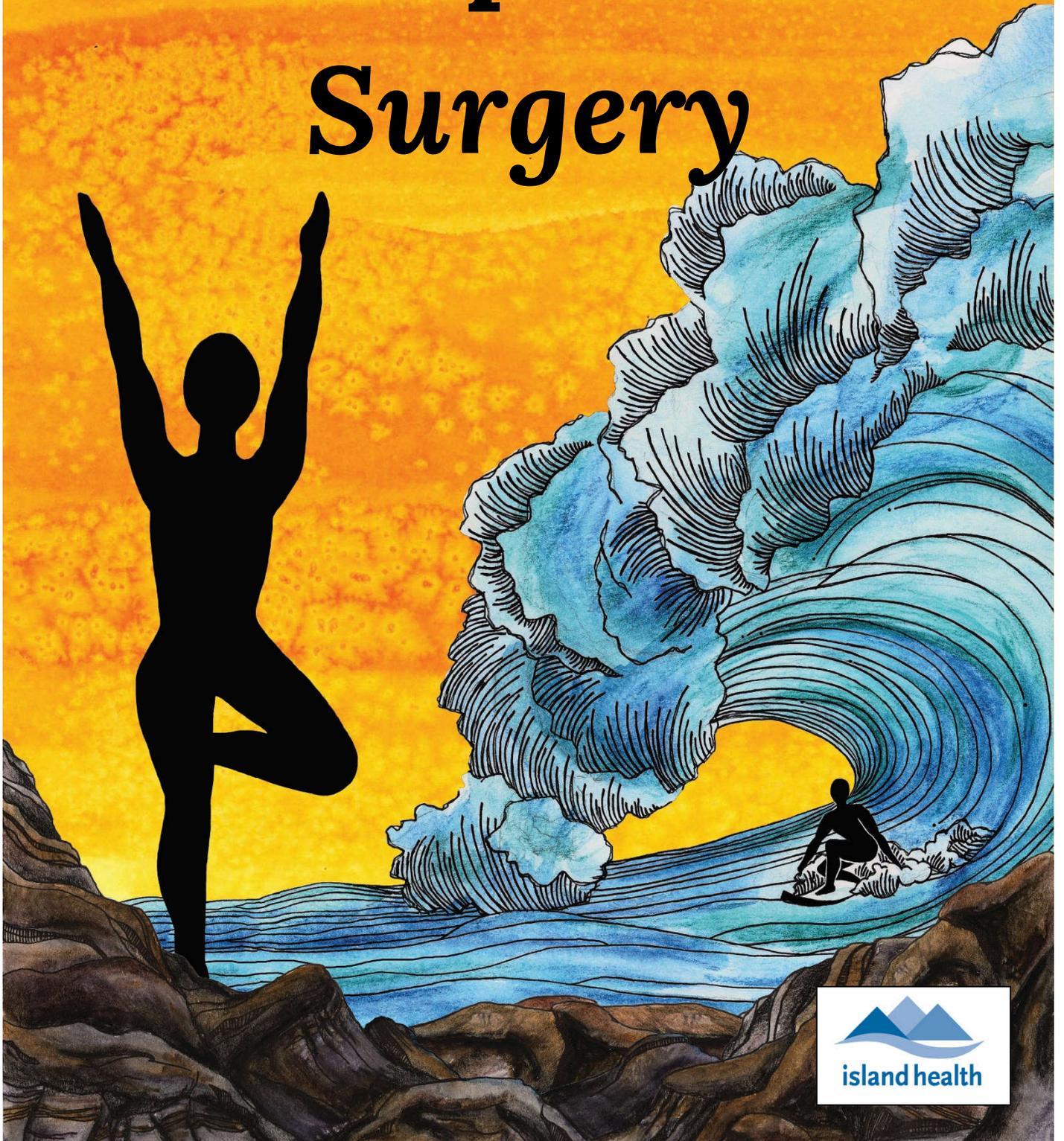


Rebalance^{MD}

Knee Replacement Surgery



Being Put on the Surgical Waitlist? Some Things to Consider...

Can I take the necessary time off work?

Do I have help post-operatively?

Do I have someone to drive me post-operatively while I am unable (could be for an extended amount of time)?

Do I have vacations coming up or will I be away for extended periods of time that will make me unable to take a surgical date or attend my post-operative appointments?

Do I have other health issues I am currently dealing with that could put-off my surgery?

Am I able to come to Victoria for multiple appointments and tests required for surgery?

Do I have any other life circumstances that may cause me to be unable to take a surgical date?

As surgical wait times are always changing, please ensure you are “Ready, Willing and Able” to take any surgical date once you have been put on the waitlist.

If any of the above considerations would cause you to not be able to take a surgical date, at whatever time that may come, please inform your Surgeon or your Navigator.

Welcome to Rebalance^{MD} New Joint Program

Now that you are on the waitlist for a total joint replacement, please review the following booklet that has **IMPORTANT** and **REQUIRED** information regarding your surgical booking. **DO NOT** lose this booklet as it will be needed throughout your journey to joint replacement. Please bring this booklet with you to any future appointments you have at Rebalance^{MD}.

Please watch our education video. You will be asked to watch at different times throughout your surgical journey. It is important that you watch this video before your New Joint Program Intake Assessment so you are prepared with informative questions.

You can find this video at <http://rebalancemd.com/resources/#knee>

What you will find in this booklet:

1. Introduction and Patient Journey (pages 3-4)
2. FFAST 2.0 (pages 5-6)
3. Knee Anatomy and How the Joint is Replaced (pages 7-10)
4. Before Your Surgery (pages 11-16)
"Having a Plan" worksheet found on page 15, please fill this out before your New Joint Program Intake Assessment
5. Once Your Surgery Day is Booked (pages 17-26)
6. Hospital Stay (pages 27-30)
7. Physiotherapy/Rehabilitation (pages 31-34)
8. At Home (pages 35-41)
9. Resources (pages 42-44)



Thank you from the Rebalance^{MD} team for reviewing this package and taking an active role in your surgical journey. If you have any further questions or comments please contact the office. 250-940-4444

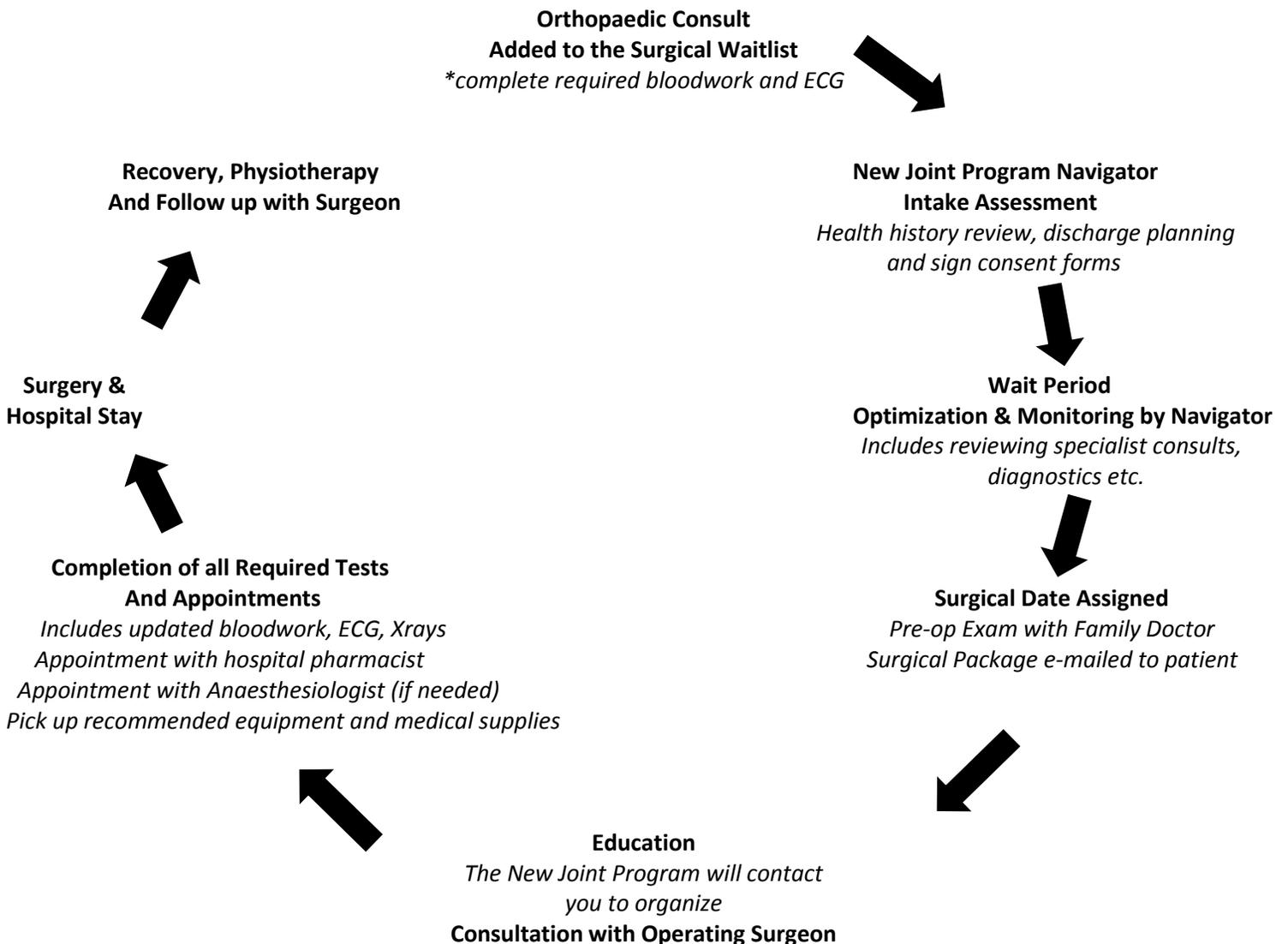
New Joint Surgical Journey

The next step in your journey is a New Joint Program Intake Assessment. You will be contacted by our office within the next 2-4 months to book an appointment with your Navigator. Your Navigator will walk you through all the steps for surgery and is available to answer any questions you may have. They will review your medical history, go over a discharge plan and ensure your health is optimal for surgery. Having reviewed all the information in this package, filling out the "Having a Plan" form on page 15 and watching the education video ahead of time (link on intro page and below) will help you and your Navigator have a successful and informative appointment.

After your Intake Assessment with your Navigator you may not hear from us often during this "waiting phase." You will be contacted by the surgical booker approximately 6 weeks before a potential surgical date. Once you have a surgical date, they will let you know of any further actions that need to be taken, arrange an appointment with your surgeon and send you a confirmation letter.

You will then be contacted by the New Joint Program to organize pre-operative tests, watch the Education video again, and complete and return required forms.

You can find the Education video at: <https://rebalancemd.com/resources/#knee>



FAAST 2.0 Total Joint Replacement Waitlist

What is FAAST 2.0?

FAAST = First Available Appropriate Surgical Triage

FAAST 2.0 is a triage tool to improve and equalize wait times for patients waiting for hip and knee replacement surgery (this does not include revision surgery). Rebalance^{MD} is working with Island Health to improve and reduce wait times and optimize outcomes in joint replacement surgery. You will be placed on our joint replacement waitlist and will receive the first available surgical date with one of our Orthopaedic surgeons.

Frequently Asked Questions:

1) How is the FAAST 2.0 waitlist different from the previous waitlist structure?

Current waitlist time for surgery between surgeons can vary by 6-12 months. The FAAST 2.0 model can significantly reduce your wait time by booking you into the first available surgical date. This will make wait times more equal for all patients.

2) When will I find out who my surgeon is?

You will be notified and receive an appointment 4-8 weeks before your surgical date to meet and discuss your case with the surgeon.

3) If after meeting my new surgeon I am not comfortable with the choice, what are my options?

We recognize that the choice between patient and surgeon is a personal one, and many factors go into a successful patient-surgeon relationship. All the surgeons participating in this program are capable of performing successful hip and knee replacement surgery. If however you are not comfortable please let your Navigator know and they can arrange to have another surgeon from the FAAST 2.0 program consult with you.

We cannot give the same date for surgery if you change; however, if you choose another surgeon within the FAAST 2.0 model you will be offered the next available slot.



Dr. R. S. Burnett



Dr. T. Camus



Dr. P. Dryden



Dr. D. Jacks

4) *The surgeon I met as part of FFAST 2.0 said I shouldn't have joint replacement surgery.*

The indications for hip and knee replacement surgery are not black and white, hence there may be differences of opinion among care providers. Feel free to discuss your case with your Navigator, and/or GP or receive another opinion.

5) *What if my condition changes?*

If you develop significant medical or social issues while on the waitlist, please contact your Navigator to discuss these issues.

6) *My hip or knee is getting much worse. What can I do?*

There are a variety of medical/physical therapies to ease the pain while waiting for your hip/knee replacement. The first step is to contact your family doctor and discuss the use of medication, physiotherapy, or assists such as a cane or walker. If your GP wishes, a re-assessment may be required. The surgeon may need to reassess your pain/ function/ x-rays to reassess your urgency on the waitlist.

7) *Can I be on the cancellation list as well as the FFAST 2.0 list?*

Yes, all patients are considered for a cancellation. You will be contacted if you are an appropriate candidate for the available date.

Get to know our surgeons currently participating in our FFAST 2.0 program. Please feel free go to our website to read their biographies.
<http://rebalancemd.com/team/>



Dr. J. McInnes



Dr. C. Nelson



Dr. L. Pugh



Dr. J. Stone



Dr. E. Torstensen



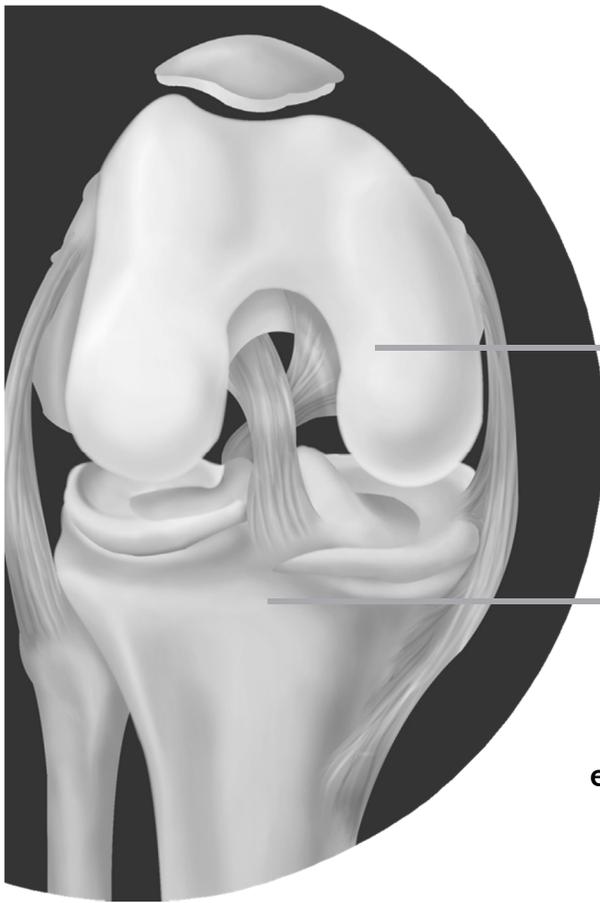
Dr. Z. Zarzour

Knee Replacement

This section contains information about:

- **Anatomy of the Knee**
- **Knee Disease**
- **Knee Replacement Surgery**
- **Fitting Options**

Knee Anatomy



Femoral Condyles
end of femur

Tibial Plateau
end of the tibia

The knee is a complex hinge joint that allows you to bend or straighten your leg. The knee joint is comprised of the distal end of the femur (the femoral condyles) and proximal end of the tibia (the tibial plateau).

When you move your lower leg, your femoral condyle glides over the tibial plateau, aided by a cushioning layer of cartilage. In a healthy knee joint, this motion is smooth and painless.

Knee Disease

Osteoarthritis- also called degenerative joint disease- is the most common reason for knee replacement surgery.

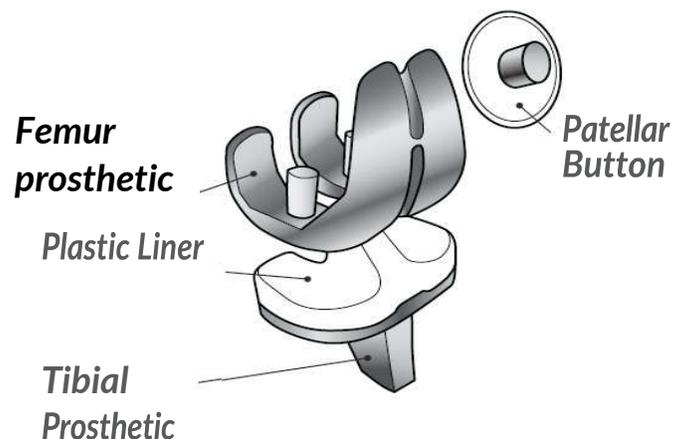
Osteoarthritis is a by-product of age-related 'wear and tear' and usually occurs in joint that bear the weight of the body. The cartilage within the joints softens and wears away. This causes the knee joint to become rough and irregular, preventing smooth and painless motion within the joint.

Joint replacement surgery is one method of repairing the damage caused by osteoarthritis. Other conditions that may lead to joint replacement include inflammatory arthritis, post-injury, or significant deformity.



Knee Replacement Surgery

Knee replacement surgery involves an orthopaedic surgeon replacing your diseased knee joint with an artificial prosthesis. The surgeon makes an incision along your affected knee joint and moves away the muscles, ligaments and the patella (knee cap). The end of the femur and tibia are then cut to eliminate the rough parts. The cut ends of these bones are covered with a metal surface separated by a plastic liner in order to create a new joint.



Fitting Options

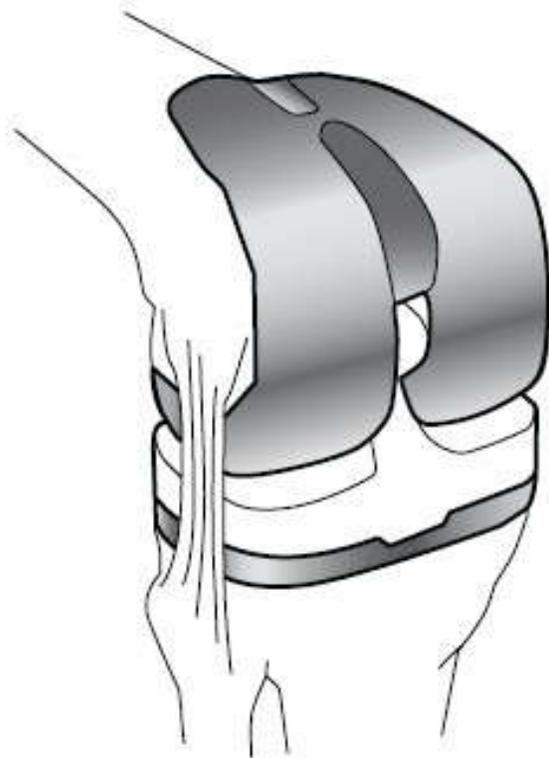
A variety of factors will determine the type of fitting used to fix the artificial joint in your body.

These include age, disease type and bone quality.

The joint may be:

Cemented: The artificial joint is secured with a quick-hardening adhesive.

Un-Cemented: The artificial joint is closely fitted and covered with a rough material, encouraging the bone to grow on to the artificial joint.



Before Surgery

This section contains information about:

- **Exercising Before Surgery**
- **Walking with a Cane or Walking Poles**
- **Weight Management**
- **Nutrition**
- **Dental Work**
- **Having A Plan Worksheet**

Exercising Before Surgery

Exercising before surgery will increase your chances of a quick and easy recovery. Exercise keeps the muscles around your joint strong, which helps to take the pressure off the joint and may reduce your pain. It also maintains your joint flexibility and improves your overall mobility. Regular physical activity keeps the muscles in the rest of your body strong. You will be relying on these muscles more during your recovery from your joint replacement surgery.

Daily physical activity will be a key part of your recovery for at least 1 year after surgery. Exercising before surgery will build up your confidence and knowledge of how to exercise after surgery.

The Canadian Physical Activity Guidelines recommend building up to at least 150 minutes of moderate- to vigorous- intensity aerobic physical activity per week. This can be done in bouts of 10 minutes or more. This works out to 30 minutes per day, 5 days per week. The guidelines also recommend strengthening and balance exercises 2 days per week.

Choose exercises that put less stress on your joints, such as pool exercises (swimming, water walking, water aerobics), riding a stationary bike, or walking with poles or a cane.

For strengthening exercises, see “Your Home Exercise Program” (pg. 32-34).

If you would like a more focused exercise program:

1. Make an appointment with a physiotherapist, kinesiologist, or personal trainer.
2. Check with your local community centre for group classes and information sessions.
3. Physical Activity Services at HealthLink BC provide physical activity information and advice by qualified exercise professionals. (see “Resources” on pg. 43).

Before beginning any new exercise program, please discuss with your family doctor whether the program is suitable for you.

Walking with a Cane or Walking Poles

Use a cane or walking poles before surgery to take the stress off your joint. This may also decrease your pain. This will also provide extra support to your other joints, which need to work harder to compensate for your sore joint. If you are limping or having pain in another body part (same leg, opposite leg, lower back), you should try using a cane or other gait aid on a more regular basis.

Walking with a Cane:

If you hang your arm loosely by your side, the top of a properly adjusted cane should be level with the crease of your wrist.

1. Hold the cane in the hand opposite your sore leg.
2. Move the cane and sore leg forward together.
3. Walk with even and equal length steps, as close to normal speed as possible.

Walking with Walking Poles:

Adjust walking poles so that you are able to grip the handles when your elbows are at a 90-degree bend. Walk with an opposite arm and leg pattern, similar to your walking pattern without the poles.

Weight Management

Being overweight or underweight can affect your recovery from surgery.

Every extra pound you carry places the equivalent of 3-6 pounds of force on your knees. But being underweight can make it harder for your body to heal after surgery.

If you are overweight, moderate gradual weight loss is a good strategy in the lead up to surgery (no more than 1 pound per week). This may reduce joint pain and allow you to do more activities.

Whether you are overweight or underweight, it is important to eat well before surgery. If you are worried about your weight, talk to a dietitian.

Nutrition

Good nutrition will help you recover from surgery. It will also reduce your risk of infection.

Protein- Promotes healing after surgery. Try to eat at least 3 servings of meat, milk or alternate protein sources every day.

Multivitamin- Promotes healing and is best taken in moderate doses. If you have a history of low iron, talk to your doctor, pharmacist or dietitian about supplements.

Calcium and Vitamin D- Are important for strong bones. Adults should have 2-3 servings of milk or calcium-fortified products per day. A minimum of 600 IU Vitamin D supplement is recommended for all people over 50 years old.

Fibre and Water- It is important to have a regular bowel habit prior to surgery, as constipation can be a complication. Spread fibre intake throughout the day and drink at least 8 glasses of water per day.

Dental Work

While you are on the waitlist, a routine check-up can help identify any issues that may delay your joint replacement surgery. Once you are booked for surgery it is important that you avoid dental work, including a dental cleaning, to minimize the risk of infection. Please note, any major dental work must be done 3 months prior to surgery.

Notes

Having a Plan Worksheet

Please review this form prior to your Intake Appointment with your Navigator

You will need to organize a discharge plan. These are a few things you will need to consider:

1. **Stairs:** Number of stairs outside of your home: _____ Is there a railing? _____
Number of stairs inside of your home: _____ Is there a railing? _____
2. **Help:** You will need help with chores: cooking, cleaning, laundry, grocery shopping etc. Who can help you after surgery? _____

Please be aware that you will still be discharged from hospital as scheduled if you do not have a discharge plan. Due to limited funding, the hospital will not arrange this for you.

If required, your Navigator can provide you with a resource booklet. These resources are mostly private-pay options.

3. **Transportation:** You will need to arrange rides after surgery as it can be up to 12 weeks before you can drive.

Drive home from hospital: _____

Drive to follow-up appointment with surgeon: _____

Drive to physiotherapy appointments: _____

Physiotherapy AFTER surgery is free at RebalanceMD, the Saanich Peninsula Hospital or any Island Health hospital outside of Victoria.

I plan on completing my physiotherapy at _____

4. **Medical Equipment:** Please review page 18

Items I already have: _____

Showering after surgery: What does your bathroom have?

Bathtub with a shower _____ Curtain _____ Sliding doors _____

Walk-in shower _____

Once Your Surgery Day is Booked

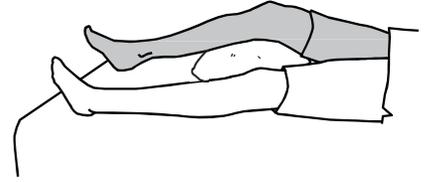
This section contains information about:

- **Knee Precautions**
- **Equipment**
- **Preparing Your Home**
- **Walkers and Crutches**
- **Stair Use**
- **Transportation**
- **Pre-Op Education**
- **Surgical Package**
- **Alcohol and Smoking**
- **Pre-Admission Clinic**
- **Cancellation of Your Surgery**
- **Shaving**
- **Pre-Op Showers**
- **Eating and Drinking Before Surgery**
- **What to Bring to the Hospital**
- **Medications**

Knee Precautions

For 3 months after your surgery, you will have the following restrictions on your movement.

- 1) Do not put a pillow behind your surgical knee. Your knee may become stiff if you keep it bent.



- 2) Do not kneel on your surgical knee.



- 3) Do not do deep squats (such as squatting down to the floor).



Equipment

You will need the following equipment:

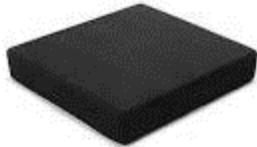
- Raised toilet seat- 2", 4" or 5"/6"
- Height adjustable bath bench or shower stool
- Two-wheeled walker (with a tray if you live alone) or crutches
- Cane
- Flexible gel ice packs, or a cryotherapy machine
- Leg lifter strap or pyjama bottoms

You may also require the following equipment based on you or your home set-up:

- Bed rail assist
- Toilet safety frame
- Long handled sponge
- Hand-help shower hose
- Non-slip bathmat
- Shower grab bars
- Elastic shoelaces or slip-on shoes

Most of this equipment can be rented or purchased from a local medical supply store or Rebalance^{MD}. Cryotherapy machines can be purchased or rented from some medical supply stores, some Bracing/Orthotics stores or purchased from Rebalance^{MD}. These expenses can often be claimed- please check with your Extended Health Benefits plan. Some items may be available from local loan cupboards. Your Navigator will review this and help with any necessary referrals shortly after your surgery is booked.

It is important that you pick up all the necessary medical equipment and set up your home so that you can move around easily at least 1 week BEFORE surgery.

2 wheeled walker		Firm foam cushion (high density foam)	
Cane		Long handled shoehorn	
Long Handled reacher		Sock aid	
Raised toilet seat		Toilet safety frame	
Shower stool		Bathtub Transfer bench	
Other equipment :	Commode Tub grab bar- clamp on Bed rail assist	Crutches (axilla) Crutches (forearm)	

Places to RENT or PURCHASE equipment in Victoria

- Please contact the store to confirm that they have the items you require and to inquire about pricing.
- If you need to purchase an item and have Extended Health Benefits, there are prescriptions in your education package that you can use for your claim. Check off the applicable items.

Store	Phone number	Address	RENT
One Bracing @ RebalanceMD	250-598-7420	104-3551 Blanshard St *cushions incl ONLINE ORDERING & SHIPPING AVAILABLE, please visit www.onebracing.com/shop	NO
Home Health Care Supply	250-474-6966	875 Cecil Blogg Drive	Need to inquire
Motion Specialties - Victoria	250-384-8000	1856 Quadra Street *cushions incl.	YES
Motion Specialties- Sidney	250-656-6228	7-9764 Fifth Street Sidney *cushions incl	YES
Rexall Home Health Care	250-384-7196	3098 Nanaimo Street	YES
Island Mediquip - Victoria	250-391-0388	750 Enterprise Crescent (top of Glanford by Bird of Paradise Pub)	YES
Shoppers Home Health	250-370-2984	1561 Hillside Avenue	YES
Vancouver Island Medical Supply	250-384-4060	1A 3534 Quadra Street	YES
HME Mobility and accessibility	250-386-0075	2521 Government St	Yes

Places to purchase the HIGH DENSITY FOAM CUSHIONS

The Foam Zone	250-475-3255	Unit 1 - 3388 Douglas Street (behind Mr. Lube)
Mc Geachie's Foam Shop	250-385-7622	2103 Douglas Street
McGeachie's Foam Shop	250-391-9320	890 Goldstream Avenue Langford
Home Health Care Supply	250-474-6966	875 Cecil Blogg Drive

Please contact your Navigator if you are having difficulty getting your equipment. 250-940-4444

Preparing Your Home

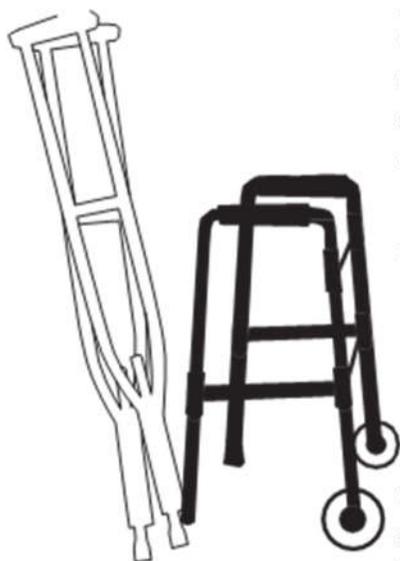
Making the following modifications to your home prior to surgery will make it easier for you to go about your daily activities in the weeks after surgery.

- If possible, arrange your home so that you can spend most of your time on a single level.
- Ensure all stairs have stable, solid railings.
- Try to use a chair with arms. Some people use patio chairs.
- Install a raised toilet seat. You may need a toilet seat safety frame (arms for your toilet).
- Have a seat for when you shower. This may be a height adjustable bath bench for over your tub or a height adjustable shower stool in your walk-in shower.
- Remove all throw/scatter rugs or other potential tripping hazards.
- If you think you will have difficulty getting in and out of bed, you can borrow or rent a bed rail assist.

Walkers and Crutches

You will be using a two-wheeled walker or crutches for 2-6 weeks after surgery to provide extra support to your new joint as it is healing. Your physiotherapist will advise you when you are ready to move to another gait aid, typically to a cane.

If you hang your arms loosely by your side, the handles of a properly adjusted walker should be level with the crease of your wrist. Crutches should be adjusted so that the crutch top is approximately 2 inches below your armpit. Adjust the crutch handle so that you have a slight 20-30 degree bend in your elbow.



*A pair of crutches
and a two-wheeled
walker*

Walking with a Two-Wheeled Walker or Crutches

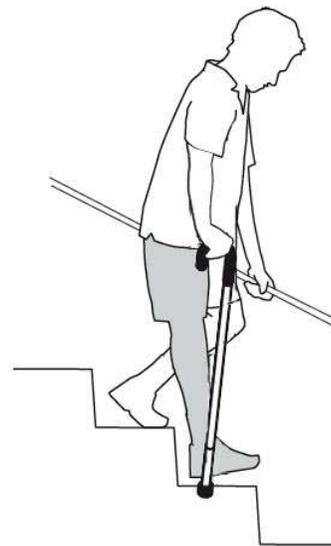
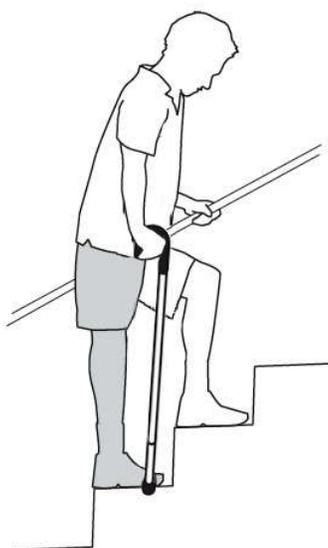
- 1) Start from standing and move the walker or crutches forward.
- 2) Step forward with your surgical leg.
- 3) Putting as much weight as necessary on the aid, step forward with your good leg.

Crutches are only recommended in certain situations as they do not encourage a normal walking pattern. They may be used if you are not allowed to put full weight on your joint (most patients are weight bearing as tolerated), if your hallways and doorways are not wide enough to accommodate a walker or if you have multiple stairs without railings. Please talk to your Navigator if you are interested in using crutches.

Stair Use

Going UP stairs:

- 1) Always use a handrail if available.
- 2) Step up with your good leg first.
- 3) Follow with your surgical leg and the aid, one stair at a time.



Going DOWN stairs:

- 1) Always use a handrail if available.
- 2) Place your cane (or crutch) on the step below.
- 3) Step down with your surgical leg first.
- 4) Follow with your good leg, one stair at a time.

The hospital physiotherapist will practice stairs with you before you leave the hospital. In the early stages of recovery, plan your day so that you minimize the number of times per day you do the stairs. This will help you conserve energy and avoid putting unnecessary stress through your new joint.

Transportation

You are responsible for arranging a ride home from the hospital. Please do not take a taxi or HandyDART unless you have someone that can accompany you and help you get into your home safely. There are many private transportation services that offer fee-based supported transportation. Volunteer services are also available. If you need assistance, speak with your Navigator.

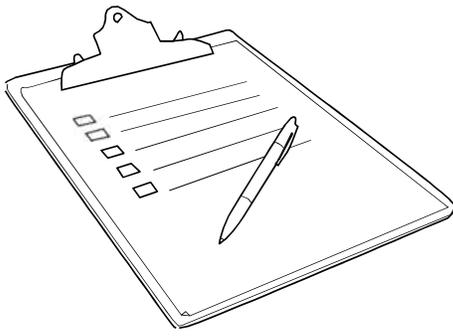
Ask the person who is picking you up at the hospital to bring the two-wheeled walker or crutches.

Getting in/out of the car:

1. Have the driver slide the seat all the way back.
2. Recline the seat back.
3. Back up until you feel the seat on the back of your legs.
4. Extend your surgical leg.
5. Lower yourself slowly to the seat.
6. Slide back and lift your legs.
7. Spin on the seat.



It is helpful to practice these BEFORE surgery



Education

After you have accepted a surgery date, you will be contacted by the New Joint Program around 3-4 weeks before your surgery to arrange your Education. This is a necessary step in preparation for surgery. Your Navigator will organize completing updated pre-operative tests, discuss equipment options and confirm your discharge plan.

Surgical Package

You will receive your surgical package in the mail or via e-mail once your surgery date is booked. This package will confirm your surgery date as well as other information to help you prepare.

Your arrival time will be e-mailed to you 1 week before your surgery date.

Alcohol and Smoking

Continued use of alcohol and smoking may prolong your recovery. Please stop drinking alcohol 7 days prior to surgery. Quitting smoking prior to surgery is also a good strategy as smoking may slow your healing. Your Navigator or family doctor can connect you with a smoking cessation program (see “Resources” pg. 43).

Pre-Admission Clinic

The Pre-Admission Clinic will call you from the hospital to schedule an appointment. At this appointment you will meet with a pharmacist who will review your medications.

You may also be called to see an anaesthesiologist prior to your surgical date. This may occur at either the hospital or at Rebalance^{MD}. You should bring any questions you may have about your anaesthesia or pain issues to this appointment.

It is important that you bring ALL of your medications/supplements to this appointment. It is advised that you complete all of your pre-op tests before this appointment. These tests will be organized with your Navigator, as mentioned in the Education section above.

Cancellation of your Surgery

Your surgery may be cancelled if you have an active infection, open wound, weeping rash, sore on the surgical leg, a cold, or the flu. Having any dental procedures 3 months prior to your surgery (including cleanings) may also cancel your surgery. If you are unwell in any way before your surgery please call Rebalance^{MD}.

Shaving

Please do not shave the area or limb to be operated on 2 weeks prior to surgery.

Pre-Op Showers

You will need to take 2 pre-op showers before your surgery. The first shower will take place the night before your surgery and the second one the morning of your surgery. You will need to purchase 2 Antibacterial Chlorhexidine 4% sponges for this. These are available at most pharmacies or Rebalance^{MD}. Instructions on how to scrub will be provided in your surgical package.

Eating and Drinking Before Surgery

Please follow the fasting guidelines as explained in your Surgical Package. You are not to eat or drink (ingest anything by mouth) as of midnight the night before surgery. Please refer to your surgical package for further instruction and detail.

What to Bring to the Hospital

- Label all personal items (denture cup, glasses case, hearing aid case, cellphone, etc).
- Bring your own toiletry items (toothbrush, hairbrush, etc).
- Bring loose fitting clothes as well as comfortable closed-toe shoes that are easy to get on/off (slip on or elastic shoelaces).

Do not bring:

- Valuables: jewellery, cash, tablets.
- Scented products: perfumes, deodorants, make-up, powders or nail polish.
- Equipment: walkers, raised toilet seats. These will be provided at the hospital.

Medications

Most medications can be taken up to and including the day of surgery. Some medications must be stopped before surgery to decrease the chances of complications.

Below is a guide to medication use in the lead-up to surgery. Any allowed medications may be taken with 30 mL of water per pill up to one hour before surgery.

You may be given further direction from the anaesthesiologist. If so, follow those instructions.

Generic Medication Name	Trade Name	When to Stop
Acetaminophen	Tylenol	May take for pain as needed up to and including day of surgery
Angiotensin converting enzyme (ACE) inhibitors	Captopril, Cilazapril, Enalapril, Rosinopril, Ramipril, Trandolapril	Hold day of surgery to reduce risk of excessive drop in blood pressure during anaesthesia
Anticoagulants and Antiplatelets	Coumadin, Warfarin, Heparin, Plavix, Ticlid, ASA, Aspirin, Xarelto	If you are on ANY of these medications, contact your cardiologist/ internist and/or orthopaedic surgeon
Cox-2 NSAIDS	Celebrex, Meloxicam (Mobicox)	Hold day of surgery
Diuretics	Hydrochlorothiazide, Furosemide (Lasix), Spironolactone	Hold day of surgery
Non-steroidal anti-inflammatory drugs (NSAIDS) with a short life	Ibuprofen, Advil, Motrin, Diclofenac, Voltaren, Ketoprofen, Indomethacin,	Stop the day before surgery
NSAIDS with an intermediate life	Naproxen, Sulindac, Ketorolac (Toradol)	Stop 3 days before surgery
NSAIDS with a long life	Prioxicam	Stop 10 days before surgery
Oral contraceptives or hormone replacement therapy		Stop 1 month before surgery and restart on the direction of your surgeon. (You may need to use alternative forms of birth control during this period.)
Oral Hypoglycemic agents	Chlorpropamide, Glyburide, Metformin	Hold day of surgery to decrease risk of hypoglycemia when fasting
Vitamin E and all other oral natural health products and herbal remedies	Garlic, Gingko, Kava, St John's Wart, Ginseng, Dong Quai, Glucosamine, Papaya	Stop 7 days before surgery
Regular vitamins and iron pills		Hold day of surgery

Hospital Stay

This section contains information about:

- **Length of Stay**
- **What Happens on the Day of Surgery**
- **Blood Thinning Medications**
- **Rehabilitation**
- **Pain Control After Surgery**
- **Discharge Checklist**

Length of Stay

Your length of stay in the hospital may be as short as 24 to 48 hours. It is important that you have made arrangements with someone to pick you up from the hospital upon discharge. Make sure these arrangements are flexible, to account for an early discharge time.

If you think you will need extra care or home support after surgery, please contact your Navigator. We have a list of resources available as you are responsible for organizing your own care after discharge.

What Happens on the Day of Surgery?

Before Surgery:

- Bring a small suitcase of your belongings (see “What to Bring to the Hospital” pg. 24).
- Do not bring your medications (unless the hospital pharmacist directs otherwise).
- If you use a CPAP machine, please bring it to the hospital with you.
- Check in at “Patient Admitting”. They will guide you from there.
- You will confirm your anaesthesia plan with your anaesthesiologist.
- You will see your surgeon at this time as well.

After Surgery:

- You will wake up in the recovery room.
- You will stay here until your pain is under control and you are no longer drowsy.
- You will have an intravenous (IV) line to keep you hydrated and to give you medication.
- You may have oxygen administered by nasal tubing.
- Your stay in the recovery room may last from 1-3 hours.

The Hospital Ward:

- You will be transferred to the orthopaedic ward once you are medically stable.
- A nurse will assist you out of bed the night of the surgery.
- The nurse will let you know how much weight you can put on your surgical leg.
- You may have a drain on your leg that collects blood from your joint.
- Sometimes your bladder function is impaired shortly after surgery. This is usually due to the anaesthetic. If you are unable to empty your bladder, the nurse will perform a portable ultrasound of your bladder while you are lying on your bed. If the ultrasound shows a large amount of urine, the nurse may insert a catheter to drain your bladder. This will be removed once the bladder has been drained.
- It is important to do deep breathing and ankle pumping exercises after your surgery, especially while lying in bed (see the following page).

Deep Breathing

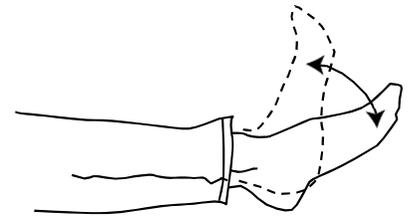
This exercise is important because it helps clear your lungs. This exercise can reduce the risk of lung problems like pneumonia.

- While sitting up, take a few normal breaths. Then take one deep breath. Try to hold your breath for 2-5 seconds.
- While making an “O” with your lips, slowly breathe out like you are blowing out a candle.
- If you feel the need, cough to help clear your lungs.
- Do this a total of 10 times, remembering to take normal breaths in between.
- Do this exercise every hour that you are awake.
- You may be given an inspirimeter which is a blue breathing tool that helps you visualize your deep breathing.

Ankle Pumping

This exercise is important because it can improve circulation and reduce the risk of getting a blood clot.

- While lying down or sitting, start by pointing your toes up towards the ceiling. Then, point your toes down, similar to pressing on the gas pedal while driving.
- Do this exercise 10 times every hour that you are awake (this could be done in conjunction with your breathing exercises).



Blood Thinning Medications

After surgery, you are at an increased risk of getting a blood clot. The following blood thinning medications reduce that risk and must be taken for as long as your surgeon prescribes.

- Dalteparin (injection)
- ASA/Aspirin (pill)
- Xarelto (pill)

Your surgeon will select the blood thinner that they think is right for you. If this is Dalteparin, the hospital nurse will teach you how to give yourself the injection.

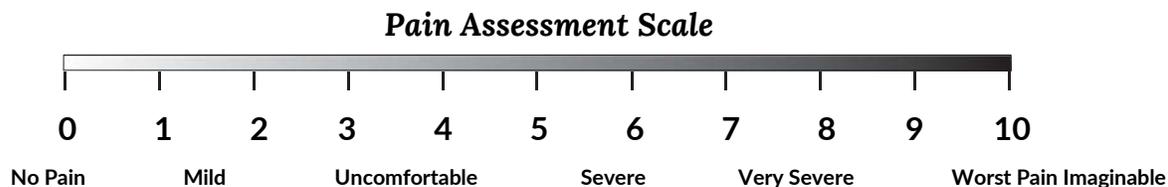
Rehabilitation

Physical activity is an important part of your recovery. It will not only help to improve the function of your joint, but help to clear your lungs, reduce your risk of blood clots, reduce your pain, and start your bowels moving.

A physiotherapist will work with you throughout your hospital stay to teach you how to walk with a walker or crutches, use stairs safely and review your home exercise program. A Rehabilitation Assistant may also help you with your walking and exercises. A member of the rehabilitation team will review how to do your daily activities such as dressing while following precautions to protect your new joint.

Pain Control After Surgery

A common way to reference your pain after surgery is by using a pain scale from 0 to 10 (where 0 means you have no pain and 10 means the worst pain imaginable).



Staying Ahead of the Pain:

The best time to take your pain medication is when your pain level is around 3 or 4 (uncomfortable but bearable). This way, you will require a smaller dose of pain medication to bring your pain level back to a comfortable range (such as 1 or 2). If you wait until your pain level reaches 7, 8, or 9 you will need a higher dose of pain medication. This can lead to nausea, drowsiness and dizziness and should be avoided.

Types of Pain Medications:

There are a variety of pain medications that your doctor may order for you. These include:

1. **Hydromorphone or oxycodone:** These narcotics are “heavy duty” painkillers. Your nurse will only give you the amount that your surgeon feels is safe.
2. **Tramadol or Tylenol with codeine:** These are effective painkillers, but might not be strong enough shortly after surgery.
3. **Tylenol (extra strength):** You will likely be on a regular dose of Tylenol to help keep your pain level down.
4. **Gabapentin or Pregabalin:** These are medications to help with nerve pain.
5. **Celebrex:** This medication will reduce inflammation.

You will likely be prescribed a combination of these medicines to control your pain after surgery.

Remember to also use ice and elevation to help alleviate pain.

Please review “Pain Control at Home” on page 36 for further information.

Discharge from Hospital

At discharge, you will be given a “Discharge Sheet” with information on it. You will also be given prescriptions for your pain medication and blood thinner.

Physiotherapy/ Rehabilitation

This section contains information about:

- **Physiotherapy/Rehabilitation**
- **Your Home Exercise Program**

Physiotherapy/Rehabilitation

Post-operative physiotherapy is offered free of charge at Rebalance^{MD}, Saanich Peninsula Hospital, and other Island Health Hospitals and Health Centres on Vancouver Island. Your Navigator will record your choice around the time of your Education and every effort will be made to have you attend at your preferred facility, but due to capacity limitations this may not always be possible. The majority of patients will be seen at RebalanceMD in our integrated group session format. Our group classes are supervised by our Physiotherapist and carried out by our Kinesiologists/Exercise Therapists in our rehabilitation department.

Your first appointment is usually 5-7 days from your surgery date. If you will be coming to Rebalance^{MD} for your physiotherapy, you will be contacted prior to surgery by the Physiotherapy Department to schedule this appointment.

Your home exercise program is the most important part of your rehabilitation. During your visits, your home exercise program will be reviewed and increased in difficulty as you recover.

The Physiotherapist or Kinesiologist will also assess your mobility and determine when you are ready to progress from the walker or crutches to a cane. You will typically be using a walker/crutches for 2-6 weeks after surgery. It is important that you do not come off your walker/crutches too soon, as this will place too much stress on your new joint, as well as other joints in your legs and back. This can be painful and may delay your recovery.

Bring any questions that you may have regarding your recovery and return to activity (such as driving, work, or a gym program) to your physiotherapy appointment. If you ever have any questions or concerns during your rehabilitation sessions please immediately seek out one of the health care practitioners on site.

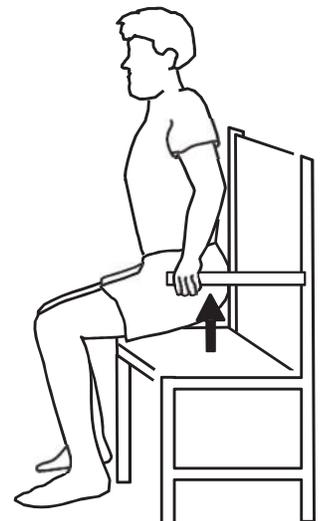
Your Home Exercise Program

It is important to practice these exercises BEFORE surgery.

Arm-Chair Push-Up

- Sit on your chair, placing your hands on the armrests, elbows bent.
- Push through your hands to lift your body by straightening your elbows.
- Hold for 5 seconds before slowly lowering your body back down.
- Repeat this exercise 10 times, 2 times per day.

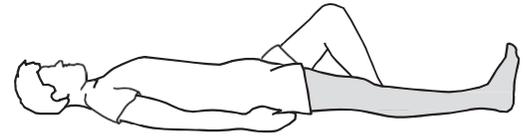
This exercise will strengthen your arms, allowing you to better use your walker or crutches, get in and out of bed, and stand up from a chair.



Tip: If you are finding that it is too difficult to do all 10 repetitions in one session, do 3-4 repetitions of each exercise every 2 hours.

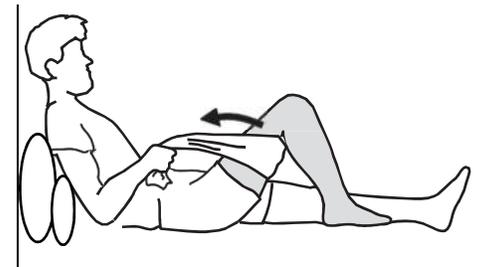
1. Simple Thigh Squeezes

- Lie on your back with your kneecap and toes facing the ceiling.
- Pull your toes back towards your body.
- Tighten the muscles in the front of your thigh and push the back of your knee down.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



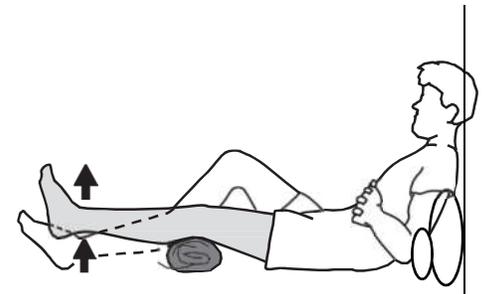
2. Knee Bending (Heel Slides)

- Lean back and bend your knee.
- With the help of a towel or hand behind your thigh, pull your heel towards your bottom.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



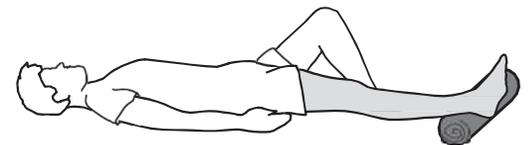
3. Complex Thigh Squeezes

- Place a rolled towel under your knee.
- Press the back of your knee down into the towel.
- Straighten your leg and hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



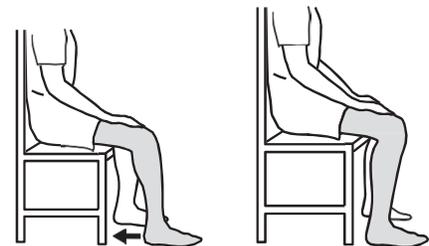
4. Knee Straightening

- Lie on your back with your kneecap and toes facing the ceiling.
- Place a rolled towel under your heel.
- Gently tighten the muscles in the front of your thigh.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



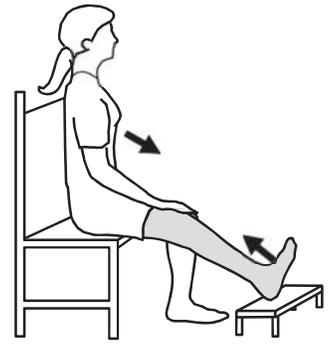
5. Seated Knee Bend

- Sit on a firm chair with your feet planted on the floor.
- Slide your heel back to bend your knee.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



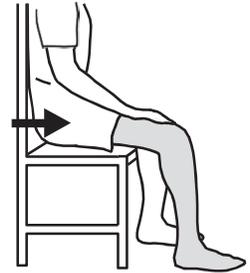
6. Back of the Thigh Stretch (Hamstrings)

- Sit on the edge of a firm chair and place your heel on a step.
- Straighten your leg and pull your toes towards your body.
- Keeping a straight back, bend forwards until you feel a gentle stretch in the back of your thigh.
- Hold for 30 seconds.
- Repeat this exercise 3-4 times, 2 times per day.



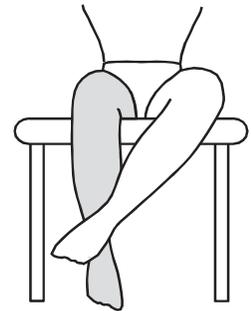
7. Passive Knee Bend

- Sit on a firm chair with your feet on the floor.
- Keep your foot fixed on the floor and slide your bottom forward on the chair to bend your knee.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



8. Assisted Knee Bend

- Sit on a firm chair.
- Cross your good leg over your surgical leg.
- Gently push with your good leg until a stretch is felt on the front of your surgical knee.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



9. Seated Knee Stretching

- Sit on a firm chair.
- Keep the back of your thigh on the chair and straighten your surgical leg.
- Hold for 5 seconds.
- Repeat this exercise 10 times, 2 times per day.



Important:

Please do not walk or stand for more than a total of 5 minutes each hour. This is the time allotted for activities such as trips to the bathroom, changing position, preparing a snack, etc. This applies for a minimum of 2 weeks after surgery, but possibly longer if there is no significant improvement in range of motion. Increased walking may promote swelling, make your thigh muscles sore, tight, and restrict your knee from bending further.

The focus should be on bending and straightening your knee frequently every hour.

At Home

This section contains information about:

- **Pain Control at Home**
- **Swelling**
- **Icing & Elevating**
- **Resuming Home Medications**
- **Changing Your Dressing**
- **Complications After Surgery**
- **Returning to Work**
- **Returning to Driving**
- **Dental Work and Medical Procedures**

Pain Control at Home

Most people experience a reduction in pain over the 6-12 weeks following surgery. Please see “Pain Control After Surgery” (pg. 30) to review effective pain management. It is important in the transition from hospital to home to maintain consistent dosing.

Acetaminophen:

It can be helpful to take acetaminophen 1000 mg (2 extra strength tablets) every 4-6 hours, ensuring you do not exceed 4000 mg in a 24-hour time frame. Here is a general schedule for taking acetaminophen:

6:00 am 11:00 am 4:00 pm 9:00 pm

Please note: Tylenol is the same medication as acetaminophen.

If a medication contains acetaminophen, be careful about using Tylenol as well. For example, “Tramacet”, “Tramadol” and “Tylenol #3” contain acetaminophen, so it is important to read your prescription bottle carefully to ensure you do not exceed the maximum daily dose.

If you have a history of liver disease or significant alcohol consumption, you may need to reduce or avoid acetaminophen use. Discuss this with your pharmacist or family doctor.

Narcotics (Hydromorphone, oxycodone, etc):

These are intended for short use following surgery as they pose a risk for addiction or dependence. Signs of drowsiness, confusion, hallucinations, slow and/or shallow breathing are all signs that you might be taking too much pain medication. If any of these symptoms are severe, please contact your Navigator, surgeon’s office, or a nurse through HealthLink BC (see “References” pg. 43).

If your surgeon gave you prescriptions for two pain medication:

Usually this involves a stronger narcotic and another more moderate pain medication such as Tramadol or Tylenol #3. It is important to only use one medication at a time. Start with the narcotic medication first following surgery. Once your pain starts to improve, try substituting one narcotic dose with the other pain medication. If this provides adequate pain control, continue replacing some but not all the narcotic doses with the other pain medication. Over the next few days, continue substituting the other pain medication, slowly decreasing the amount of your narcotic use until you are no longer using the narcotic. It is advisable that you do not stop the narcotic suddenly or you may experience withdrawal symptoms such as nausea, irritability, jitteriness etc.

As your pain continues to improve, start decreasing how often you take your pain medication. You can start substituting extra-strength Tylenol in place of the other pain medication until you no longer need any pain medication.

Do not use non-steroidal anti-inflammatory drugs such as Ibuprofen/Advil and Aleve while you are taking your prescribed blood thinner unless directed by your surgeon.

Swelling

Having some swelling in your leg is normal after surgery, as well as later in the recovery process. Swelling may also increase as you become more active and during your physiotherapy exercises. It is important to take active steps to minimize swelling.

In order to reduce swelling:

- Ankle Pumping- Point and flex your feet 10 times every hour while you are awake (pg. 29).
- Please do not walk or stand more than a TOTAL of 5 minutes each hour in the first 2 weeks after surgery.
- Lie down often for 15-20 minutes with your leg up on pillows (keeping knee precautions in mind). It is useful to ice your joint at the same time.
- Ice your joint regularly, especially following exercises.
- Do not sit for longer than 30 minutes.
- Sometimes compression stockings can help reduce swelling. You may purchase a medium compression stocking that goes all the way to your thigh or an intermittent pneumatic compression device (review Education video) recommended by our surgeons.

If you are having difficulty controlling your pain or swelling, please call your Navigator.

Icing & Elevating

Icing your joint regularly throughout the day is an effective way to reduce pain and swelling. It is useful to ice after you exercise or after you have been on your feet for a while. Use ice packs or a cryotherapy machine.

Wrap one or two ice packs in a pillow case and place them on the joint. Secure with a tensor bandage, Velcro straps, or a tie. If you are using a cryotherapy unit, place the pad on your joint and secure it with the supplied Velcro straps. Ice for 15-20 minutes. Repeat at least 4-6 times per day in the first two weeks. Continue to use ice as needed for as long as you find it helpful. It is also helpful to elevate your leg while icing.

To avoid injury, never apply ice directly to your skin.

Resuming Home Medications

Once you return home following surgery you can resume most of your usual medications, unless otherwise directed.

Medications that you should NOT continue (unless instructed by your surgeon or family doctor):

- Blood thinners you were taking before surgery (Aspirin/ASA, Plavix, Coumadin, etc.)
- Methotrexate, or biologics such as Remicade.
- Hormone Replacement Therapy.
- Ibuprofen or any previously prescribed painkiller.
- Any supplement that has blood thinning capabilities, such as glucosamine or Vitamin E.

Changing your Dressing

You will receive a Dressing Change Guide specific to your surgeon in your Education package. You are responsible for your own dressing change. If you have any questions about your dressing change or incision, contact your Navigator.

How to change your dressing:

- Wash your hands with soap and water beforehand
- Simply take off the old dressing (carefully, so as not to remove the steri-strips) and apply the new one
- DO NOT clean the incision with anything, including water

When your incision no longer requires a dressing, please make sure you avoid the sauna, pool, hot tub or bath until the incision is completely healed. This usually takes an average of 6-8 weeks to be completely healed.

Do not apply lotions, oils, ointments to the incision until it is completely healed.

Complications After Surgery

After surgery, a few people suffer complications and may require further medical treatment.

Blood Clots:

A small number of people may develop a blood clot following surgery. These usually develop in the deep veins within the legs and may travel to your lungs. If you have significant calf pain, swelling and cramping, call our office if available, or go to Emergency. If you have difficulty breathing or chest pain, go to Emergency as soon as possible.

In order to reduce your risk of blood clots:

- Take the blood thinning medication prescribed by your surgeon.
- It is important to mobilize every hour that you are awake, but limit it to 5 minutes at a time.
- While you are sitting or in bed, pump your ankles (see pg. 29) and flex your leg muscles to improve circulation.
- Use compression stockings or an intermittent pneumatic limb device (review Education video).

Constipation:

A change in diet, reduced activity, and pain medication may cause some patients to have difficulty with constipation after surgery.

Some ways to stay regular in hospital and at home include:

- Drink at least 8 glasses of water or other clear low calorie fluid per day.
- Eat fibre such as prunes, bran, beans, fruit and vegetables.
- Activity, such as moving around frequently and doing your exercises.
- Take an over the counter stool softener and/or laxative, especially while you are taking pain medication.

Infection:

Infection around a new joint is something that occurs in 1-2% of people. However, it is possible for an infection elsewhere within the body to reach the new joint through the blood stream. If you develop a joint infection, you will require antibiotics and, on the rare occasion, further surgery.

Signs of an infected incision include:

- Redness developing around the area and that redness is spreading.
- Green, yellow, or increasing drainage from the wound site. Although it is normal for a new surgical wound to have some drainage, this should slowly stop within 3 to 5 days.
- Increased pain or swelling at the wound site and the surrounding area.
- A fever (above 38 degrees Celsius or 101 degrees Fahrenheit) or chills.

If you think you have a possible wound infection, call your surgeon's office immediately.

Confusion:

You may experience short term confusion if you are reacting to medication or are suffering alcohol withdrawal.

- If the confusion is severe, go to the nearest Emergency Room.
- If the confusion is minor, please see your family doctor, visit a walk-in clinic or contact a nurse via HealthLink BC (see “Resources” pg. 43).
- If you think the confusion is caused by the pain medication, contact your surgeon’s office.

Chest Infection:

Chest infection following surgery is generally the result of mucus that is not cleared from the bottom of your lungs.

Signs of a chest infection include:

- Frequent coughing, coughing up yellow or green mucus, or shortness of breath.
- Fever above 38 degrees Celsius or 101 degrees Fahrenheit.

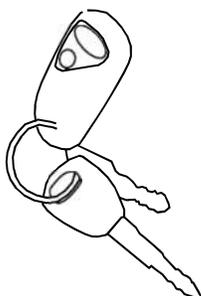
If you think you have a possible chest infection, contact your Family Doctor.

Returning to Work

It is important that you allow yourself time to recover from surgery and focus on your rehabilitation before you return to work. Some people need longer than others to heal and recover. This depends on a variety of factors, such as your health status and the type of work that you do.

Talk to a health care professional about what is right for you.

Returning to Driving



Being able to drive safely depends on which leg was operated on, whether you have an automatic or standard transmission vehicle, and your ability to safely navigate your foot from the gas pedal to the brake.

As a general guideline you should be off all narcotic medication. If your right leg was operated on, you should wait a minimum of 6 weeks after your surgery date.

It is important that you discuss this with your surgeon and/or physiotherapist at your post-operative visit.

Dental Work and Medical Procedures

If you will be having any dental work or medical procedures- such as procedures involving the bladder, prostate, lung, or colon- it is important that you let your health care professional know that you have had joint replacement surgery.

To avoid the risk of infection, it is important that you avoid dental work, including dental cleaning, for 3 months after surgery.

If you have a health issue that compromises your immune system, you may need antibiotics with every dental procedure for the rest of your life. Please discuss this further with your surgeon and dentist.

Resources

This section contains resources for:

- **Arthritis and Surgery Information**
- **Health Professionals**
- **Physical Activity**
- **Transportation**
- **Resource Guides**

Resources

Rebalance^{MD}
www.RebalanceMD.com
250-940-4444

Arthritis & Surgery Information

OASIS Program;
"Osteoarthritis Service
Integration System"
Vancouver Coastal Health
www.oasis.vch.ca

The Arthritis Society
www.arthritis.ca
Email: info@arthritis.ca
Arthritis Society Information
line: 1-800-321-1433

Eating Well for Arthritis
<http://www.arthritis.ca/living-well/optimized-self/eating-well/your-good-food-guide>

Canadian Orthopedic
Foundation
www.whenithurtstomove.org

Ortho Connect
www.orthoconnect.org

American Academy of
Orthopaedic Surgeons
www.orthoinfo.aos.org

Health Professionals

Nurse Hotline/HealthLink BC
Phone: 8-1-1
www.healthlinkbc.ca
Non-emergency health
information provided by a nurse,
pharmacist or dietitian.

Dietitians of Canada
www.dietitians.ca

Physiotherapy Association of
British Columbia (PABC)
- to find a physiotherapist in
your area
www.bcphysio.org

Quit Now
www.quitnow.ca

BC Smoking Cessation Programs
<http://www2.gov.bc.ca/gov/content/health/health-drug-coverage/pharmacare-for-bc-residents/what-we-cover/drug-coverage/bc-smoking-cessation-program>

Physical Activity

Physical Activity Services
at HealthLink BC
www.healthlinkbc.ca/physical-activity

Phone: 8-1-1

Transportation

HandyDART
www.bctransit.com/victoria/riderinfo/handydart
250-727-7811

SPARC -
Disabled parking pass
Victoria Disability
Resource Centre
www.drcvictoria.com/parking-permits/
phone: 250-595-0044
fax: 250-595-1512
email:
parking@drcvictoria.com

TAP - Travel Assistance
Program
www.health.gov.bc.ca/tapbc/
1-800-663-7100

Resource Guides

Seniors Serving Seniors
Directory
www.seniorsservingseniors.bc.ca

Greater Victoria Rec
Centre Guide
www.fitinfitness.ca

**Please note that information on this page is provided as a reference only and is subject to change. You may need to use directory assistance or an internet search.*

Visit Our Website

www.rebalancemd.com

**For Educational Videos & Anaesthetic
Information Regarding Your
Knee Replacement Please Visit:**

<http://rebalancemd.com/resources/>

Do not worry about the “forms” in this video. You will be provided these forms once you have accepted a surgical date and you have been contacted regarding pre-operative Education.