical teams.	
	Home Support	Ensuring support and follow-up of your physical condition, as required. Continuing your rehabilitation, as appropriate.	
	Outpatient Physiotherapy	Continuing your rehabilitation, as required.	
	Orthopaedic surgeon	Providing follow-up after your surgery.	
LIVING WITH YOUR PROSTHESIS	Orthopaedic surgeon	Monitoring your condition with regard to your prosthesis.	
	You and your coach	Following the advice provided. Continuing the exercise program and adopting a healthy lifestyle.	

THE PRE-HOSPITAL PHASE

PHASE	ACTORS	ACTIVITIES
PRE-HOSPITAL	You and your coach	Optimizing your health and your physical condition. Preparing your home and your return home. Addressing your questions, fears and concerns.
	The group meeting	Providing you with all the information necessary for your preparation and your safe return home; initiating a structured educational process in order to optimize your health. Addressing your questions, fears and concerns.
	The Admitting Service or Surgical Planning Service	Planning the date of your pre-admission and surgery. Specifying your needs during your stay in the hospital. Validating your discharge arrangements.
	Pre-Admission clinic	Evaluating your state of health and your functional particularities (by various members of the care and medical teams). Addressing your questions, fears and concerns, and planning your discharge from the hospital.

YOUR INVOLVEMENT AND YOUR COACH'S INVOLVEMENT

The activities proposed in this phase have three main objectives:

1. Optimizing your health and physical condition.
2. Preparing your home for your return following surgery.
3. Addressing your questions, fears and concerns.

1. Optimizing Your Health and Physical Condition

Adopting a healthy lifestyle is essential to optimize your health and your physical condition prior to your surgery. As such, the proposed actions (see Summary Table on page 16) will help reduce the risk of postoperative complications. Here are a few examples.

Eating

- ☐ Maintain or achieve your healthy weight. This will facilitate your exercises and protect your joints, so it will be easier for you to get moving and resume your activities of daily living.
- ☐ Healthy eating contributes to speedy recovery after surgery and helps prevent postoperative complications. Eat three balanced meals a day, and refer to *Canada's Food Guide* (CFG: www.hc-sc.gc.ca) or consult a dietitian. You can also add snacks,

as required. After your surgery, it is important to give special attention to certain nutrients: proteins, iron, calcium, vitamin D, and dietary fibres.

- ❑ Calcium and vitamin D are important nutrients to maintain strong, healthy bones. A 400 IU Vitamin D supplement is recommended for individuals over 50³.
- ❑ Drink plenty of water, especially in the days leading up to your surgery, in order to achieve optimal hydration for your surgery (1.5 to 2 L per day), unless you are subject to fluid restriction.
- ❑ The consumption of alcohol might impact your stay in the hospital. It is important to understand that alcohol:
 - i. reduces the capacity of your immune system;
 - ii. inhibits the healing of tissues (poor scarring);
 - iii. contributes to the development of certain complications, such as delirium, pneumonia, infections, etc.;
 - iv. complicates pain management.

Therefore, we recommend that you reduce to a minimum your consumption of alcohol a few weeks prior to surgery. Alcohol, anesthesia and analgesics can be a very bad combination. Reactions such as confusion, hallucinations, tremors, nausea and vomiting may occur.

Physical Activities⁴

Surgery is a stressful experience for the body. So you must limit your physical activity after the operation. Therefore, one key to a successful operation is to be in good physical condition. Exercising before surgery can help you improve your endurance, muscular strength, balance and heart health. This could help speed up your recovery after the operation. Also, extensive research has demonstrated that physical activity:⁵

- can help reduce pain;
- contributes to substantially improving the quality of life (physical capacity, reduced symptoms, self-confidence and self-esteem, return to work, etc.) of people with heart⁶ or lung⁷ problems;
- improves the serum lipid profile⁸ (cholesterol level);
- can help reduce smoking;⁹

³ www.hc-sc.gc.ca/fn-an/nutrition/vitamin/vita-d-fra.php

⁴ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

⁵ *Cadre de référence : Traité santé. Programme régional de réadaptation pour la personne atteinte de maladies chroniques*, Agence de la santé et des services sociaux de la Capitale-nationale, Région 03, February 2007, ISBN 978-2-89616-021-1 (PDF version).

⁶ N.K. Wenger, et al. «Cardiac Rehabilitation as secondary Prevention», in Agency for Health Care Policy and Research, and National Heart, Lung and Blood Institute. *Clinical Practice Guideline Quick Reference Guide for Clinicians*, 1995(17): 1-23

⁷ Y. Lacasse, et al. «The Components of a Respiratory Rehabilitation Program: A systematic Overview», *Chest*, 1997; 111(4): 1077-88.

⁸ H.R. Superko et P. Dunn. «Sophisticated Lipid Diagnosis and Management: The Potential for Plaque Stabilization and Regression in the Cardiac Rehabilitation Setting.» in: F.J. Pashkow and W.A. Dafoe (eds.). *Clinical Cardiac Rehabilitation: A Cardiologist's Guide*, 2nd ed., Baltimore, Williams & Wilkins, 1999, p. 327-64.

⁹ M.C. Rosal, I.S. Ockene, et J.K. Ockene. «Smoking Cessation as a Critical Element of Cardiac Rehabilitation,» in F.G. Pashow et W.A. Dafoe (Ed.). *Clinical Cardiac Rehabilitation: A Cardiologist's Guide*, 2e ed., Baltimore, Williams & Wilkins, 1999, p. 365-82.

- increases energy expenditure, a complement to dietary changes with regard to weight control¹⁰ ;
- improves effort and endurance capacity;¹¹
- reduces blood pressure;
- fosters adherence to treatment;
- may reduce the need for hypoglycaemic medication in type 2 diabetics.¹²

As you can see, your rehabilitation begins even before your surgery. Here is what we suggest you start doing right away.

- ☐ Do your mobility, strengthening and balance exercises (see the “Rehabilitation” section) every day, because they have a positive influence on your ability to recover your strength and muscle tone after the operation, as well as on your blood circulation, which reduces the risk of clots forming in your leg (thrombophlebitis).¹³
- ☐ Exercise to tone upper body muscles, especially if you need to use a walker or crutches after surgery. For example: while sitting down, do “push-ups” on the arms of the chair, lifting your buttocks.
- ☐ Practise using a walking aid so that it becomes easy and natural.
- ☐ Remain or become active, within your limits, and vary your activities. If you are not usually active, check with your family physician about the level of activity that is safe for you. Here are a few tips.
 - i. We suggest walking, swimming or stationary cycling (unless this significantly increases pain). Avoid activities causing too much stress on your joints: jogging, Stairmaster, jumping, squatting.
 - ii. It is important to start slowly. Your objective is to be active every day.
 - iii. Wear shock-absorbing shoes that support you arches.
 - iv. Start with a few minutes, and increase gradually to 20 or 30 minutes, 4 to 7 times a week. If you can't do 30 minutes non-stop, try to perform the activity for 10 minutes, 3 times a day.
 - v. To maintain a safe level of training, make sure that you can keep talking without being short of breath while you perform the activity.
 - vi. Articular or muscular pain that lasts more than 2 hours after exercising or fatigue that lasts until the next day indicates that you have probably exercised too much or too hard!



¹⁰ J. Desaulniers et D. Rioux. *Guide pratique du diabète de type 2, Édition du Québec, Trois-Rivières, Formed, mai 2002, chapitre 22, p. 131-44*

¹¹ NH. Miller, M. Hill, T. Kottke et al. “The Multilevel Compliance Challenge: Recommendations for a Call to Action. A Statement for Healthcare Professionals”. *Circulation*. 1997; 95:1085-1090.

¹² G.F. Fletcher et al. “Statement on Exercise: Benefits and Recommendations for Physical Activity Programs for all Americans. A Statement for Health Professionals”, *Circulation*, 1996:94(4): 857-862.

¹³ Canadian Orthopaedic Foundation. www.canorth.org, heading: Continuum of Care

Stress Management, Positive Thinking and Restful Sleep¹⁴

Stress has a negative impact on your health, immune system, cardiorespiratory system and general state of mind. Therefore, it is essential to relax your body and your mind. The benefits of positive thinking will allow you to exercise more control over your emotions, slow down your breathing, ease your muscular tension and reduce your anxiety. Your attitude is important: optimists tend to look for solutions to their problems, while pessimists tend to dwell on their worries and fears.

- ☐ We you to sleep as well as possible thereby being fully rested on the day of your surgery.
- ☐ Practise the following relaxation method regularly. Plan to have a daily 15-minute relaxation session, ideally, following your exercises. To help you with this exercise, you could use a CD or DVD to guide you while you practise a relaxation technique.

Relaxation Technique

1. Place one hand on your abdomen.
2. Breathe in deeply while concentrating on a positive image. Use all of your senses (i.e. sight, hearing, touch, taste, and smell) to make your image even more realistic. For example, imagine you are on a cruise, the sky is blue, the water sparkles, and you hear the sound of the sea and smell the fresh air.
3. Feel your abdomen inflating. Push your abdomen out as much as possible while you breathe in; this will help you fill your lungs with air.
4. Breathe out through your mouth, while pursing your lips (as if to blow out a candle).
5. Feel your abdomen returning to its normal size. Start to relax.
6. After each exhalation, wait until you're ready to breathe in again. Continue this relaxation exercise while visualizing your positive image.
7. After a few breaths, you will follow your own rhythm. For example: one deep breath for every five normal breaths. If you start to feel dizzy, take a few normal breaths before starting over. Conclude this relaxation and visualization exercise while retaining your positive image.

Do you feel the calm within you? Savour this calm and peaceful feeling. Take a few minutes to enjoy this intense state of relaxation.

¹⁴ Living Well with COPD, Patient Education Tools. www.livingwellwithcopd.com

Tobacco and Your Health

Smoking delays bone healing and wound scarring. It is also a factor contributing to pulmonary complications and a factor predisposing to osteoarthritis. Remember that second-hand smoke is just as harmful to non-smokers. There are several resources available to help you quit smoking: your pharmacist, your family physician, smoking cessation centres, and certain websites, such as: <http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/index-eng.php> (Health Canada), <http://www.pq.lung.ca/>, <http://www.defitabac.qc.ca/defi/en/index.html>, <http://www.jarrete.qc.ca/en/default.html>, http://www.cqts.qc.ca/candidature_Prix_Marcel-Boulanger_en.pdf, <http://www.cancer.ca>, or contact the Lung Helpline at 1 888-768-6669, extension 232.

- ☐ It is recommended¹⁵ to stop smoking at least one month prior to any surgery.

Oral Health¹⁶

Orthopaedic surgeons recommend treating dental and gum problems before an arthroplasty. It is also important to finish any dental procedures, as germs from your mouth could enter your bloodstream and infect your new joint.

- ☐ Check with your dentist whether there are any problems requiring special attention prior to your orthopaedic surgery.

Optimizing Control of Your Chronic Diseases

- ☐ Consult your family physician in order to optimize control of your chronic diseases, such as high blood pressure, diabetes, pulmonary disease, and heart disease.
- ☐ In order to avoid circulatory complications, we suggest not remaining seated for more than three hours at a time for one month before and after your surgery. Long trips are also not advisable.

Vaccination

According to the *Protocole d'immunisation du Québec*¹⁷ (Quebec Immunization Protocol), individuals with chronic diseases are not more susceptible to (i.e. they are not more likely to get) vaccine-preventable diseases, but should they contract one, do face a higher risk of morbidity (*complications*) and a higher mortality rate. Vaccination against influenza, pneumococcus, diphtheria, pertussis (whooping cough), and tetanus is recommended.

- ☐ Therefore, we suggest that you discuss updating your vaccination profile with your family physician or take part in vaccination campaigns organized by the *Ministère de la Santé*.

¹⁵ Strategies to Prevent Surgical Site Infections in Acute Care Hospitals, Deverick J. Anderson et al., S51 Infection Control and Hospital Epidemiology, October 2008, Vol. 29, supplement 1.

¹⁶ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

¹⁷ Protocole d'immunisation du Québec, 2013. ISBN: ISSN 1925-069X. PDF document accessible from http://publications.msss.gouv.qc.ca/msss/fichiers/piq/piq_complet.pdf

SUMMARY TABLE: OPTIMIZING YOUR HEALTH

Ways of optimizing your health	Preventing or reducing potential complications
Healthy eating, according to the Canada's food guide, combined with proper hydration. Your family physician may prescribe iron supplements and/or vitamins: check with your physician.	<ul style="list-style-type: none"> Fosters better postoperative recovery Prevents anemia Improves wound healing Prevents bedsores Improves physical condition Reduces fatigue Controls glycemia
Reaching your healthy weight	<ul style="list-style-type: none"> Facilitates postoperative exercise Facilitates mobilization Allows faster resumption of daily living activities Optimizes the service life of your implant Prevents phlebitis Prevents infection
Reducing the consumption of alcohol	<ul style="list-style-type: none"> Boosts your immune system Reduces the risk of delirium, hallucinations, pneumonia, and infection Facilitates control of postoperative pain Fosters better overall healing
Physical activities	<ul style="list-style-type: none"> Increases endurance Increases muscular strength Facilitates mobilization after surgery Reduces the risk of phlebitis Reduces the risk of falls
Stress and rest management	<ul style="list-style-type: none"> Optimizes the ability to relax Fosters better sleep before and after surgery Fosters better pain control
Smoking cessation	<ul style="list-style-type: none"> Fosters better bone healing Fosters healing of the surgical site Optimizes pulmonary capacity Reduces the risk of infection
Oral health	<ul style="list-style-type: none"> Reduces the risk of infection
Chronic disease control: Diabetes, high blood pressure, heart disease, circulatory disease	<ul style="list-style-type: none"> Fosters healing of the surgical site Facilitates mobilization after surgery Reduces the risk of postoperative infarction Reduces the risk of phlebitis and pulmonary edema
Regular intake of analgesics	<ul style="list-style-type: none"> Allows optimal pain control to speed up recovery Improves medication effectiveness Helps to maintain the pain level at 3/10 or less as early as day 2 after surgery

2. Preparing Your Home for Your Return after Surgery

Your mobility will be reduced after surgery. Therefore, it will be important to plan the items on the following checklist **before** your admission to the hospital.

Checklist: Things to Do to Prepare Your Home

- ☐ Make sure your coach or a family member or a friend (within 20 minutes travel) will provide minimal support when you return home for the first two weeks.
- ☐ Since you will not be able to drive for 6 to 8 weeks, make arrangements for your transportation upon hospital discharge and to and from your appointments (some community organizations offer this service). You can also contact 8-1-1.
- ☐ If you are currently receiving or have received in the last three months any services from the CLSC, you must notify the CLSC of the date of your surgery.
- ☐ If you have no one to help you or take care of you, find a convalescent home where you can stay (make arrangements in advance with “Retirement Homes” or “Convalescent Homes” or “Nursing Homes”. If you wish to return home nevertheless, contact organizations providing home care services. You can also contact 8-1-1
- ☐ Find a grocery store offering home delivery and/or Internet ordering.
- ☐ Find a pharmacy offering a delivery service.
- ☐ Buy or prepare in advance meals that you can freeze and later reheat in the microwave.
- ☐ Arrange your home as per the recommendations on page 65.
- ☐ Arrange a bathroom, as required, with all the necessary equipment and no slippery surfaces, as per the recommendations on page 63.
- ☐ Plan for housekeeping during your convalescence, from lawn mowing in the summer to snow removal in the winter.
- ☐ Find someone to keep or take care of your pets.
- ☐ Read and follow the advice in the “Preventing Falls” section on page 69.
- ☐ Obtain the equipment suggested by the care team during your pre-admission visit (see list of equipment). Make sure to have the equipment at home before your admission to the hospital. Do you have private insurance covering this type of equipment? Check with your insurance company and, if necessary, ask for a prescription during your pre-admission visit.

Remember: if you have any questions at any time before your surgery, you can contact the Pre-Admission Clinic nurse.

3. Addressing questions, fears and concerns

Preparing for major surgery requires an understanding of several elements. To ensure your optimal participation in every step of the process, we encourage you to:

- ☐ Prepare each of your meetings with practitioners by writing down your questions.
- ☐ Talk with someone who has had the surgery, so as to get a realistic picture of what you can expect and suggestions about ways to prepare yourself.¹⁸
- ☐ If you have any questions, you can contact the Pre-Admission nurse at any time.

☐ **To be on the safe side, read this document as soon as possible in order to make all the necessary changes in your lifestyle.**

THE GROUP MEETING

You are invited to make an appointment **as soon as possible** to attend an information and structured education session with various members of the rehabilitation and care teams. This group meeting has two main objectives:

1. Providing the necessary information for your preparation and your safe return home; initiating a structured educational process in order to optimize your health

You will meet a few members of the care team (nurse, physiotherapist, occupational therapist...), and we will discuss the following topics:

- Knee prosthesis.
- Continuum of care.
- Optimizing your health: healthy lifestyle, healthy eating, and smoking cessation.
- How to prepare for your return home: preparing yourself and your home.
- Preventing complications and pain control.
- Self-care of the surgical wound.
- Exercises: mobility, strength, endurance, and light to medium aerobics.
- Transfers, instrumental activities of daily living, activities of daily living as they relate to the required equipment.

¹⁸ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

2. Addressing Your Questions, Fears and Concerns

You will meet people about to undergo the same surgery as you. Then, you will have the opportunity to learn about their concerns and be able to share your experiences and your worries. These are the objectives defined for that meeting:

At the end of the meeting, you should be able to:

1. Understand the proposed surgery.
2. Understand your role and your coach's role and be aware of your responsibilities.
3. Explain what you can expect before, during and after your surgery.
4. Know the elements involved in preparing your home.
5. Identify the means to optimize your health for surgery.
6. Understand the importance of pain management.
7. Know how to care for your surgical site, monitor for wound and postoperative complications.
8. Undertake preoperative and postoperative exercises.
9. Use walking aids and identify useful self-help devices.
10. Know how to go about the most common transfers.
11. Anticipate the difficulties you may encounter upon your return home and find possible solutions.
12. Be reassured with regards to your questions, fears and concerns.

THE ADMITTING SERVICE OR THE SURGICAL PLANNING SERVICE

A few weeks before your surgery, once you have attended the group meeting, you will get a phone call from the Admitting Service or the Surgical Planning Service. This call has three main objectives:

1. Planning the date of your pre-admission appointment and surgery.
2. Specifying your needs during your stay in the hospital.
3. Validating your discharge arrangements.

1. Planning the date of your pre-admission appointment and surgery

The Admitting Department or the Surgical Planning service will call you 4 to 6 weeks before your surgery to schedule an appointment for your pre-admission visit: Write down this information on page 5. Several meetings will be planned on that day. You will be told at what time you should arrive. Once your file is complete, you will receive a call from the surgical booking department to schedule your surgery according to the surgeon's and the operating room's availabilities

2. Specifying your needs during your stay in the hospital

- ☐ We will ask you to provide information concerning your private medical insurance, where applicable.
- ☐ We will check other elements specific to your case.

3. Validating your discharge arrangements

The Admitting Department or the surgical planning service will verify that the information you provided to plan your return home is still current (support person, home care service organization, convalescence home).

THE PRE-ADMISSION CLINIC APPOINTMENT

1. Evaluating your state of health and your functional particularities, based on individual meetings with various members of the care and medical teams.
2. Addressing your questions, fears and concerns, and planning your discharge from the hospital.

To prepare for this visit, you should:

- ☐ View the DVD provided by the Orthopaedic Clinic.
- ☐ Write down your questions, fears and concerns (writing space provided at the end). Indicate whether you will need a medical prescription for the reimbursement of equipment by your private insurance.
- ☐ Bring (where applicable):
 - **Mandatory : The list of your medications as provided by your pharmacy**
 - List of the natural products (vitamins, herbs...) that you use.
 - The medical reports of specialists you have consulted recently.
 - Your blood glucose log book.
 - Your blood pressure log book.
 - Your health insurance card.
 - Your Hôpital de Hull card (pink or grey).
 - Your eyeglasses and hearing aids.
 - Your pain medication if you take any.
- ☐ Wear loose clothing, so that it will be easier to examine your limbs (arms and legs) and perform an auscultation.
- ☐ Bring the walking aids that you use: cane, walker...
- ☐ Bring your coach along.
- ☐ Follow the instructions to prepare for your examinations: Be fasting or non- fasting...
- ☐ Bring a snack or some money for breakfast and lunch, as well as for parking.

☐ **You must bring this document with you at the pre-admission clinic appointment.**

You will have to schedule **an entire day** for this visit. A schedule of the various meetings and examination appointments will be provided upon your arrival.

1. Individual evaluation meetings regarding your state of health and your functional particularities with various members of the care and medical teams

At your pre-admission clinic appointment, various members of the care team will meet with you in order to organize your care plan before, during and after your surgery:

- Nurse;
- Laboratory technician;
- Radiology technologist;
- Electrophysiology technologist (ECG);
- Rehabilitation staff: occupational therapist (exceptionally physiotherapist);
- Medical specialists: anesthesiologist, internal medicine specialist...

During your visit to the orthopaedic surgeon, we started collecting your personal data: history, health profile, previous surgeries, and medications. At the time of your pre-admission, we will provide you with more documents and questionnaires for you to complete. We will add the information related to your functional level, your walking capacity, your pain, details about your home, and your arrangements for your return home. We will also carry out a few tests to measure your mobility, your strength, your use of stairs and the risks of complications. From this we will develop a plan based on your particular needs and track the progress and improvement of your condition over the next few months.

You will also undergo various examinations in order to establish your health status before surgery; depending on your health profile, these examinations will vary. A blood test, a urine analysis and culture, a nasal swab (done with the cotton tip of a swab swiped in each nostril) to determine if you are a carrier of antibiotic resistant bacteria, an electrocardiogram and chest x-rays are required. You will be informed whether any special preparation is necessary (fasting, etc.).

On the request of your surgeon, an internal medicine specialist will evaluate your health profile in order to determine whether the surgical option is safe. He could recommend certain supplemental tests or request a consultation with another specialist (cardiologist, neurologist, urologist...). He could also indicate which of your medications you should cease or continue to take prior to your surgery.

Practically all surgical procedures require some form of anesthesia¹⁹. The task of the anesthesiologist (a physician specialized in anesthesia and analgesia) is to ensure your overall well-being, which includes evaluating your health prior to surgery and monitoring your vital signs during surgery and recovery. So, during the pre-admission visit, you will meet an anesthesiologist who will explain the various options for anesthesia and will guide you in the choice of the optimal procedure for you, considering the type of surgery you will be undergoing and your state of health (this meeting could occur at some other time, such as on the morning of your surgery). He will also suggest pain management procedures to control

¹⁹ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

your pain after surgery. It is possible that the anesthesiologist who will evaluate your health prior to surgery will not be the same as the one who will perform the anesthesia on the day of the surgery.

There are three types of anesthesia: regional, general, and a combination of both.

- Regional, or local, anesthesia numbs only the area of the body to be operated on. The rest of your body remains sensitive. The most common type of regional anesthesia is spinal or epidural anesthesia (in the back). There is also the nerve block, during which the anesthesiologist injects a numbing medication around the nerves that transmit pain signals from the leg area involved in the surgery. The procedure “blocks” these nerves, so it reduces the pain caused by surgery. This method is explained in more detail later on.
- General anesthesia numbs the entire organism, including the brain, so that you will feel nothing and remain unconscious during the surgery.
- Combined regional and sedation numbs the area to be operated on, while helping you to relax and be less conscious of the surgery.

The type of anesthesia you will receive depends on the type of surgery and your overall state of health. Discuss this with the anesthesiologist.

2. Addressing your questions, fears and concerns, and planning your discharge from the hospital

During these meetings with the various members of the medical and care teams, you will have the opportunity to ask questions about your surgery and your recovery. We will also verify with you that everything is in place to facilitate your return home. We will take the opportunity to discuss, with your coach, their involvement and their availability. We will conclude this visit by signing the Partnership (see page 24).

Criteria to have surgery

- Be healthy enough to have surgery
- That you and your support people are prepared to follow the home rehabilitation plan with the help of the CLSC.
- Your transportation and escort are arranged.
- That you have the necessary equipment at home to get around and be functional

- ☐ Notify the **Pre-Admission** clinic staff if you:
 - Have a cold or any other illness before surgery.
 - Have started a new medication(s) since your last visit.
 - Believe you are pregnant.
 - Have any deterioration of your health or exacerbation (worsening) of any chronic disease. For example: respiratory tract infection, flu requiring antibiotics, unstable coronary angina, uncontrolled capillary glycemia, etc. **Your surgery could be delayed.**
- ☐ If for any other non-medical reason you cannot come for your surgery at the predetermined date, notify the **admitting service or the surgical planning service** staff as soon as possible.

PARTNERSHIP AGREEMENT²⁰

In our opinion, patients who take an active part in their treatment receive maximum benefits. Our objective is to make your care and transition home as smooth as possible by carefully planning and involving you in every step throughout the process. With this in mind, we encourage you to read the following statements and to agree to participate to the best of your abilities.

I understand and agree that, prior to my surgery:

- ☐ I will make the necessary arrangements for a safe return home: I will find a person or a community organization that will take care of me when I return home or stay in a convalescent home.
- ☐ I will try to increase my tolerance to exercises and to optimize my health.
- ☐ I will read the educational material provided.
- ☐ I will practise the exercises, transfers and self-care procedures (surgical site dressing) that I have been taught.
- ☐ I will prepare my home as suggested.
- ☐ I will obtain the prescribed / recommended equipment (purchase, rental or loan).
- ☐ I will arrange transportation for my discharge from the hospital (on the morning of the 2nd or 3rd day after surgery).
- ☐ I will follow preoperative instructions: a few days before, on the day before and on the morning of the surgery.

I understand and agree that, during my hospital stay:

- ☐ I will follow the instructions of the care team: physicians, nurses, physiotherapist and occupational therapist.
- ☐ I will try to increase my functional level as fast as possible by taking an active part in my care program: self-care procedures, exercises, transfers, walking...
- ☐ I will discuss all my questions and concerns with the personnel involved in my care.
- ☐ I will take an active part in my rehabilitation by doing the prescribed exercises and I will attend all my treatments (at the Orthopaedic Unit or the Rehabilitation Department).

I understand and agree that, following my hospital stay:

- ☐ I will follow the suggested treatments, in compliance with the prescribed schedule, and I will attend all the appointments required for postoperative follow-up. I will begin my physiotherapy treatment on an outpatient basis as soon as possible after discharge from the hospital (possibly the next day).
- ☐ I will take an active part in my rehabilitation by doing the prescribed exercises at home.
- ☐ I will receive outpatient rehabilitation services until my condition becomes functional or as long as the professional deems appropriate. The rest of my rehabilitation will then become my own responsibility (private physiotherapy clinic, fitness centre...).

Patient's signature: _____ Date: _____

Coach's signature: _____ Date: _____

Witnessing professional: _____ **Date:** _____

²⁰ Based on the document: *A Guide for Patients Having Hip or Knee Replacement*, Holland Orthopaedic & Arthritic Centre, Sunnybrook, Toronto.

THE HOSPITAL PHASE

PHASE	ACTORS	ACTIVITIES
HOSPITAL Duration of Stay: 2 to 3 days	You and your coach	Collaborating with the care team. Performing all required exercises. Maintaining constant communication with the care and medical teams.
	The Day Surgery Department	Receiving you and preparing you on the morning of your surgery.
	The Operating Room	Performing the surgery. Ensuring immediate post-surgical care and monitoring.
	Orthopaedics Unit	Receiving you when your medical condition is stabilized. Providing, jointly with the rehabilitation team, postoperative care and support, such as: reducing pain as much as possible, encouraging your mobilization, cleaning the surgical site. Screening and preventing complications. Preparing for your return home.

1. YOUR INVOLVEMENT AND YOUR COACH'S INVOLVEMENT

Your participation in this phase has three main objectives:

1. Collaborating with the care team.
2. Performing all required care and exercises.
3. Maintaining constant communication with the care and medical teams.

To prepare for the day of surgery, complete each of the following tasks:

Checklist: Things to Do to Prepare for Surgery

A few days before surgery

- ☐ Stop taking any supplements not prescribed by your physician and any natural products at least 21 days before your surgery, because these can interact with certain medications and cause serious postoperative complications, such as haemorrhage, embolism, etc. You can, however, continue to take your multivitamins. Refer to the list written on page 5.
- ☐ Do your housework or ask someone to do it for you.
- ☐ Do your laundry or ask someone to do it for you.
- ☐ Make sure you have all the food you will need when you return home.
- ☐ Make sure the equipment required for your movements and functional activities are in place at home.
- ☐ Review the checklist "Things to Do to Prepare Your Home" (pages 17-18) and make the necessary changes.

- ☐ Do not shave your legs for at least 7 to 10 days before surgery and up to 3 weeks after surgery.
- ☐ Do your foot care (clipping nails...) or have it done by a specialist.
- ☐ Pack your bag for your stay in the hospital (**identify your personal items with a label**):
 - o Your personal items (toothbrush, toothpaste, comb, soap, box of facial tissues, shaving kit, etc.).
 - o Sleepwear, a robe, underwear, comfortable shoes or slippers with Velcro fasteners, non-skid soles and closed heel and toe (purchase them, if necessary). After surgery, your feet might be swollen, so make sure your shoes or slippers are not too tight.
 - o Loose-fitting, comfortable clothes (jogging suit, pyjamas, socks), so you can do your exercises more comfortably.
 - o Your walker, if you own one. Do not forget to clearly identify it with a label.
 - o Electronic audio/video devices are authorized, but must be used with headphones.
 - o Your **Step-by-Step book**, pencil, notebook.

The day before surgery

On the day before surgery, we will contact you to confirm the time at which you must present yourself at the Hôpital de Hull of the CISSS de l'Outaouais. If your surgery is scheduled on a Monday, you will be called on the preceding Friday. This call is made between 11:00 a.m. and 3:00 p.m. If you're not at home, we will leave a message on your answering machine. Write down this information on page 5. You will be admitted to the hospital on the morning of your surgery. You must observe the following instructions for your surgery to take place on the scheduled day. These instructions **must** be followed to ensure your own **safety**.

- ☐ Contact the Admitting Department or the Surgical Planning Service if you expect to be away or hard to reach on the day before your surgery.
- ☐ Notify the person who contacts you or call the Pre-Admission Clinic as soon as possible if your health condition does not permit surgery:
 - o Flu
 - o Infected ingrown nail
 - o Fever
 - o Delayed menses or suspected pregnancy
 - o Urinary tract infection
- ☐ Get the special equipment prescribed / recommended by the health care team.
- ☐ **For 24 hours before surgery, do not consume any of the following products: tobacco, drugs, or alcoholic beverages (beer, wine, liquor).**
- ☐ Ensure proper intestinal function on the day before surgery. To prevent constipation, consume prunes, high fibre foods (bread, whole-grain cereals, fruit and vegetables) and hydrate yourself properly (unless you are subject to fluid restriction or following a special diet). It is not necessary to take a laxative, but if you're constipated, you may give yourself a glycerin suppository.
- ☐ **Take a bath or shower** using mild, unscented soap ("Dove" or "Ivory" type). Take care to gently rub the surgery site for 3 to 4 minutes. Wash your hair and do not apply styling products after shampooing. If you are colonized with the Staphylococcus (MRSA+) bacteria, the pre-admission nurse will indicate the washing procedure with chlorhexidine, which is also applied on the morning of the surgery.

- ☐ **You need an oral hygiene special care** (tooth brushing, dental flossing,).
- ☐ **Change your sheets and wear clean sleepwear.**
- ☐ Remove any makeup, artificial nails and nail polish from hands and feet because, during surgery, we check the coloration of your skin and nails in order to evaluate your blood oxygen level.

- ☐ **After midnight, and until the surgery: do not eat anything solid (including chewing gum, sucking candy), as well as taking in any dairy products, otherwise your surgery will be cancelled.** The reason for this is that, under anesthesia, the systems that keep food and liquids in place in the stomach are weakened. Food and liquids could then exit the digestive system and enter the lungs through vomiting or regurgitation, which could cause serious problems.²¹
- ☐ **The following liquids are allowed up 5 AM the morning of your surgery:** water, clear grape juice or Gatorade quantities permitted for your comfort. If you are the first patient to have surgery in the morning, the quantity permitted is a maximum of 500 ml or 2 cups.

On the morning of your surgery (before coming to the hospital)

- ☐ **You must take a bath or shower again** using mild, unscented soap ("Dove" or "Ivory" type). As on the night before your surgery, take care to gently rub the surgery site for 3 to 4 minutes. This will ensure maximum cleanliness of the surgery site and will help prevent infection. **You need an oral hygiene special care.**
- ☐ If you wish to tie your hair back, use metal-free elastic.
- ☐ Do not apply perfume, cream, powder, makeup or nail polish on your hands and feet. During your stay in the hospital, we ask you not to use scented body care products.
- ☐ Remove any jewellery, body-piercing implements, contact lenses or artificial eye because, during surgery, we use electrical equipment that may interact with metals and cause electric shock.
- ☐ Leave all your valuables at home (credit cards, jewellery, wristwatch). The hospital does not accept responsibility, in the case of loss or theft.
- ☐ Take the medications authorized by the nurse and/or the physician with a sip of water (refer to the list on page 5 of your program).
- ☐ **Bring:**
 - Your document "Step by Step".
 - **Your health insurance card and your Hôpital de Hull card (pink or grey)**
 - The list of your medications, as provided recently by your pharmacy.
 - The medical reports of specialists you have consulted recently (if this applies to you).

²¹ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

- Your eyeglasses or contact lenses, hearing aids and dentures, along with their case/container (clearly identify your personal items with a label).
- Your inhalers (pumps).
- A bag to store your clothes. Do not bring a storage bag to the Day Surgery Department.
- Your insurance documents (forms): you or your coach must bring any insurance forms, or other documents which your orthopaedic surgeon must complete, to the Orthopaedic Clinic. Do not leave them in the chart or on the ward.
- Leave your bag and your walker with your escort, who will bring them to your room on the orthopedic floor.

On the morning of your surgery, when you arrive at the hospital

- ☐ Be on time for your appointment: we ask you to arrive an hour and a half or two hours before your surgery, in order to have sufficient time to get you prepared properly; therefore, it is important to arrive at the specified time.
- ☐ Bring your coach along. Because of space limitations, only one person can accompany you.

2. THE DAY SURGERY

The Day Surgery has two main objectives:

1. Admitting you.
2. Preparing you on the morning of your surgery.

The Day Surgery, before surgery (preoperative period)

- You will be provided with an identification bracelet.
- You will be taken to a room where you can remove your clothes and underwear and put on a gown and stockings to help prevent thrombophlebitis. We will ask your coach or accompanying person to keep your clothes during your surgery. If you come alone, your belongings will be sent to the unit of care where you will be transferred after surgery.
- You will remove your dentures, contact lenses or eyeglasses.
- If you tie your hair back, use metal-free elastic.
- You will carry out mouth hygiene without swallowing.
- You will urinate before you leave for the operating room.
- A nurse will explain what will happen, check your blood pressure, ask you a few questions and give you preoperative medication, as prescribed by your surgeon or anesthesiologist.
- In the surgery or day surgery area, you will be visited by a specialised surgical nurse (IPAC). She will be assisting your surgeon during surgery. She will contact your family or friends after the operation.
- It may be necessary to shave the surgical site. An electric shaver (clipper) will be used, as required; you must not do this yourself, as any skin lesion will increase the risk of

infection. Furthermore, it is recommended to shave the surgical site within the hour preceding surgery²².

- An attendant will take you to the operating room on a gurney.
- After you've left, your coach or accompanying person can:
 - Return home and wait for the phone call from your surgeon's assistant (IPAC) who will give them your room number. If not known, three hours after this call, he can contact the hospital's information service to ask for your room number. When you will arrive to your room you could get in touch, yourself, with your coach to give them the information concerning your room. It will confirm that you have arrived. **Your coach should wait for your arrival before going to your room.**
 - Your coach or accompanying person can also wait for you in the waiting room on the 4th floor. Three hours after meeting your surgeon or his assistant, your coach or accompanying person can go to the information office located at the main entrance on the 1st floor, to get your room number and then await your arrival from the operating room in the waiting room of your admitting unit. **The nurses on your unit will not be able to inform your coach or accompanying person your arrival time on the unit.**

3. THE OPERATING ROOM

The Operating Room has two main objectives:

1. Performing the surgery (in an operating room).
2. Ensuring immediate post-surgical care and monitoring (in the recovery room).

In the operating room

- Upon your arrival in the operating room, you will be met by an operating room nurse, the anaesthesiologist and a respiratory therapist.
- While the operating room is being set up (cleaning, positioning of the instruments...), you will wait in an adjoining room.
- The first step of your anesthesia may occur outside of the operating room.
- In order to ensure your peace of mind and your safety, be aware of which joint and which side will be operated. You will be asked regularly to confirm this with various members of the surgical team and your surgical site will be marked.
- You may also be asked again for your consent to surgery and anesthesia. Make sure that the surgery indicated on this form is exactly the surgery you are expecting.²³
- When everything is ready, you will be taken inside the operating room. Intravenous tubing will be installed to administer fluids and medication during the surgery.
- In the operating room, your surgical site will be cleaned or disinfected. Except for the surgical site, your body will be covered with a sheet. The anaesthesia administered will be as discussed with the anaesthesiologist. For the duration of the surgery, you will be

²² Tanner J., Woodings D., Moncaster K., Preoperative Hair Removal to Reduce Surgical Site Infection, The Cochrane Database of Systematic Reviews 2006, Issue 2.

²³ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

under constant monitoring by a respiratory therapist, an anesthesiologist, nurses, your surgeon and their assistants.

- The duration of the procedure will depend on the type of surgery and the particulars required by your condition. Normally, this type of surgery requires one to one and a half hours.
- A catheter may be installed to drain the urine from your bladder.

After the surgery, in the recovery room

- After the surgery, you'll be taken to the recovery room for at least two hours of close observation. There, you will be allowed to drink water.
- The nurse will frequently check your pulse, blood pressure and surgery site as part of routine care.
- You may require an oxygen mask for a short period.
- Analgesic medication will be administered intravenously to alleviate pain. If you feel pain or nausea, notify the nurse. She can adjust your medication to make you more comfortable.
- You may be asked to take deep breaths and perhaps do some exercises to ensure proper blood circulation. A device may also be installed around your legs to apply light, intermittent compressions along your calves (pumping).
- If no x-rays were taken during surgery, some may be taken at this time.
- Once you are sufficiently awake and your condition permits it, or as directed by your surgeon, you will be transferred to the care unit, normally two hours after the surgery.

4. THE ORTHOPAEDIC UNIT

The interventions by the care team working on the Orthopaedic Unit have four main objectives:

1. Admitting you when your medical condition is stabilized.
2. Providing, jointly with the rehabilitation team, postoperative care and support, such as: reducing pain as much as possible and providing appropriate care for your surgical wound and encouraging you to perform your exercises and resume your activities.
3. Screening and preventing complications.
4. Preparing for your return home.

In your room

- ☐ On the evening of the surgery, ask your coach to bring to your room: your bag and your walker, if you own one.
- ☐ You must change your position in bed every 2 hours.
- ☐ Your orthopaedic surgeon will prescribe your regular medication.
- ☐ You can accelerate the return of intestinal peristalsis by moving and taking regular walks.
- ☐ You will be prescribed anticoagulants (medication to thin the blood and prevent the formation of clots) for a few days to a few weeks after your surgery (the period may vary depending on your predisposition to thrombophlebitis).
- ☐ You must do your respiratory exercises regularly every hour.

- ☐ You must do your circulatory exercises regularly every hour.
- ☐ You must do your mobility and strength exercises regularly, as you were taught by the rehabilitation team (3 times a day).
- ☐ You must walk as much as possible.
- ☐ You should ask for ice and analgesic medication as soon as you feel the need. Don't wait until your pain reaches severe intensity.

When you arrive at the care unit

- The nurse will regularly evaluate your blood pressure, pulse, and breathing. She will check your surgical site dressing (bleeding), temperature, sensitivity and mobility of the operated limb in order to monitor and prevent potential complications. She will give you specific medication related to your surgery, such as pain medication.
- You will have an IV (intravenous) fluid and/or a venous access device to hydrate you and to administer certain medications intravenously.
- You may also have a urinary (bladder) catheter to allow drainage of your urine.
- You may be able to drink clear liquids and eat a light snack (toast...).
- You will be told how much weight you can put on your leg when you're standing or walking.

Your stay in the care unit

- The nursing staff delivers the required care and treatments specific to your type of surgery and your health needs. They will do what is necessary to make you comfortable. They will give you instructions that you must follow. Do not hesitate to ask them any questions and let them know about your concerns.
- Your nurse will change your dressing within 24 to 48 hours following surgery. She will explain the surgical site care and dressing change procedure so that you can take over when you return home. She may let you change your surgical site dressing. She will monitor each of the steps to ensure that you perform them safely.
- **If your condition permits, the nursing staff will help you stand on the very day of your surgery or, at the latest, the next day.** You will be able to walk to the chair, then progressively further with a walker. The staff will guide and teach you the instructions to prevent problems and complications. **Don't stand up alone before we tell you it's safe to do so.**
- Depending on the time of your arrival on the care unit, the rehabilitation team will begin your rehabilitation on the day of your surgery or on the following day, so that you can recover your mobility and resume your regular life as soon as possible.
- The day following your surgery, you will wash up with the help of the patient attendant.
- You will resume your regular diet, unless you feel discomfort caused by nausea.
- Your operated limb will swell rapidly after surgery. It will stay this way for a period of 2 to 4 months. Therefore, you will be encouraged to do the circulatory exercises, to mobilize the knee, and to apply ice on the surgical site. Various other options can also be considered, depending on your condition: anticoagulants (medications), anti-embolism (compression) stockings to help prevent thrombophlebitis, and a device installed around your leg to apply intermittent compressions if you already had a

thrombophlebitis in the past, and a mechanical pumping effect which also helps to prevent thrombophlebitis.

- You will receive regular visits from the specialized surgical nurse (IPAC). She will monitor your progress and will contact your surgeon, if necessary.

You have now embarked on the path to recovery, where our priorities will be:²⁴

- Ensuring your comfort
- Ensuring your healing
- Ensuring your recovery

To do this, the essential elements are:

- A.** Reducing your pain as much as possible
- B.** Providing proper care for your surgical site
- C.** Screening and preventing complications
- D.** Preparing for your return home

A. Reducing your pain as much as possible²⁵:

Reducing pain as much as possible is an important element of your healing process. If your body is stressed because of pain, your healing will take more time, your functional abilities will be more limited, your sleep will be altered and your mood will be affected. Each person is unique with regard to the most efficient ways of alleviating pain. To determine the treatment that is most suitable for you, it may be necessary to try various combinations of medications (anti-inflammatories, narcotics) or various dosages.

Here is what you can do to reduce your pain.

- ☐ Discuss your pain with the health professionals, so that they can determine the amount, location and the type of pain you are experiencing. A standard method of measuring pain is to evaluate it on a scale of 0 to 10, where 0 means no pain and 10 means the worst possible or imaginable pain:
- ☐ By describing your pain, you will help your care team better understand its nature and select the most appropriate treatment. Words such as “continuous pain,” “stinging sensation,” “burning sensation,” or “throbbing pain” are useful in describing pain.
- ☐ Following instructions with regard to positioning will also allow you to exercise some

Absence of pain	Minimal	Light	Moderate	Severe	The worst imaginable
0	1	2	3	4	5
6	7	8	9	10	

control over your pain.

- ☐ Do your exercises. Move, change positions, walk.

²⁴ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

²⁵ Ibid

- ☐ Apply ice after your exercises for 15-20 minutes every 2 hours if needed.
- ☐ Practise the relaxation technique.
- ☐ When they stop using nerve blocks or the PCA pump, you will continue taking analgesic medication orally. **Don't hesitate to ask for your analgesic medication (not necessarily at the scheduled hours)**, so that pain will not delay your functional recovery. Pain rated at 5/10 or less is acceptable on the first day after surgery, and 3/10 or less on the following days.

During the immediate postoperative phase, several methods can be used to control surgical pain: Regional epidural anesthesia (in the back), Nerve block and the PCA (patient-controlled analgesia) pump. You will also be given oral medication to control the pain.

Nerve block

- To reduce pain, the anesthesiologist may use regional anesthesia (nerve block) in a single dose or in place for up to 48 hours after surgery, by injecting a numbing or anesthetic drug or medication around the nerves that transmit pain signals from the leg area involved in the surgery.
- Before the surgical procedure, the anesthesiologist has inserted a small plastic tube (catheter) a few centimeters below the skin. It is through this tube that you receive a local anesthetic continuously and automatically, via an elastomer pump or a pump controlled by the nurse. This perfusion can last from 24-48 hours after which the surgical pain is better controlled. The concerned limb remains numb and weakened. **As long as you feel this numbness and this weakness, you should mobilize with caution or with help to not fall.**
- It is common to have clear fluid or blood tinged leakage at the catheter insertion site that can be absorbed by a dry dressing or compress. After 24- 48 hours, or when the elastomer pump or bottle is empty, the catheter is removed.
- The effects of the nerve block gradually diminish after the catheter is removed. The ability to move will precede the return of feeling or sensation to the affected limb. As feeling or sensation returns, you will feel tingling of the anesthetized limb. The effects of the nerve block have worn out when feeling or sensation has returned to the affected limb or area. You may then feel pain at the operative site.
- Oral analgesics (painkillers) are prescribed by your surgeon following the removal of the nerve block catheter. Do not wait for the effect of nerve block to disappear completely to start taking painkillers. Begin oral analgesics once you feel the sensation of tingling in the affected limb. Do not hesitate to take them regularly the first few days following surgery, if you feel pain.

The PCA (Patient-Controlled Analgesia) Pump

- For up to 48 hours, your anesthesiologist may choose a method which would allow you to treat your pain by yourself, without having to ask the nurse. This consists of a pump containing pain medication.
- The PCA pump is connected to your intravenous line; this way, you have access to medication providing fast pain relief without requiring an injection.
- With the PCA pump, you can exercise full control over your pain, since you can press a button and release a determined amount of analgesic medication.
- The pump is programmed so that you can administer a maximum permissible dose of the medication every hour, based on your height and weight. So, any time you feel the pain, press the button. Do not wait until your pain reaches severe intensity.
- The PCA system is very safe and allows the administration of an optimal dose of medication, no more, no less. Do not hesitate to administer the analgesic treatment you require. Don't let anyone else (family, friends...) press the button.
- If the relief is unsatisfactory or if you experience side effects (nausea, itching, vomiting, constipation), notify your nurse. She will be able to adjust the pump settings in order to ensure you have access to medication in a more efficient way.

B. Providing proper care for your surgical wound

- You have a 4 to 6-inch (10 to 15 cm) incision on your knee, closed by sutures or clips, thread or adhesive strips ("Steristrips"), and covered by a dressing. It is normal to see a bruise appear behind your knee.
- Your dressing and your bandage will be removed 24H after the operation. The nurse will apply another dressing to cover the incision.
- This dressing will be changed again before you leave or more frequently, if necessary.
- After your discharge, follow-up of your surgical wound will be done by the CLSC nurse.
- The nursing care staff will give you instructions concerning the care of your surgical site. Don't hesitate to discuss any uncertainties or misunderstandings.

Wound closed with adhesive strips (Steristrips), without clips:

- ☐ You can apply a compress (gauze) held in place using adhesive tape to cover your wound for comfort only or to protect it against chafing from rubbing on clothing.
- ☐ There is nothing else to do but let the adhesive strips gradually detach and fall off by themselves. After three weeks, your skin should be completely healed. You will then be able to remove the remaining strips, if necessary.

Wound closed with sutures or clips:

- ☐ You can apply a compress (gauze) held in place using adhesive tape to cover your wound for comfort only or to protect it against chafing from rubbing on clothing.

- ☐ The CLSC will perform the removal of clips approximately 10 to 14 days after your surgery. After the clips are removed, maintain a dry dressing (gauze) until fluid no longer seeps out at the clips' entry points.

To provide proper care for your surgical wound, here is what you should do.

- ☐ Always wash your hands before touching the surgical site area.
- ☐ Perform self-care of the surgical site / wound as you have been taught by the nursing care staff.
- ☐ On the date specified by the surgeon, have your stitches, clips or sutures removed (if you have them) at the designated facility (probably your CLSC).
- ☐ Watch for signs of infection or other complications; **contact the CLSC nurse or Info-Santé at 811, if you experience one or more of the following signs or symptoms:**
 - **Redness spreading beyond the edges of the wound or surgical site;**
 - **Fever above 38 °Celsius or 100 °Fahrenheit;**
 - **Unusual coloration or discharge, including pus;**
 - **Unusual tenderness or swelling.**
- ☐ Even after clips or Steristrips are removed, it is important to look after the wound area. You must gently wash the surgical wound with mild soap, rinse it thoroughly with clear water, and then pat it dry carefully **without rubbing**. ***Taking a shower or a bath is not permitted if your wound oozes or weeps.***
- ☐ You must also protect the area against any injuries for at least four weeks.

C. Screening and Preventing Complications²⁶

Any surgery entails the risk of complications, even after the best preparation possible; they are rare, but possible. Your responsibility consists of following the instructions given to you by the care team and your physician, as well as recognizing potential complications. This way, you will contribute to preventing and reducing them.

Nausea

Nausea is the most frequent postoperative complication. If nausea and vomiting persist, certain medications can be administered. After surgery, you are given clear liquids to prevent nausea until your stomach resumes normal function and you can start to eat normally again. If you are receiving epidural analgesia, nausea is one of the side effects you would normally experience. The care team is there to intervene, if necessary. To prevent or reduce this complication:

- ☐ Take your medication with food to protect your stomach.

Urinary retention

Urinary retention is a frequent problem after any type of surgery, but things return to normal after a few hours or a few days. To solve this problem, it may be necessary to insert a catheter (tube) into your bladder in order to drain the urine. The catheter can remain in place for a few hours or a few days, or it can be removed immediately after the bladder has been drained.

²⁶ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

Constipation

Postoperative constipation can be associated with a change of diet, reduced physical activity and the use of sedatives to alleviate pain. Sedatives tend to inhibit intestinal function. Medications to counter constipation are prescribed during your stay in the hospital, and you could continue to use them at home. To prevent this complication:

- ☐ It is advisable to adhere to healthy eating habits that promote regularity. Introduce high fibre foods in your regular diet: whole-grain breads and cereals, bran, fruits and vegetables, unless you are following a special diet.
- ☐ Adequately hydrate yourself: drink 1.5 to 2 L of water a day in order to optimize the efficiency of dietary fibres, unless you are subject to fluid restriction.
- ☐ Move as soon as possible and as much as possible as per recommendations of your health care team.

Swelling

Your operated leg will remain swollen for several weeks or months after your surgery. This is normal, and will often vary depending on the type of activities you do. To reduce swelling:

- ☐ Elevate your operated leg (ideally 20 to 30 cm (8 to 12 inches) above the level of your heart) to an inclination of approximately 15° (a single pillow under the calf, without bending your knee).
- ☐ Avoid remaining seated for long periods of time.
- ☐ Do your circulatory exercises (see relevant section) in order to maintain blood circulation.
- ☐ Apply an ice bag on the surgical site for the first few days, in order to contain swelling.

Blood clots, phlebitis, and pulmonary embolism

Blood clots can form in the deep veins several hours or several weeks after a surgical procedure, usually because of the lack of movement. These clots could break off and make their way to the lungs (pulmonary embolism) or block the circulation in your legs (phlebitis), which would entail serious risks for your health. The following individuals run the risk of developing blood clots: people with a history of phlebitis or pulmonary embolism, heart problems, circulatory problems or other health problems, such as diabetes, who are inactive and overweight, and who undergo a surgical procedure such as a knee replacement.

Symptoms of thrombophlebitis are: persistent pain in the legs (calves), increasing with activity or in touching the calf, with or without swelling, with or without redness. To prevent the formation of clots after surgery, you will wear tensor bandages around your legs for the first two days and/or compression stockings. If you wear anti-embolism stockings:

- ☐ Continue wearing them all the time, 24 hours a day, for **14 days**, after your release from the hospital;

- ☐ Remove your stockings every two day for your personal hygiene;
- ☐ **If needed**, change them or wash them every second day, washing them out well by hand, wring them well, hang them up to dry; Do not put them in the dryer.
- ☐ Lay down for 30 minutes before putting those socks on. **Ask your helper to assist you in putting the socks back on;**
- ☐ Do not roll them down, and be sure the stockings do not shift or slip. Pull stocking up and fit around ankle and calf, working up to final position. Make sure heel and toe are positioned correctly. Smooth out any excess material between top of stocking and ankle. Pull toe section forward to smooth ankle and instep area and allow for your toe comfort. You can use rubber gloves to put on your stockings;
- ☐ We will show you how to put on and position your stockings.

To prevent thrombophlebitis you must also:

- ☐ Stand up as soon as possible, with the help of the nursing staff.
- ☐ Move your feet and ankles every hour (see the section on circulatory and respiratory exercises).
- ☐ Wear your support or compression stockings (if you already wore them or if they were prescribed).
- ☐ Take anticoagulants as per your surgeon's prescription (if necessary, refer to the section on "Self-Injection of the Anticoagulant").

Anemia

You can lose a significant amount of blood during this type of surgery. Blood loss can cause a reduction of your blood hemoglobin level, a condition referred to as anemia. In order to produce hemoglobin, your body needs iron. Hemoglobin carries oxygen to your organs, and its level can be measured through a blood analysis. This will be tested as part of your preparatory examinations before surgery, followed by more tests after the operation. If your hemoglobin level is too low, you may feel weak and dizzy, out of breath, very tired, or you may experience nausea or headaches. Therefore, you may need a blood transfusion and you may also be given iron supplements.

Here is how to avoid low red cells count in your blood and the need for a blood transfusion.

- ☐ Follow the Canada's Food Guide to ensure healthy nutrition. Heme iron of animal origin (meat, poultry, fish, liver) is much better absorbed than non-heme iron from vegetable sources (lentils, chickpeas, enriched cereals, nuts and seeds, greens). Iron from vegetable sources will be better absorbed if taken with food rich in vitamin C (kiwi, pineapple, orange, strawberries, red/orange/yellow peppers)
- ☐ If you have a history of anemia, you should consult your physician or dietician in order to evaluate the relevance of an iron supplement.

Infections

Less than 1% of patients develop wound infections after surgery. However, infection is a very serious complication when it occurs. Prevention is the key. The onset of infection can occur in your joint during surgery or during your stay in the hospital, or it may be caused by bacteria coming from

another part of your body. You will run a higher risk of developing an infection if you are eating inadequately or if your immune system is weakened. For our part, to reduce these risks, we will ensure aseptic conditions during your surgery and your stay in the hospital, and we will administer antibiotics.

For your part, to prevent infection in the perioperative period:

- ☐ **Consult a professional if you suspect or notice one or more of these signs of infection:**
 - **Fever ≥ 38.5 °C (101.3 °F).**
 - **Redness or swelling of the wound.**
 - **Leakage from the wound.**
 - **Increased pain from the wound during activities or rest.**
- ☐ Get into shape by maintaining a healthy diet before and after your surgery.
- ☐ Stop smoking before your surgery.
- ☐ Maintain good oral health.
- ☐ Wash the area of the operation, as suggested, before surgery.
- ☐ Avoid people who have colds or infections.
- ☐ Follow instructions to look after the wound.
- ☐ Do not put your fingers in your mouth and wash your hands before you touch your dressing or the wound.

Hand Washing²⁷²⁸

On a daily basis, you touch a number of objects which could have been contaminated by viruses or bacteria left behind by yourself or by other people. When you touch your eyes, nose, mouth, or any wound with your contaminated fingers, you increase the risk of developing an infection. Therefore, you have to wash your hands very often to avoid developing an infection.

Everybody should wash their hands! Parents, children, adults, as well as staff in hospitals, schools, day-care centres, offices, restaurants, etc.

When to wash your hands:

- **Before and after changing a dressing;**
- When they are visibly dirty;
- After coughing or sneezing
- After blowing your nose or a child's nose;
- Before and after manipulating food, and before eating;
- After using the bathroom or after changing a diaper;
- Before putting on or taking off your contact lenses;
- After manipulating garbage.

Steps to follow to wash your hands properly:

- ❶ Remove your rings and wet your hands under warm running water.
- ❷ **Put a small amount (5 mL or 1 teaspoon) of liquid soap in the palm of one hand.** Bar soaps are not as hygienic as liquid soaps because they stay moist and attract germs. If you only have bar soap, it should be stored on a slatted drip rack so that it doesn't sit in water.
- ❸ Rub your hands together for 20 seconds to work up a lather. Make sure you scrub the backs of your hands, between your fingers, and under your fingernails.
- ❹ Rinse your hands thoroughly under clean running water for at least 10 seconds. Once your hands are clean, try not to handle the faucets. Use a paper towel to turn off the water.
- ❺ Dry your hands with a single-use paper towel. If you use a hand towel, be sure to change it every day. During cold and flu season, each family member should have his or her own hand towel.
- ❻ Use hand lotion to moisturize your skin if your hands are dry.



Hint: It is not necessary to use antibacterial soap.

²⁷ <http://sante.gouv.qc.ca/conseils-et-prevention/lavage-des-mains/>

²⁸ <http://healthycanadians.gc.ca/diseases-conditions-maladies-affections/disease-maladie/hygiene-eng.php>

Skin complications

Decubitus ulcers (commonly called bedsores) may result from the compression of skin covering bony parts or from moisture or friction. They occur in patients bedridden for an extended period of time or in a poor state of nutrition. It is possible to prevent this complication by using good skin care techniques, an appropriate mattress cover or a special mattress. Allergic reactions are also possible, from a simple rash to a more intense reaction. To prevent this complication, you can:

- ☐ Check whether you have one or more allergies.
- ☐ Move regularly and as soon as possible after your surgery.
- ☐ Proteins are essential to the healing and scarring of your surgical wound. To meet your protein requirements, it is recommended to include some in every meal, to facilitate reaching your objectives.

Examples of protein rich foods
Milk or fortified soy beverage: 250 mL (1 cup) Yogurt: 175 g ($\frac{3}{4}$ cup) Cheese: 50 g (1½ oz.) Meat, poultry, fish and seafood: 75 g (2½ oz.) Legumes: 175 mL ($\frac{3}{4}$ cup) Tofu: 150 g or 175 g ($\frac{3}{4}$ cup) Eggs: 2 Peanut butter: 30 mL (2 tbsp)

- ☐ If you are unable to satisfy your protein requirements or to follow the number of servings recommended in the Canada's Food Guide, because of lack of appetite, fatigue, or postoperative nausea, some commercial preparations could be helpful for you. You can buy supplements at your pharmacy or grocery store. These should be ingested in addition to the food you are able to consume. Take them at the end of a meal or snack. However, avoid taking them 2 hours or less before a meal, since they may affect your appetite for the next meal.

Postoperative confusional state

Sometimes, certain individuals experience a period of confusion or delirium after surgery. They might act or talk in an unusual manner. For example, they may begin to forget things, they may be confused, or they may see, hear or believe things that make no sense at all. Normally, delirium disappears in a few days but, on occasion, it could persist for several weeks. Generally, it is attributable to more than one cause. The side effects of anesthetics and medications, the lack of sleep, pain, infection, alcohol withdrawal, constipation and a low oxygen level are some of the more common causes of delirium. The care team makes every effort to find and correct the cause of the delirium.

To reduce the possibility of this complication occurring, you must:

- ☐ Use the appropriate relaxation technique in order to alleviate lack of sleep and manage your stress.
- ☐ Gradually reduce your consumption of alcohol.
- ☐ Limit your consumption of analgesic medications.
- ☐ Hydrate yourself properly and maintain a healthy diet during the weeks preceding surgery.
- ☐ Ensure proper intestinal function.
- ☐ Inform the care team if you had this problem before with a previous surgery.
- ☐ Wear your eyeglasses and/or hearing aid soon after surgery.

Pulmonary Complications

After the surgery, as a result of the anesthesia and prolonged lack of movement, pulmonary complications, such as pulmonary edema or pneumonia, may occur. To avoid these complications, the care team will help you to get up on your feet on the day of your surgery or, at the latest, on the next day. Your role is as follows:

- ☐ Stop smoking at least one month before surgery.
- ☐ Do not eat or drink anything after midnight on the night before your surgery.
- ☐ Do your respiratory and circulatory exercises as indicated.
- ☐ Take deep breaths regularly.
- ☐ Change positions every two hours (vary your posture even when you are in bed: on your back, on your side) and move as much as possible.
- ☐ **While in the hospital, if you have trouble breathing, notify your nurse. At home, you can call the Info-Santé nurse by dialling 811.**
- ☐ If you take medication to improve your breathing, take it before and after your surgery, as prescribed by your physician.

Cardiovascular Complications

The two most common postoperative cardiac complications, **although very rare**, are heart attacks and heart failure. The stress of surgery can cause a heart attack in individuals with heart disease (known or unknown). The care team is there to watch for signs of complications and to intervene, if necessary.

Nerve Damage

Depending on the area of the surgical wound, some nerve damage (local loss of sensation in the skin, weakness...) may occur because of the proximity of nerves and blood vessels. Normally, such damage is temporary, especially if nerves were stretched by the spreaders used to facilitate the surgeon's movements. Sometimes, it can also be caused by epidural anesthesia or nerve block. Permanent damage is a rare occurrence. The care team is there to watch for signs of such complications and to intervene, if necessary.

Loss of Appetite

- ☐ To stimulate your appetite, try to get some fresh air before meals, if possible.
- ☐ Have liquids a half-hour before or after meals, in order to avoid feeling bloated.
- ☐ Make food presentation attractive. Vary colours, flavours and textures; make meal time as pleasant as possible.
- ☐ It is often preferable to have 3 small meals and to add 3 snacks.
- ☐ Select ready-to-eat or easy-to-prepare dishes. Cook prior to surgery and freeze the food as individual meals.

A word on polypharmacy

The hospitalisation rate resulting from the adverse effect of a medication is four times higher among older patients than among young adults.²⁹ Moreover, polypharmacy is a known risk factor for falls among the elderly. This risk increases by 60% when over four drugs are taken.³⁰ Thus, it is possible that the cause of the symptoms placing you at risk of falls is the combination or sum of the effects of the medications you are taking. The care unit pharmacist or physician unit might thus review and update the medications prescribed to you. After your hospital stay, you should talk to your family physician about this.

D. PREPARING FOR YOUR RETURN HOME

Duration of hospital stay:	1-2 days
Duration of convalescence:	approximately 3 months
Time off work:	to be discussed with your orthopaedic surgeon
Driving:	not permitted for 6 to 8 weeks , as recommended by your physician

Before leaving the hospital:

- The dressing will be changed by the nurse. We will give you instructions to look after your surgical wound.
- Your physiotherapist will give you instructions regarding your exercises and the next steps of your rehabilitation.
- You will be informed of any restrictions that may apply.
- We will ensure that you know how to properly use the functional equipment you will need (walker, cane, reaching aid...).
- You will receive a prescription for all the medications you will need: anticoagulant, analgesics.
- We will specify your next appointments with the orthopaedic surgeon
- The care team will make arrangements for follow-up by the CLSC.

²⁹ Rochon P.A. "Drug prescribing for older adults". www.utdol.com (Website consulted on February 20th, 2016).

³⁰ Zieler G., Dieleman J.P., Hofman A. *et al.* "Polypharmacy and falls in the middle age and elderly population". *British Journal of Clinical Pharmacology*. 2005; 61 (2): 218-23.

- Within the first day of your hospital stay, we will review with you the arrangements for your discharge from the hospital, the identity of your coach and who will be responsible for taking you home.

Medical Criteria for Hospital Discharge

We will regularly evaluate whether you have met the criteria required to allow your safe return home or discharge from hospital. We will be able to consider your discharge from the hospital as soon as:

- Your physical, cognitive and psychosocial condition is stable. More specifically, when:
 - The functioning of your physiological systems (cardiac, respiratory, digestive, etc.) has returned to the preoperative level.
 - You are alert and oriented on all levels.
 - You eat well, and experience no nausea or vomiting.
 - Your stool is normal and you have no urinary problems.
 - Your pain is properly controlled.
 - Laboratory results are stable.
 - Your surgical wound shows no sign of infection.
- No major complications or reactions to treatment are anticipated.
- You and your loved ones understand the treatment and monitoring to be performed, and you are able to identify problems related to:
 - Your medications
 - Self-management of your postoperative pain.
 - Your surgical wound.
 - Your exercises.
 - Resuming your activities.
 - Signs and symptoms of complications.
 - Preventing falls.

Rehabilitation Criteria for Hospital Discharge

If your medical condition is stable and complications, if any, are controlled or treated, the following additional criteria are used to make this decision.

- You are self-sufficient in performing your sit-to-stand and stand-to-sit transfers (chair/toilet) using the equipment, as required.
- You can get in and out of bed, without bedrails, either by yourself or with the assistance of your caregivers or using technical aids.
- You can dress your lower body either by yourself or with the assistance of your caregivers or using technical aids.
- You can walk safely with a walker over a distance of 15 m (50 feet).
- You can use stairs by yourself, taking into account the conditions present at your home (number of steps, handrails, caregivers...).
- Your cognitive state is similar to your pre-hospitalisation condition or sufficiently functional for your return home.

Visiting Policy

- Visiting hours are 8:00 a.m. to 8:00 p.m., 7 days a week. However, the presence of your coach is permitted at all times.
- The number of visitors or attendants allowed to visit a hospitalized person is limited to two at a time. Certain specific conditions may apply (intensive care...).
- Please note that children under 12 are allowed to visit hospitalized persons but they must be supervised by an adult at all times.
- Visitors have access to parking. Parking fees are based on an hourly rate, with a maximum rate per day. You can also purchase a weekly or monthly parking permit.

Discharge Policy

- Make sure someone will be available to take you home as soon as the second day after your surgery. Once you have met the criteria for a safe discharge, you will be asked to return home. **You must leave your room 2 h after the announcement of your discharge.**

THE POST-HOSPITAL PHASE

PHASE	ACTORS	ACTIVITIES
POST-HOSPITAL	You and your coach	Performing all required care and exercises. Fostering optimal recovery of your function. Ensuring prevention and monitoring of complications. Maintaining constant communication with the care and medical teams.
	Home Support	Ensuring support and follow-up of your physical condition, as required. Continuing your rehabilitation, as appropriate.
	Outpatient Physiotherapy	Continuing your rehabilitation, as required.
	Orthopaedic surgeon	Providing follow-up after your surgery.

1. YOUR INVOLVEMENT AND YOUR COACH'S INVOLVEMENT

As far as you are concerned, this phase has four main objectives:

1. Performing all required care and exercises.
2. Fostering optimal recovery of your function.
3. Ensuring prevention and monitoring of complications.
4. Maintaining constant communication with the care and medical teams.

When you return home:

- ☐ Make sure you can call on your coach or get help from your family or friends for daily housekeeping activities.
- ☐ Continue your anticoagulant treatment, as well as your circulatory exercises until the date indicated in your program booklet.
- ☐ Remember: all sedatives can cause constipation; be active, adopt a high fibre diet, add prune juice, and drink 8 to 10 glasses (1.5 to 2 L) of water every day, unless you are subject to fluid restriction or on a special diet. As a last resort, you can insert a glycerin suppository.
- ☐ Use caution, since sedatives can produce nausea; if this happens, take your analgesics with food. If the situation persists, talk to your pharmacist or your physician, who may suggest supplemental medication for your stomach.
- ☐ Avoid consuming alcohol if you are taking analgesics.
- ☐ If your analgesic medication causes drowsiness, try taking smaller doses.
- ☐ Continue taking prescribed medication and following instructions, to reduce your pain, conserve your energy and ensure proper positioning. If your pain is still not under control, contact the Orthopaedic Clinic nurse.

- ☐ You may experience some difficulty concentrating if you have had general anesthesia. This condition will improve over time. Follow the instructions you were given concerning driving and do not make important decisions, such as signing legal contracts, until your mental abilities return to their normal level.
- ☐ You can take a shower 2 days after the clips/sutures have been removed and when leakage from the wound has stopped. Do not take a bath. Carefully pat dry the wound area, **without rubbing**. Wait at least 3 weeks before taking a bath. **If there is leakage from the wound, taking a shower or a bath is not permitted.**
- ☐ Monitor and treat your surgical wound as per the instructions you received at the hospital.
- ☐ You must not shave your leg for at least 3 weeks after surgery.
- ☐ Don't drive until your surgeon authorizes you to do so.
- ☐ For health advice, you can reach Info-santé staff **at any time** by dialling 811.

Advice on recovery and self-management of your pain³¹

- ☐ Feeling some pain after surgery is normal. Everyone is different, so learn to know and respect your limits by adapting your activities to your level of pain. Continue to take your analgesics, as required. The pain will gradually subside.
- ☐ Be active; gradually increase your level of activity, as suggested by the care team, by alternating periods of activity and periods of rest.
- ☐ Rest when you feel the need, but do not stay in bed after you have returned home. Try to change positions every 45 minutes, in order to avoid discomfort caused by stiffness; the best thing to do is to walk, at least over short distances.
- ☐ If your leg tends to swell, lie down for about 15 minutes several times a day, with your leg above the level of your heart. You could take this opportunity to **apply ice**, as required. You could also raise your leg, with a pillow under the calf, at a 15° angle; be careful not to bend the knee.
- ☐ **Do the exercise program given to you, at least twice a day** (ideally three), in order to increase your endurance and ensure the return of complete mobility (see the Exercise section).
- ☐ Use home assistive devices or functional aids in order to protect the wound area and reduce the stress to which it could be submitted.
- ☐ Use your walking aid (cane, walker...) during the period required to develop a normal walking pattern. **Remember that it is better to walk normally with a cane than to walk with a limp without a cane.**
- ☐ Use chairs with arm rests, so that you can get up more easily.
- ☐ Follow the dietitian's instructions to resume eating normally, unless otherwise recommended. Eat plenty of foods containing proteins, fibres and vitamins in order to accelerate healing.
- ☐ Follow the instructions received when you leave the hospital concerning taking a shower, sexual activity, returning to work and driving.

³¹ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

2. HOME SUPPORT SERVICES OR THE CLSC

Their interventions have two main objectives:

1. Ensuring support and follow-up of your physical condition, as required.
2. Continuing your rehabilitation as required or as appropriate for your condition.

Within 24 to 48 hours from your return home, a CLSC nurse will contact you to check certain details (wound). Do not hesitate to contact your CLSC before this time should you have questions. Depending on your condition a nurse may visit you, or you may have to go to the CLSC for follow up on your physical condition and to receive the appropriate care (changing dressings...). A member of the rehabilitation team could also come to visit you to pursue your rehabilitation at home. If you have sutures or clips, they will be removed approximately 10 to 14 days after the surgery by the CLSC nurse. After the CLSC nurse's follow-up, if you notice drainage (leakage) from your wound, notify the CLSC nurse so she can check your wound. ***If there is leakage from your wound, taking a shower or a bath is not permitted.***

3. OUTPATIENT PHYSICAL THERAPY

The main objective of this service is to continue your rehabilitation. You will still need to continue your exercises at home. Feel free to take your pain medication before your treatment. Arrange transportation for your treatments, because you will not be able to drive for 6 to 8 weeks. **If the team does not contact you, you must phone them to ensure that follow-up is provided.** Physiotherapy clinic or home services/treatments will continue until you have met the following treatment criteria:

- **RANGE OF MOVEMENT (ROM) :** 105 degrees of flexion, 0 degrees of extension, if appropriate.
- **WALKING:** Acceptable to walk with a slight limp and / or with a cane only outdoors, depending on the case.
- **STAIRS:** With the cane, one step at a time (but not alternating).

Note that the majority of patients will terminate physiotherapy sessions after 8 weeks of active treatment. It is important to understand that the range of motion of the operated knee concerned after surgery is related to or dependant on its range of motion prior to surgery. The mobility (ROM) postoperative objectives take into consideration preoperative joint stiffness.

Improving your functional level beyond these objectives is your responsibility, as it is for the general public. We encourage you to join a fitness centre, go to a swimming pool, take lessons (dancing, tai chi, yoga...) or consult a physiotherapist in a private clinic.

RETURNING TO WORK

Most patients are unable to return to work for at least 8 weeks following their surgery. However, if you do sedentary work and your state of health permits, you could resume your professional activities sooner.

- ☐ Discuss the matter with your surgeon at your first follow-up visit.
- ☐ Even if you return to work, make sure to continue with your exercises.
- ☐ Depending on the type of work you do, discuss your special needs with your employer: frequent changes of position, elevating your leg, time to do your exercises.

RESUMING ACTIVITIES³²³³: TO BE DISCUSSED WITH YOUR ORTHOPAEDIC SURGEON

Activities to resume immediately:

- ☐ As soon as you return home, walking should be your preferred activity.
- ☐ When your wound is completely healed (3 weeks) going to the pool is also a good choice, as long as it is equipped with stairs and handrails. Make sure to give your pain proper consideration.

Activities to resume after 6 to 8 weeks (unless otherwise specified by your orthopaedic surgeon):

- ☐ Stationary bicycle (can be used earlier as a mobility exercise).
- ☐ Swimming in any pool.
- ☐ Social dancing.
- ☐ Driving a car, provided you meet SAAQ requirements.
- ☐ Discuss with your surgeon any other leisure or sports activities of interest to you

Activities to resume after 3 months (unless otherwise specified by your orthopaedic surgeon): Watch out for any risks of falls.

- ☐ Lifting moderately heavy loads
- ☐ Gardening: sitting on a small bench
- ☐ Lawn care and mowing
- ☐ Golf
- ☐ Bowling, petanque (lawn bowling)
- ☐ Bicycling outdoors (not mountain biking)
- ☐ Doubles tennis (occasionally)
- ☐ Classic cross-country skiing
- ☐ Snowshoeing

³² A Guide for Patients Having Hip or Knee Replacement, Holland Orthopaedic & Arthritic Centre, Sunnybrook, Toronto.

³³ Kuster M.S. Exercise Recommendations after Total Joint Replacement, Sports Medecine, 2002: 32 (7) 433-445.

Activities to discuss with your orthopaedic surgeon:

- ☐ Mountain biking
- ☐ Downhill skiing or cross-country skiing (no skating)
- ☐ Sailing
- ☐ Canoeing
- ☐ Trekking
- ☐ Horseback riding

High-risk activities (not recommended):

- ☐ Singles tennis
- ☐ Running, jogging
- ☐ Squash, racquetball
- ☐ High-impact aerobics

4. VISIT TO THE ORTHOPAEDIC SURGEON

The main objective of the first postoperative visit to the orthopaedic surgeon is to ensure follow-up of your surgery. Therefore, you will have a follow-up appointment 6 to 8 weeks after your surgery. If you have not been given your appointment time when you are discharged from the hospital, you will be contacted during the next few weeks to make that appointment. **If no one contacts you, you must phone the Orthopaedic Clinic to ensure that follow-up is provided.** During that visit, the Orthopaedic Clinic team will make sure that your condition has progressed normally. You may have to undergo certain radiological or clinical tests in order to measure your progress.

- ☐ **Return the DVD.**
- ☐ Write down your questions.
- ☐ Inform the orthopaedic surgeon of any complications which might have occurred and been treated by another physician.
- ☐ Make sure you understand the instructions: precautions, restrictions concerning certain activities or sports.
- ☐ Ask the surgeon for the date of your next scheduled visit.
- ☐ Check whether you can resume driving an automobile.
- ☐ Discuss your return to work with the orthopaedic surgeon.
- ☐ Make sure you get all the necessary information about the antibiotics you may have to take before a dental treatment or before certain surgical operations (where applicable).

THINGS TO WATCH FOR

NOTIFY THE ORTHOPAEDIC CLINIC AT 819 966-6022 OR 819 966-6200 EXT. 3967 OR INFO-SANTÉ AT 811, IF:

Signs of wound infection:

- ☐ The area around the wound becomes increasingly red, warm and very swollen.
- ☐ There is a separation of the incision edges.
- ☐ There is leakage of fluid at the knee surgical site (green, yellow, or pus).
- ☐ There is a bad odour from your wound.
- ☐ You have a fever ($> 38.5^{\circ}\text{C}$ or $>101.3^{\circ}\text{F}$, measured 30 minutes after eating or drinking) for more than 24 hours.

Signs of bleeding:

- ☐ Red or dark urine.
- ☐ Red or dark stool.
- ☐ Bleeding from the gums or nose.
- ☐ Excessive bruising.

VISIT THE EMERGENCY DEPARTMENT IF:

Signs of thrombophlebitis:

- ☐ You have persistent pain in your legs (calves) or arms, increasing with activity or when touching the calf or biceps, with or without swelling.

Signs of pulmonary embolism:

- ☐ You have chest pain.
- ☐ You experience difficulty breathing, wheezing or shortness of breath even at rest.
- ☐ You experience unexplained sweating.
- ☐ You become confused.
- ☐ You feel a sharp pain in the shoulder when you take a deep breath.

SPECIAL RECOMMENDATIONS

- While you are using anticoagulants, prevent cuts and injuries by:
 - Shaving carefully, ideally with an electric razor;
 - Using a soft toothbrush;
 - Clipping your nails carefully;
 - Wearing shoes at all times;
 - Following fall prevention instructions.
- If you have to undergo dental or any other surgery, you must notify your dentist or physician that you have a knee implant. You may have to take antibiotics before any dental treatment.
- Notify your family physician if you develop any type of infection: urinary, dental, throat... An antibiotic may be necessary.

LIVING WITH YOUR PROSTHESIS

PHASE	ACTORS	ACTIVITIES
LIVING WITH YOUR PROSTHESIS	Orthopaedic surgeon	Monitoring your condition with regard to your prosthesis.
	You and your coach	Following the advice provided. Continuing the exercise program and adopting a healthy lifestyle.

1. YOUR ORTHOPAEDIC SURGEON

You will have regular visits with your orthopaedic surgeon in order to verify the proper positioning of your prosthesis and to check for any signs of late complications, such as infection, loosening of the implant or rejection. These complications are rare and sometimes impossible to detect, because they remain symptomless, so it is necessary to ensure monitoring. Your orthopaedic surgeon will determine the appropriate frequency of your visits. **If no one contacts you, you must phone the Orthopaedic Clinic to ensure that you receive follow-up.**

- ☐ Write down your questions.
- ☐ Inform the orthopaedic surgeon of any complications that might have occurred and been treated by another physician.
- ☐ Make sure you understand the instructions.
- ☐ Ask the surgeon for the date of your next scheduled visit. Contact the Orthopaedic Clinic shortly before that date.
- ☐ Bring the list of your medications as provided by your pharmacy, as well as the list of the natural products or herbs that you use.

2. YOUR INVOLVEMENT AND YOUR COACH'S INVOLVEMENT

WHAT SHOULD YOU EXPECT?³⁴

It is not uncommon to continue feeling pain around the surgical wound. It may take a few months to obtain the desired results, so do not get discouraged.

- ☐ Continue following the advice provided.
- ☐ If you have questions, at any time, don't hesitate to contact the Orthopaedic Clinic nurse.

³⁴ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

You will experience progressive improvement up to 5 or 6 months after the surgery. Afterwards, improvement will be slower. It has been demonstrated that even after a year or more, activity can increase as muscular strength continues to improve.

WHAT ARE THE RISKS INVOLVED IN HAVING A PROSTHESIS?

Prosthetic infections may occur as a result of the improper treatment of the site of infection: whitlow or felon (tip of the finger or nail infection), ingrown nail, infection of the ear/nose/throat sphere (sinusitis, laryngitis, etc.), bronchitis, urinary infection. Do not wait to consult your family physician in case of infection, to have an examination and, possibly, a prescription for antibiotics.

- ☐ Make sure to notify your dentist and any other physician you may consult that you've had a knee replacement. Even in the course of a routine dental check-up, you may run the risk of developing an infection. A small infection can create a serious problem, and the health professionals who treat you know what precautions to take. It's your job to keep them informed.³⁵

POSTOPERATIVE CONTRAINDICATIONS (NONE, UNLESS OTHERWISE INSTRUCTED BY YOUR SURGEON)

Following your surgery, there are no specific contraindications however, it is not advisable to:

- Put too much weight or impact forces on the affected joint limb by carrying heavy objects pressed against the operated leg or by jumping.
 - Practise activities involving risks of injury such as contact sports.
 - Pivot on the operated leg.
-
- ☐ For the first 3 weeks, we advise against **taking a bath or going to the pool**, so that your skin can heal properly at the surgical site.

After the 6 weeks have passed, pain will be your best guide. Activities such as washing the floor or the bathtub, kneeling on the floor or kneeling in church that involve positions such as **kneeling, crouching or being on all fours** will be difficult.

³⁵ Planning for Maximal Results: Preparing for Your Surgery. Canadian Orthopaedic Foundation. www.canorth.org

FREQUENTLY ASKED QUESTIONS

How long does it take to get a final result?

You will require several months to enjoy all the benefits of the operation. You must resume your activities in a smooth, progressive manner during the first 2 months following the surgery (range of movement, muscular effort, etc.). Gradually, you will acquire most of the benefits your prosthesis can give you. For all practical purposes, you will need approximately 5 to 8 months to obtain optimal results after a knee replacement.

Can I live normally with a prosthesis?

It is possible to live normally with a prosthesis within the usual conditions of daily activities. A piece of advice: consider your age and your physical abilities prior to surgery, in order to define realistic objectives.

Can I participate in sports?

Nothing is formally prohibited. It all depends on age, state of health, type of sport, physical abilities prior to the surgery. You must, however, exercise moderation in practice, as well as control your enthusiasm; a prosthetic knee is more fragile than a normal knee. With the benefit of a knee replacement, an individual can ride a bicycle, practise non-aggressive skiing, swimming, etc., providing you were already doing these activities before the surgery. **Avoid** sports where the prosthesis is subjected to excessive stress and contact sports (racing, jumping, judo, karate, team sports, etc.). **Recommended** alternatives: swimming (after 6 weeks), walking, golf, riding a bicycle, while taking into account your limitations and your pain.

Can I travel?

In most cases, there are no specific precautions involved in travelling, though it is recommended to **avoid long plane trips for the first 3 months**. While on board an airplane, don't forget to do your circulatory exercises (ankle pumping) at least every hour. It is essential to buy appropriate travel insurance, including medical evacuation in case of problems. When travelling to a faraway country where the health system is rudimentary, consult your family physician one month in advance to plan ahead. You should know that walkthrough metal detectors in airports might detect the steel in the prosthesis. In such cases, you should be prepared to show your surgical incision (scar).

Should I follow a special diet?

Watch your weight: obesity is a knee implant's worst enemy. A varied, balanced diet, combined with regular physical activity, is always recommended.

What is the service life of prosthesis?

Your knee prosthesis could last for your entire life. Service life will depend on your age, your body weight, your activities, the stresses you submit it to and your body's reaction to this implant. Depending on your age and other factors, prosthetic revision surgery could be considered if this prosthesis causes problems.

YOUR REHABILITATION

Your Rehabilitation through the Continuum

Your rehabilitation starts at the group meeting and continues progressively until your maximum recovery (up to a year). During your stay in the hospital, starting on the day of your surgery, we will be focusing on the recovery of: your functional abilities, your mobility, your strength, your endurance, your posture and your balance. Every day, you will meet a member of the rehabilitation team (physiotherapist, physical rehabilitation therapist; occupational therapist meet if needed). The nursing and auxiliary staff will also be very present to help you regain your mobility as soon as possible. We are here to help or assist you, but you must gradually learn to perform your exercises, movements, dressing and transfers by yourself (or with the help of your coach), because you will have to continue doing these things after you return home.

The objectives of rehabilitation during the hospitalisation phase are:

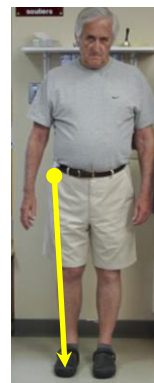
- Reducing pain and swelling;
- Ensuring your safety in your daily activities;
- Encouraging you to move, do your exercises and walk;
- Preparing you to safely take charge of your rehabilitation and your return home.

Here is an overview of what might be done during your stay:

- **Day 0** (surgery day):
 - We will help you to sit on the edge of the bed.
 - You will get up for the first time with the help of the nursing staff to avoid complications (pulmonary, phlebitis, etc.). This could take place on Day 1 if your surgery is late in the day.
- **Day 1:**
 - We will help you do your exercise program, while controlling your pain.
 - We will help you get up and, possibly, walk several times a day until you are able to do so safely by yourself.
 - You will move about with a walker (yours or one supplied by the hospital). You will be able to gradually put weight on your leg, depending on your surgeon's instructions.
- **Day 2:**
 - Everything will be in place to encourage you to be increasingly self-sufficient in your movements (to the bathroom, to your chair, in the corridor), your personal care and getting dressed.
 - You will continue your exercises (see the section on exercises).
 - You will go to the Rehabilitation Department to practise various elements to prepare for your return home: stairs, walking, transfer to the bed (Day 1-2).
 - We will finalize the preparations for your return home. If your condition permits, you may be able to return home. **If you are discharged from the hospital, you have to leave the room 2 h after the announcement of the discharged.**
 - If you've arranged for a convalescent home in your care plan, you could be transferred there today.

EXERCISES: prior to surgery, in the hospital and when you return home

- Doing your exercises every day will allow you to accelerate your healing and maximize its benefits. The exercises are primarily designed to help you recover your strength and your mobility, and to prevent certain complications of a circulatory, respiratory or intestinal nature. They also prevent stiffening of your knee.
- If you start practicing them **before your surgery**, you will feel more confident when you do them after your surgery and you will optimize your physical condition.
- Following your discharge from the hospital, you may have to continue your physiotherapy, on an outpatient basis, twice a week for 1 to 2 months. Discuss this with your physiotherapist at the hospital.
- You must always maintain a **perfect alignment** of your leg: foot, knee, and hip well aligned, without torsion. It is important to maintain this alignment when you do your exercises, sit, get up, walk, climb stairs, lie in bed, or remain seated.



☐ **RESPIRATORY EXERCISES:** Repeat these 10 times every hour

Goals: To help prevent respiratory complications and facilitate relaxation.

Either sitting or lying down (on your back or on your side), place one hand on your abdomen.

- Without a spirometer:** Take a deep breath through your nose, ideally by expanding your abdomen in a natural way without effort, hold it for 3 seconds, then exhale smoothly through your mouth, pursing your lips as if to blow out a candle.
- With a spirometer (if available):** Insert the mouthpiece of the spirometer in your mouth, and breathe as you would without the spirometer. Maintain the ball elevated for 3 seconds while you breathe in.
- After your respiratory exercises, cough a few times and spit out, if necessary.

☐ **CIRCULATORY EXERCISES:**

Goals: To help prevent circulatory complications and facilitate proper blood circulation.

- Lying down, pull your feet up toward your knees as much as you can so as to feel stretching in your calves. Point your feet downward as far as you can so, as to feel your calves hardening. **Repeat this 30 times in a minute or so, every hour.**³⁶



- Lying on your back, one or both legs stretched out, push your knees down into the mattress and pull your toes towards you while hardening your thighs and buttocks. **Repeat this 10 times every hour.**



³⁶ McNally, M.A. & al, 1997. *The Effects of Active Movement of the Foot on Venous Blood Flow after Total Hip Arthroplasty*. JBJS, 79-A:8, pp. 1198-1201.

MOBILITY, STRENGTHENING AND BALANCE EXERCISES³⁷

(After the surgery, only do the exercises that are indicated by the rehabilitation team.)

Goals: To help recover a proper range of movement, improve your strength, prevent circulatory complications and facilitate proper blood circulation.

For all exercises to be done lying down, make sure the bed headboard is flat (not in a semi-raised position). **You must repeat only the exercises indicated 10 to 20 times, three times a day.** Each exercise must be done slowly, without inhibiting your breathing. It is normal to feel **moderate** pain for 10 to 30 minutes after the exercises. Your physiotherapist will provide information about the use of ice to control this pain.

- ❑ **Knee flexion :** lying on your back, bend the knee of your operated leg as much as you can by sliding (lightly, without friction) the heel on the mattress, without lifting your foot from the bed. Do the same with the other leg in order to activate your blood circulation.



You can put a plastic bag under your foot to make it slide more easily.

You could make it easier to bend your knee by using a strap or a towel under your foot or tied at the ankle and by pulling with your hands.



- ❑ **Knee extension:** lying on your back or in a half-sitting position with your operated leg extended and a rolled-up towel under your ankle, by firmly contracting your thigh and pulling your foot towards you, lower your leg so as to straighten out the knee completely. You could maintain this position for as long as possible, up to ____ consecutive minutes.



- ❑ **Hip abduction :** lying on your back, by firmly contracting your thigh (quadriceps muscle) and pulling your foot up towards you, spread your operated leg outward as far as you can; then, bring it back towards the centre by sliding it on the bed (without moving your pelvis). You can put a plastic bag under your foot to make it slide more easily.



- ❑ **Knee extension on a roll :** lying on your back, bend your non-operated leg and place a rolled-up towel under the knee of the operated leg. Lift the heel as high as you can, while pulling your toes towards you. Do not lift your knee off the roll. (Do not leave the roll in place after your exercise.)



- ❑ **Leg press :** lying on your back, bend the knee of your operated leg, slip a towel or an elastic band under your foot and hold both ends in your hands. Extend the knee to stretch out your leg while applying resistance with the towel or the elastic band. Then, bend your knee in a controlled motion (do not let the elastic band accelerate your movement).



³⁷ Fleury France Charles (March 2009). *Recueil des meilleures pratiques concernant l'organisation des services et les interventions en réadaptation pour les personnes ayant reçu une prothèse totale de hanche et de genou*. Agence de la santé et des services sociaux de la Montérégie, p. 27

- ❑ **Knee flexion sitting:** slide the heel on the floor under the chair so as to bend the knee, without lifting your buttock off the chair. You can use the other leg to bend the knee further. You could use a rocking chair or a chair mounted on coasters to facilitate bending your knee.



- ❑ **Knee extension sitting :** contracting your thigh muscles, stretch your leg straight as far as you can without lifting your thigh off the chair. If this strains your back, lean back slightly (half-sitting position).



Standing up, hands on a counter, the back of a chair or a table:

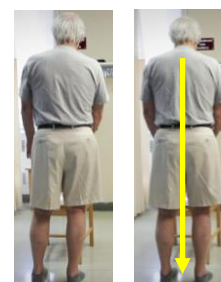
- ❑ **Knee flexion standing:** bend the knee of your operated leg as much as you can without bending your back or hip.



- ❑ **Hip flexion standing :** bend the knee of your operated leg while you bend your hip, without bending your back.



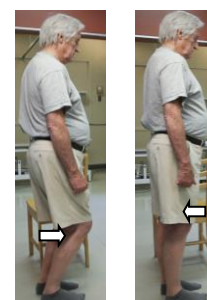
- ❑ **Weight bearing equally:** In front of your walker or a chair, stand with your weight distributed equally on both legs, back and knees straight (B), and try not to use your hands for support.



A

B

- ❑ **Mini-squat and knee extension:** keep your back straight, your feet spread shoulder width apart and your weight on your heels. While aligning your patellae (kneecaps) to your second toes and pushing your buttock slightly backward, bend your knees until you feel your thighs working (A), and hold this position for ____ seconds. Then, straighten your knees as much as possible (B), and hold this position for ____ seconds. Repeat ____ times.



- ❑ **Mobilization of the patella (kneecap):** In a semi-raised position, place a small rolled-up towel under your knee, take the four corners of your patella between your thumbs and index fingers; without pushing the patella against the femur, glide (move) your patella in all four directions (toward the thigh – toward the foot, toward the left - toward the right). Maintain the position at the end of each movement for 3 to 5 seconds. Repeat the movement 10 times in each direction. Repeat this exercise 2 to 3 times a day.



ICE OR HEAT³⁸³⁹

- During the acute phase and the rehabilitation phase, applications of ice are recommended. However, you can continue them longer if you find them beneficial.

Are there precautions or contraindications concerning ice and heat?

- Never apply **ice** or **heat** in the following cases: severe circulatory problems; significant decrease in sensitivity; under medication affecting awareness; malignant tumour (cancer); during sleep.
- Never apply **ice** in the following cases: anemia, Raynaud's disease, large open wound, intense discomfort due to cold, cold urticaria, severe hypertension, diabetes with circulatory complications.
- Never apply **heat** in the following cases: haemorrhage, acute stage of inflammation, infection, open wound, access, skin disease (eczema), and heat allergy.
- To check whether you have an allergic reaction to cold or heat, apply each to an area other than the site of pain for a period of 3 minutes. If the skin turns red, it's a normal reaction. If the redness is accompanied by swelling, the use of ice or heat is not recommended.
- There are various ways to apply ice; we recommend the ice towel.

Ice towel

- Wrap some ice, preferably crushed, or a bag of small frozen vegetables (peas) in a towel or plastic bag and apply on the area to be treated **for 15 to 20 minutes**, without getting your surgical wound wet. Afterwards, the treated area should be “red”. Check your skin for any signs of burning, and stop using ice if any such signs should appear.
- Ice can be applied several times a day. **Wait at least 2 to 3 hours between applications.**
- You could also use gel-filled cushions or thermal wraps which, by chemical reaction, become very cold when covered with a damp towel.

Heat

- Before using heat, you must make sure that the wound is completely closed and healed and that you've recovered your sense of touch in the skin around the scar (**at least 3 weeks after surgery**).
- Use one of the following methods: Magic Bag, gel-filled cushion, thermal wrap, electric pad. Apply on the area to be treated for 20 minutes.
- Wait at least 2 to 3 hours between applications of heat.
- Make sure you don't fall asleep with a thermal wrap or an electric bad on your skin.

³⁸ Ordre de la physiothérapie du Québec, Vous avez de la douleur, glace ou chaleur? 2008 (in French only).

³⁹ Brosseau L., Yonge K., Welch V., Marchand S., Judd M., Wells G.A., Tugwell P., *Thermotherapy for Treatment of Osteoarthritis (Review)*. Cochrane Collaboration. 2003

MASSAGING THE SCAR⁴⁰

- Initially, the incision (the cut) is slightly warm, red, sensitive, or uneven.
- It is normal to feel itching or numbness.
- Once healed, your scar should become mobile and flexible again to allow complete movements of the articulation.
- As soon as the sutures have been removed and **the scar is exempt of any crust (scabs) or leakage** (around the 3rd week), you can begin massaging the tissues around the surgical site (but not if you've had a skin graft).

“Massaging” the scar has several important purposes:

- Modelling the scar (keeping it flat).
- Fostering an adequate production of collagen.
- Helping to reduce itching and pain.
- Giving the scar added flexibility.

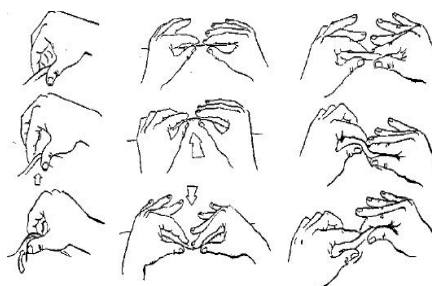


To perform the massage, you can use, **as per your physician's instructions**, a small amount of unscented emollient cream or vitamin E. oil. Place the pads of your index fingers on each side of the scar, press firmly but not painfully on the tissues so that your fingers and your skin move together: your fingers must not slide on your skin or on the scar. To stretch your scar and the surrounding tissues in every direction, do each of the following movements 10 times, twice a day. Move your fingers and your skin:

- Vertically, up and down.
- Horizontally, right and left.
- In small circles in one direction and the other.

Then, place the pads of your index fingers and thumbs on each side of the scar, press firmly but not painfully on the tissues so that your fingers and your skin move together:

- Gently pinch the skin so as to create a fold; this will lift the skin slightly to separate it from the bone or the muscle.
- Try to roll this fold upward, then downward (towards the extremities of the scar).



On the first days when you perform these massages, it is normal for the scar to react somewhat, by swelling a bit or by becoming warmer. If this creates discomfort, you can apply ice for 15 to 20 minutes on your scar after the massage sessions.

Continue with these massages for as long as it takes for the scar to become as flexible as the normal tissues around it. Stop the massages if pain develops or if your scar shows an adverse reaction: redness, ↑ warmth, leakage, thickening...

Other Precautions:

Protect your scar from the sun by using a sunscreen lotion with the highest sun protection factor.

⁴⁰ De Domenico G., *Beard's Massage: Principles and Practice of Soft Tissue Manipulation*, 5th Edition, Saunders Elsevier, 2007, pp. 219-221

WALKING⁴¹

Following your surgery, you will be allowed to put weight on your leg, partially or totally, as per your physician's instructions. You can use various types of walking aids to make things easier. During the first few days following your surgery, using a **walker** is recommended. The height of the walker will be adjusted to your own height. Your physiotherapist will be present for your first trials, in order to guide you and make sure you can move about safely. Although it is important not to overtax your strength when you start walking, you will still have to increase the walking distance from day to day.

When you are able to walk without a limp with all the weight on your operated leg, it will be time to switch to using a **simple cane**. Here again, your physiotherapist will be the resource person to help you get you through this stage and correct your gait.

ADJUSTING THE HEIGHT OF THE WALKER, CANE, OR CRUTCHES



Adjusting the walker, cane, or crutches is done while you stand up straight, with flat-heeled shoes and your feet slightly apart. Stand between the two handles of the walker or place the tip (bottom) of the cane or crutches approximately 15 cm (6 inches) from your feet. To adjust the height of the hand rests, let your arms hang loose along the walker, cane or crutches, and make sure the hand rests are at the same height as the crease of the wrist. For crutches, adjust the height so that you can place 2 fingers between the top of the crutch and the armpit (shoulders relaxed).

HOW DO I WALK WITH A WALKER?

- While sliding (rolling) the walker in front of you, walk normally, with equal steps for the operated leg and the other leg.
- Make sure the walker remains close to you: the rear legs of the walker must not be ahead of your feet.
- **Caution:** Do not put more weight on the operated leg than permitted.



HOW DO I WALK WITH YOUR CANE OR YOUR CRUTCHES?

- If you're using a cane or a single crutch, **you must hold it with the hand opposite the operated leg**. Walk in the following weight-bearing sequence : cane (or crutch), operated leg, non-operated leg; cane, operated leg, non-operated leg... Be careful not to place the cane in front of you. It should be aligned with your foot (ideally with the middle of your foot).
- If you're using two crutches, bring your operated leg forward as you advance both crutches. Push down on the hand rests of the



⁴¹ Ordre de la physiothérapie du Québec. Ajuster votre aide à la marche. 2004 (in French only).

crutches with your hands to bring the other leg forward, making sure you keep your elbows straight and the shoulder rests pressing against your thorax (**do not put your weight on your armpits**: this may cause serious circulatory problems).

- The operated leg must always follow the cane or the crutches in their forward and backward motions. Always take normal steps with your non-operated leg.
- Whatever the walking aid you use, it is important not to limp. Avoid walking with a stiff knee and your foot turned outward. Resume normal motion at knee and hip levels: move in the same way as on the non-operated side.
- You can begin to **walk naturally**, without an aid, when the limp and pain have disappeared.
- Wear shock-absorbing shoes that support you plantar arches.



STAIRS

Climbing up and down stairs is possible after a surgery such as yours, but you must follow certain fundamental rules for as long as you experience pain and weakness.

HOW DO I CLIMB UP STAIRS?

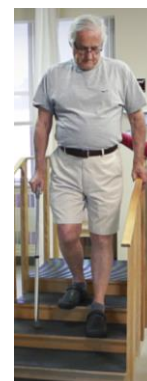
- Always use two means of support: one handrail and one cane/crutch or two handrails.
- Place the cane or crutches close to the first step; **raise your non-operated leg onto the step**; with the support of your hands, raise the cane or crutches and the operated leg simultaneously on the same step; repeat this sequence of movements for each step: non-operated leg, then the cane (or crutches) with the operated leg on the same step; non-operated leg ...



HOW DO I CLIMB DOWN STAIRS?

- At the start, of course, the cane or crutches and both legs are on the top step; **lower the cane or crutches and the operated leg first**; with the support of your hands, lower the non-operated leg on the same step as the operated leg; repeat this sequence of movements for each step: the cane (or crutches) with the operated leg, then the non-operated leg on the same step; cane with the operated leg ...

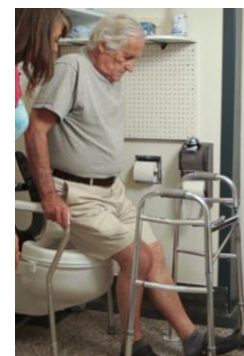
Your physiotherapist will give you a demonstration and will accompany you in your first endeavours in stairways. **Do not attempt this by yourself. Never use a walker to climb stairs.**



ACTIVITIES OF DAILY LIVING: IN THE HOSPITAL AND WHEN YOU RETURN HOME

TRANSFER TO THE TOILET OR TO A CHAIR:

1. Back up with your walker until the back of your knees touches the edge of the chair or the toilet.
2. **For the first few days**, move your operated leg forward, keeping the knee slightly bent. **After these few days**, bend your operated leg as much as possible so as to use it more and more to sit down and get up.



3. Grip the arm rests of the chair or the toilet safety frame, one hand at a time.
4. Sit down slowly (avoid letting yourself fall into the chair or the toilet).

POSITIONING ON A CHAIR:

1. Use a firm, straight-back chair with arm rests. Increasing the height of the seat makes it easier to get up. A pillow in your back is allowed.
2. It is important not to remain seated too long to avoid ankylosis and swelling.

POSITIONING IN BED:

1. When you are lying down, it is important to maintain a proper alignment of the body.
2. Lying on your side is permitted, but will probably be more comfortable if you lie on your non-operated side. Place a pillow between your legs so as to maintain a proper alignment and to be more comfortable.
3. While lying on your back, **do not place a pillow under the operated knee**. This precaution must be observed until your physician allows you to adopt another position (**normally 6 to 8 weeks after the surgery**).
4. **To prevent respiratory complications**, it is important to change positions while lying down.

TRANSFER TO BED (NON OPERATED SIDE, IDEALLY) :

1. Sit on the edge of the bed, as you would do to sit on a chair.
2. Start to **lean sideways**, with the support of your arm on the non-operated side.
3. Try to lift your operated leg onto the bed. You can also use the other leg to facilitate this exercise (for the first few days).
4. Follow with the other leg and lie on your back, if you wish.



To get out of bed, reverse the process, as much as possible **on the side of the non-operated leg** so as to ensure proper support for the operated leg.



ARRANGING THE BATHROOM:

It may be necessary to make modifications to your bathroom to facilitate your return home. The occupational therapist can discuss the following bathroom modifications with you at the pre-admission clinic visit:

- ☐ Installing a toilet safety frame, in order to facilitate sitting on the toilet and getting back up (optional).
- ☐ Removing bathtub sliding doors and replacing them with a shower curtain (optional).
- ☐ Installing a bath transfer bench or a bathboard in the bathtub, and/or a shower seat in the shower unit (optional).
- ☐ Installing non-slip mats inside and outside the bathtub.
- ☐ Installing a hand-held shower in the bathtub/shower unit.

- ❑ Installing wall-mounted grab bars (optional). Never use the towel bars or the soap holder for support.

TRANSFER TO THE BATHTUB:

After your surgery, you must not sit on the bottom of the bathtub, because you may have difficulty getting back up.

The recommended method is to use a bath transfer bench. Follow these steps:

1. Approach the bathtub.
2. Spread a towel over the bathboard so that you will slide more easily.
3. Turn around, your back to the bathtub.
4. Extend your operated leg while keeping the knee lightly bent.
5. Sit down, while gripping the safety handle or grab bar with one hand. Rest your other hand on the edge of the tub or on the walker.
6. Once seated, turn to face the faucets by moving one leg into the bathtub, then the other.



To get out, reverse the process.

TRANSFER TO THE SHOWER UNIT:

You can choose to take your shower standing up or sitting down. You should simply evaluate your strength and the level of pain you are experiencing at this stage of your convalescence. Follow these important steps:

1. Approach the shower using your walker.
2. Get your non-operated leg in first.
3. Grab the vertical bar (if installed) for support, and then move your operated leg inside.
4. Place one hand after the other on the shower seat (if installed) and sit down.

PERSONAL HYGIENE:

For your personal hygiene, the use of a bath mitt will prevent dropping the bar of soap. The use of a long-handled sponge will allow you to reach the more difficult areas (back, legs and feet) and reduce the risks of falls. A hand-held shower allows you to remain seated during your shower, which reduces the risks of falls. Installing wall-mounted grab bars adds an element of safety during your bath transfers. To dry yourself, wrap a towel around a long-handled sponge or reaching tongs.

DRESSING:

It is preferable to perform this activity while sitting down on the edge of the bed or on a chair. Normally, this activity is not difficult. However, if the knee is not bending sufficiently, the greatest difficulty encountered by operated individuals is to put on pants, underwear, socks and shoes. We will indicate the recommended technical aids. These aids are **optional**. You can also ask for help

from your caregiver until you have the capacity to bend the operated knee sufficiently. You have to keep your compression stockings for 14 days (see p. 37 for more details)

- **Socks**

The sock aid is a tool which enables you to put on socks. The dressing stick or the reacher are used to take them off. Your occupational therapist will show you the proper technique.



- **Shoes**

The easiest to put on are “loafer” types. A long-handled shoehorn can facilitate inserting the foot into the shoe and pulling it out. Your shoelaces can be replaced by elastic laces, since you will not be able to bend down to tie them. You can also wear shoes with Velcro fasteners and use a reacher or a dressing stick to close the fasteners.



- **Pants and Underwear**

You can put them on and take them off using a dressing stick or a reacher, as you prefer. **Slide in the operated leg first**, then the other leg, then pull up the garment. To pull it up to the waist, get up using the armrest of the chair for support. Place one hand in the middle of the walker while the other hand pulls up the garment.



INSTRUMENTAL ACTIVITIES OF DAILY LIVING WHEN YOU RETURN HOME

ARRANGING YOUR HOME:

- ☐ Remove carpets, obstacles, electrical wires, and arrange your furniture so that you may circulate freely with a walker.
- ☐ Arrange the rooms so that you can avoid using the stairs, for instance, by arranging a bedroom on the first floor. If you still have to use the stairs, have handrails installed, if necessary.
- ☐ Arrange to have a firm bed, high enough (higher than the hollow of the knee) to facilitate your transfer to stand up. If necessary, elevate your bed with wooden blocks or add another mattress. If the bed is too high, consider removing the bedspring. Do not use a stool.
- ☐ Place all the objects that you use regularly at a height where they will be easily accessible without having to bend down or climb on a stool to reach them (bedroom, kitchen, bathroom, closet, laundry room...).
- ☐ Provide adequate lighting for night time in your room, hallway and bathroom, as well as some space to keep all you might need during the night close to the bed.

- ☐ Provide a high chair (seat higher than the hollow of the knee) with armrests in each of the rooms you will be using after your surgery.

HOUSEKEEPING:

Make an effort to do as many tasks as possible by yourself, taking frequent breaks, to accelerate your rehabilitation while saving your energy. Sit down to do certain tasks, such as: preparing meals, ironing, odd jobs.

For the first 6 weeks, avoid doing heavy housework, such as: house cleaning, washing floors and windows, lawn mowing, snow removal. Do your laundry step-by-step in order to carry and manage light loads of clothes.

CARRYING LOADS:

To carry objects, you can use an apron fitted with pockets, a bag tied to your walker (avoid overloading, however) or a backpack. In your closets and cupboards, you should place frequently used objects on easy-to-reach shelves (from shoulder level to thigh level). You can rent a tray for the walker that can carry your plate or small items.

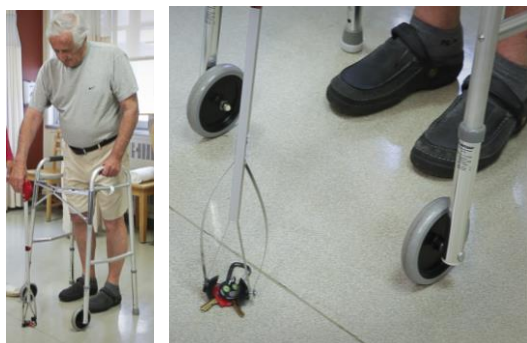
Avoid carrying objects in your hands when you are moving around with a walker or cane. If you cannot avoid doing so or you are walking without a cane, carry the load in the same hand as the operated side.

Be aware that, should preparing meals or housekeeping become overly difficult, certain community organizations can provide low-cost assistance.

GETTING OUT-OF-REACH OBJECTS:

Never use a stepladder or chair to reach objects placed higher than shoulder level. To reach objects placed lower than knee level or off the floor, use a long-handled reacher. When you get stronger, you will be able to lean on a solid surface (e.g. a counter) and pick up the object on the floor by extending your operated leg behind you. When your legs become stronger, you will be able to pick up objects on the floor by bending, mostly at the hips and slightly at the knees, but not too low, so as to be able to get back up (for more safety, you could use a table or counter as support). Be careful not to put excessive strain on your back.

Start:



Later:



SEXUAL ACTIVITY:

You can resume sexual activity as soon as you feel better. Until you are completely healed, it is recommended to assume a comfortable position **while following instructions on contraindicated movements specific to your surgery and your other conditions.**

DRIVING:

- The waiting period required before driving a car after your operation depends on several factors: Which leg was operated? Which type of transmission is used in your car? What is your general state of health since surgery? **So, you must consult your surgeon before resuming this activity.**

Société d'assurance automobile du Québec (SAAQ) documents⁴² indicate that, « in order to drive safely, a person must be able to turn the steering wheel entirely (stop to stop) and operate the controls of the vehicle with ease, speed and precision, especially in case of emergency, and simultaneously when required ».

- During your convalescence, even as a passenger, long trips are not recommended.
- During your rehabilitation, your occupational therapist will discuss transfers in and out of a vehicle with you, recommend certain equipments to improve your comfort and show you the adequate techniques to avoid injuries.

TRANSFER TO A VEHICLE (FRONT SEAT):

1. Stand on the pavement, not on the sidewalk.
2. Make sure someone has adjusted the seat of the car as far back words as possible and lowered the back of the seat before you climb aboard.
3. Cover the car seat with a plastic bag, to make the surface more slippery (and facilitate transfers).
4. Approach the seat with your back to the car, using your walker, place one hand on the back of the seat and the other on the lowered window or on the seat (never on the door of the vehicle).
5. Sit down on the seat and slide back until your knees are well supported by the seat.
6. Raise your legs one by one into the car. Make sure to always maintain a perfect alignment of your leg.
7. Adjust the position of the back end seat.

Reverse the process to get out of the vehicle, first reclining the back of the seat and sliding the seat back.



⁴² [Guide de l'évaluation médicale et optométrique des conducteurs au Québec, Édition révisée 1999, Société de l'assurance automobile, ISBN 2-550-29251-0 \(in french only\)](#)

RECOMMENDED EQUIPMENT

Several technical aids can make your life easier. At your pre-admission visit, your occupational therapist will suggest the most appropriate for you. You could obtain them from the CLSC or purchase them from an orthopaedic appliance supplier (see the list at the end of this document) or from a pharmacy. Remember that the CLSC can help you out on certain occasions, but will not guarantee the provision of equipment. Equipment rental could also be profitable for some items.

Check off the equipment items as you acquire them, ideally before your stay in the hospital or, at the latest, on the day after your admission (your coach will help you make the necessary rental or purchase arrangements). Bring the equipment items marked with an asterisk (*) to the hospital and make sure to identify them clearly:

To wash up:

- | | |
|--|--|
| <input type="checkbox"/> Bath mitt or sponge | <input type="checkbox"/> Bathtub safety handle, wall-mounted grab bars |
| <input type="checkbox"/> Disposable hypoallergenic wipes | <input type="checkbox"/> Non-slip mat |
| <input type="checkbox"/> Liquid soap or bar soap on a string | <input type="checkbox"/> Hand-held shower with controls on the shower head |
| <input type="checkbox"/> Long-handled brush or sponge | |
| <input type="checkbox"/> Bath transfer bench, bathboard or shower seat | |

To use the toilet:

- | | |
|---|--|
| <input type="checkbox"/> Elevated toilet seat, with or without armrests:
2 inches <input type="checkbox"/> 4 inches <input type="checkbox"/> | <input type="checkbox"/> Toilet safety frame |
| | <input type="checkbox"/> Commode chair |
| | <input type="checkbox"/> Urinal |

To walk (depending on your condition):

- | | | |
|-------------------------------|-----------------------------------|--|
| <input type="checkbox"/> Cane | <input type="checkbox"/> Crutches | <input type="checkbox"/> Walker* standard or two-wheeled |
|-------------------------------|-----------------------------------|--|

To dress:

- | | |
|--|--|
| <input type="checkbox"/> Reacher (26 inches)* | <input type="checkbox"/> Elastic shoelaces |
| <input type="checkbox"/> Long-handled shoehorn | <input type="checkbox"/> Slip-on (loafer) or Velcro-fastened shoes, wide enough to avoid pressure due to foot swelling, with non-slip soles and flat heels that are shock-absorbing and support your plantar arch* |
| <input type="checkbox"/> Dressing stick | |
| <input type="checkbox"/> Sock aid* | |

For various tasks:

- ☐ High stool (24 inches) to sit while preparing meals or doing precision work
- ☐ Tray for your walker

A bit of advice from your occupational therapist: Your health comes first and you certainly take it very seriously, so purchasing the suggested equipment is absolutely not a luxury, but rather a necessity for you to heal in an optimal way!

For your self-care:

- | | |
|---|--|
| <input type="checkbox"/> Bag of ice or frozen vegetables | <input type="checkbox"/> A rectangular container to deposit used syringes and needles (for disposal at the pharmacy) |
| <input type="checkbox"/> Thermometer | <input type="checkbox"/> Analgesics (ex : Tylenol®) |
| <input type="checkbox"/> Alcohol swabs or cotton balls with a bottle of alcohol | |
| <input type="checkbox"/> Compresses, medical-type adhesive tape | |

PREVENTING FALLS

Falls can happen to you, too. After your surgery, your balance will perhaps not be as good as usual, so it will be most important not to take any chances so as to avoid any falls, as well as their regrettable consequences.

- ☐ Clear corridors by removing any obstacles from the floors, hallways and stairways.
- ☐ Take your time when climbing stairs, and use the handrails for as long as necessary. As much as possible, do not carry loads on stairs.
- ☐ Clear corridors by removing any obstacles from the floors, hallways and stairways.
- ☐ Take your time when climbing stairs, and use the handrails for as long as necessary. As much as possible, do not carry loads on stairs.
- ☐ Install non-slip mats, especially in wet areas such as the bathtub and shower.
- ☐ In the shower, use liquid soap or bar soap on a string.
- ☐ Make sure lighting is sufficient, even at night: easy-to-reach bedside lamp, night lights...
- ☐ Rearrange the furniture so that you can walk around freely with a walker, a cane or crutches.
- ☐ Move about carefully when you are under the influence of medication.
- ☐ Get up slowly from a seated or lying position.
- ☐ Ask for help to get objects that are too high, heavy or difficult to handle. Place frequently used objects at a height where you can reach them easily, without having to climb on a stool or chair.
- ☐ Keep your cell phone nearby in case of an accident. For individuals living alone, more sophisticated personal alert systems exist, but they're also more expensive. Discuss this with your occupational therapist. Do not hurry to go and answer the phone. Keep emergency numbers nearby, in an easy-to-read format.
- ☐ Indoors, wear non-slip shoes or slippers. Outdoors, wear non-slip shoes or boots. During the winter, you can wear special soles with metal cleats under your boots. Do not walk on wet grass.
- ☐ Leave your pets with someone you trust if you're afraid they might cause you to fall. Otherwise, have them wear a collar with a bell so you know their whereabouts. Do not let their toys clutter the floor.
- ☐ Do not carry too many parcels; instead, use delivery services or a bundle buggy or shopping cart.
- ☐ If you have fallen in the past, try to identify the cause to prevent falls in the future.
- ☐ Be aware of your limitations and act accordingly.

PROBLEM-SOLVING METHOD

- ☐ Before you begin an activity, stop and ask yourself:
 1. Am I doing a risky movement?
 2. If the answer is no, you can do the task, taking into account your pain and your tolerance threshold.
 3. If the answer is yes, change your technique, use the suggested adaptive equipment, ask for help, or just do not perform the task.
- ☐ Before you start on a project, make sure you have enough energy to accomplish the whole activity, or plan periods of rest.
- ☐ Sometimes, it becomes necessary to reorganize your environment, such as, the place where you will sit, the things you will use...
- ☐ Your therapist will teach you specific methods for reaching objects placed too high or too low. At times, reaching tongs can be very practical!

RESOURCES

Several websites provide information on your surgery, on your pathology or on living with a prosthesis. We've listed a few for you.

www.coa-aco.org

www.myjointreplacement.ca

["http://www.arthritis.ca"](http://www.arthritis.ca)

www.canorth.org

Suppliers

MEDICAL EQUIPEMENTS (walker, elevated toilet seat, bath bench)

Côté Santé – Équipements médicaux

355, boul. Gréber, Gatineau-G

Les entreprises médicales de l'Outaouais - Ergosanté

131 boul. Gréber, Gatineau-G

819-205-9111

Médi-Santé

867, boul. St-René ouest, Gatineau-G

819-243-1717

You can also visit any pharmacy

WALL MOUNTED GRAB BAR, HAND HELD SHOWER

HARDWARE STORES

Rona, Réno-Dépôt, Home Depot, Canadian Tire, etc.

GROCERY STORE

INTERNET SITE OF YOUR FAVORITE GROCERY STORE

To deliver at home

www._____

YOUR NOTEBOOK

PRE-ADMISSION VISIT

ADMISSION TO THE HOSPITAL

FIRST FOLLOW-UP APPOINTMENT WITH THE ORTHOPAEDIC SURGEON

SUBSEQUENT FOLLOW-UP APPOINTMENTS WITH THE ORTHOPAEDIC SURGEON

YOUR HEALTH PROFESSIONALS

Orthopaedic surgeon: _____

Surgical assistant nurses: _____

Nurses: _____

Physiotherapists/physical rehabilitation therapist: _____

Occupational therapist: _____

Social worker: _____

Nutritionist: _____

Others: _____

Ask all the professionals you meet throughout your continuum of care to write their names, so that you may consult them, if necessary.

**Centre intégré
de santé
et de services sociaux
de l'Outaouais**

Québec 

Québec 



**Santé
Canada**

**Health
Canada**

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