



Queensway Carleton
Hospital

Total Knee Replacement

Patient Information Booklet

For Information Call
613-721-2000 extension 2920
Between 8:00 a.m. and 4:00 p.m.
Monday to Friday

**Please bring this book to all your appointments and
to your admission to the hospital**

NAMC 0413-26-01

qch.on.ca

For information call

Before your surgery:

Contact your surgeon's office or Pre-Operative Assessment Clinic 613-721-2000 ext. 2920 between 8:00 a.m. to 4:00 p.m. Monday to Friday

After your surgery:

Contact your surgeon's office

The information contained in this booklet is not specific to medical advice, nor is it a substitute for medical advice. For your safety, it is advised that you speak with your doctor and healthcare team about your healthcare needs.

Acknowledgements:

This booklet was developed with assistance from OASIS (Osteoarthritis Service Integration Systems) at Vancouver Coastal Health

Table of Contents

Welcome to Queensway Carleton Hospital	5
Knee Anatomy & Knee Replacement Surgery	5
Knee Anatomy.....	5
Knee Disease.....	5
Total Knee Replacement Surgery	6
Bilateral (Both) Knee Replacement Surgery	6
Unicompartmental (Partial or Oxford) Knee Replacement Surgery	6
Knee Revision (Repeat) Surgery.....	7
Preparing for your Knee Replacement Surgery	8
QCH’s Pre-habilitation Program.....	8
Will I need to see a social worker?	9
FAQs	9
Health tips before surgery	11
Pre-surgery home set-up	11
Exercise.....	13
Final check list: One day before surgery	14
Day of Surgery	15
When you arrive at the hospital.....	15
After surgery: Recovery Room.....	15
Length of your hospital stay	16
Pain Management after Surgery	17
Anticoagulant medications	18
Going home	19
Activity guidelines	22
Post-operative Concerns	26
Complications	26
Appendix 1	31
Patient Reported Outcome Measures (PROMs).....	31

Appendix 2	33
Knee Home Exercise Program	33
Appendix 3	36
Sexual activity after knee replacement	36
Appendix 4	37
Guide to using equipment.....	37
Peri-Care Assist Options.....	37
Appendix 5	40
Using the adaptive devices	40

Welcome to Queensway Carleton Hospital

Queensway Carleton Hospital (QCH) is a patient and family-centered hospital providing a broad range of services through the dedicated care of healthcare professionals. We look forward to helping you throughout your hospital stay. Please be sure to ask any questions you may have at any time.

For preoperative information refer to “Preparing you for Surgery Booklet”.

Please refer to our Patient Handbook for more information about QCH and what you need to know as a patient while you are here. This handbook will focus specifically on your upcoming knee replacement surgery.

Important: If your surgeon or healthcare team gives you different recommendations than what has been provided in this booklet, please follow directions from the surgeon or healthcare team.

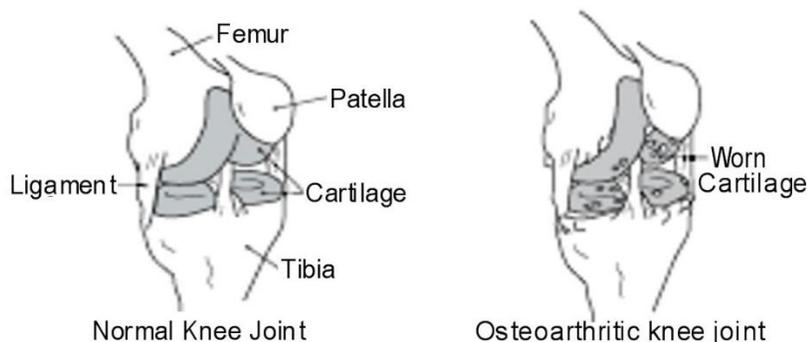
Knee Anatomy & Knee Replacement Surgery

Knee Anatomy

The knee joint is where the thigh bone (femur) meets the shin bone (tibia). The knee is a hinge joint that allows you to bend and straighten your leg. The kneecap (patella) is the attachment for muscles that help you straighten your knee.

Knee Disease

The most common reason for joint replacement surgery is OSTEoarthritis. Osteoarthritis results in the breakdown of cartilage on the ends of the bones. Osteoarthritis can cause joint pain and stiffness that may require joint replacement surgery. Other diseases, such as rheumatoid arthritis or injuries can lead to joint damage. Talk to your doctor if you have questions about your joint health.



Total Knee Replacement Surgery

Today, most patients who have knee replacement surgery can move their joints better, have less pain and are able to walk more comfortably than they were prior to surgery.

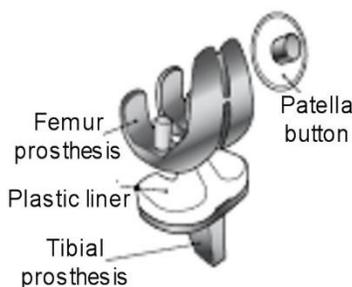
In total knee replacement surgery, the surgeon replaces the worn out joint with an artificial joint (prosthesis). This surgery takes about two hours to perform. Once the new joint is in place, the muscles and ligaments are repaired. Your skin is closed with staples (metal clips that hold your skin together while the incision heals).

Bilateral (Both) Knee Replacement Surgery

In rare cases, your surgeon may decide that both knees need to be replaced at the same time. This depends on a number of factors including your overall health, joint damage and lifestyle. Your hospital stay may be longer, and you may need more rehabilitation after surgery to help you get back to your daily activities.

Unicompartmental (Partial or Oxford) Knee Replacement Surgery

If you only have arthritis damage on one side of your knee, your surgeon may decide that you are a suitable candidate for unicompartmental (partial or Oxford) knee replacement surgery. Many people who have this kind of joint replacement surgery recover more quickly than people who have total knee replacement surgery.



Knee Revision (Repeat) Surgery

Some people who previously have had a knee replacement may need a repeat surgery, called a revision surgery because:

- The replacement joint is loose or worn out
- There has been bone loss or an infection in the replaced joint (see signs and symptoms of infection on page 28)

Repeat surgeries can be more complex. You may not be able to put as much weight on your new joint while you recover.

Please answer the following questions before your prehab appointment.

- How many stairs/steps into the house and which side is the railing going up?
- How many stairs/steps to the bedroom and which side is the railing going up?
- What is the height of the toilet on each floor from the floor to the top of the seat?
- What is the height of the bed where you will sleep?
- What is the height of any chair you may sit in?

Preparing for your Knee Replacement Surgery

QCH's Pre-habilitation Program

The Queensway Carleton Hospital Rehabilitation Department provides a pre-habilitation program designed to educate both patients and their care partners. After seeing a surgeon at the Total Joint Assessment Clinic, you will be contacted by phone to arrange your “pre-hab” appointment. We will review your home environment to determine what equipment you will need to buy or rent to assist in your recovery.

It is mandatory to attend this appointment, or your surgery will be postponed or cancelled. We encourage you to bring a friend or relative for additional support. There are also videos about your surgery on our website that you should watch before your Prehab assessment.

<https://www.qch.on.ca/ChamplainMSKCareProgram>

Phone number prehab dept: 613-721-2591

Email prehab prehab@qch.on.ca

Pre-hab Appointment (1:1 or Class format) date and time:

Pre-op Assessment

On the day of your Pre-Operative Assessment Clinic visit, we advise you to purchase Endure 420 -Chlorhexidine 2% wash and the Bandage Kit. This can be purchased at the Queensway Carleton Hospital Gift Box on the main floor next to the front lobby.

QCH Gift Box Hours

Monday to Friday 9 a.m. to 8 p.m.

Weekends 12 p.m. to 4 p.m.

Pre-op Appointment date and time:

Friends/Family

Check with friends and family who may have equipment you can borrow.

Will I need to see a social worker?

It is your responsibility to arrange for any help needed following surgery. Things to consider include meal preparation, housekeeping, equipment and transportation to follow up appointments.

If you are worried about being alone, you may want to consider having a family member or friend stay with you or plan for private respite care in a retirement home. Staff can provide you with a package of resource information that includes private care services and a list of retirement homes offering respite stays.

Only if there are any issues that may make it difficult for you to make these arrangements or if you have other discharge concerns, a social worker is available to meet with you during your pre-operative visit or may contact you by phone. We can offer support and assist you with your plans as needed.

If you are already receiving home care through Ontario Health at Home, please make sure that your Care Coordinator knows the date of your surgery.

If you are a caregiver for someone else, please let us know at the time of your pre-operative visit.

FAQs

Will the hospital/social work assist with arranging transportation to and from the hospital?

No, patients are responsible for arranging their own transportation to and from the hospital. Resource lists can be provided on which private companies patients can contact to book their own transportation.

Will the social worker arrange respite care for me?

No, it is the responsibility of the patients or their families to arrange respite care post-op.

Can I stay overnight or more than one night in the hospital to recuperate/recover?

Social work cannot arrange this. The length of stay is determined by your surgeon. To discuss concerns regarding staying overnight, call your surgeon's office. Most patients do not stay overnight in hospital.

Which medications should I stop or continue to take prior to my surgery?

The medications will be reviewed with you during your pre-op assessment with the nurse and medical doctor. Contact your surgeon's office to discuss questions or concerns regarding your medications.

Will I get homecare?

Most patients do not qualify for services through Ontario Health at Home. However, we can provide you with a list of private companies should you wish to higher private homecare support.

Is a respite stay in a retirement home free?

No, patients pay privately for stays in retirement homes. We can provide you with a list of local homes.

Will I get rehab?

No, most patients do not require a rehab stay.

Health tips before surgery

Dental Work

We recommend that dental work be done six weeks in advance of surgery (including cleaning and any dental procedure). Having dental work done closer to surgery may result in your surgery being cancelled due to risk of infection.

After your surgery, you must inform your dentist and other doctors that you have had joint replacement surgery. You may need to take antibiotics prior to certain procedures. We do not recommend dental work, unless it is an emergency, for 3-6 months after surgery.

Infections or illness before your surgery

We encourage all patients to get the flu vaccine. The vaccine takes up to two weeks to take effect. To avoid illness during your recovery period, it is preferable to have the vaccination prior to your surgery.

Note: Notify your surgeon by calling their office before your surgery if you develop a cold, have any open wounds, have an active virus (e.g. shingles), or have any other illness.

This is important for your well-being and the safety of others because there is a risk for everyone if you go to surgery with an infection.

Pre-surgery home set-up

It is important to set up your home before your joint surgery. This will allow you to easily move around your home with a walker or crutches after surgery and reduce the risk of falls.

- Ensure hallways and rooms are free of clutter and tripping hazards (e.g. scatter rugs, footstools, etc.)
- Add non-slip surfaces to outside stairs and walkways
- Install stair railings or make sure the existing ones are secure

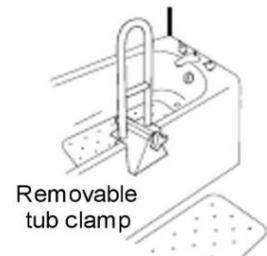
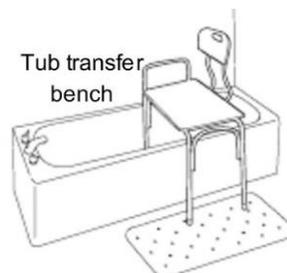
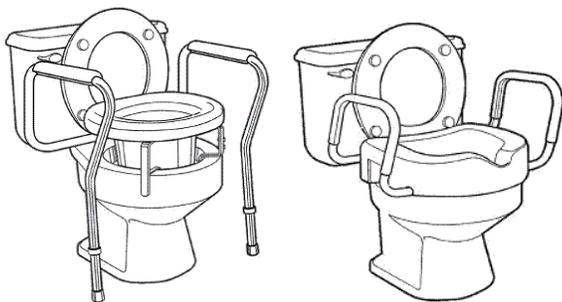


- Set-up a firm chair with armrests
- Ensure that you have good lighting in hallways and other well used areas
- Arrange for extra help with household tasks if needed (e.g. vacuuming, laundry)
- Move frequently used household items to counter height (e.g. pots and pans). Consider moving items in the lower parts of the fridge/freezer to a higher shelf
- Stock your freezer/pantry with healthy foods and snacks. If needed, private food/meal delivery services are available in many areas
- Have a thermometer at home to check your temperature after surgery
- Consider alternatives for pet care e.g. dog walking, changing cat litter

Bathroom

The need for this equipment will be discussed at your pre-rehabilitation appointment with the physiotherapist as you may not need all the equipment listed below.

- An over toilet commode over your toilet to assist you to sit or stand. If you get up often during the night, you may place one next to your bed. Place a garbage bag with paper towels in it to absorb the liquid. Men and women may want to purchase a urinal
- Remove sliding doors from your bathtub and replace with a shower curtain
- Set-up a transfer bench (in a bathtub) or a shower chair (in a shower stall)
- Use a non-slip bathmat both inside and outside the bathtub or shower
- Install a hand-held shower hose in the bathtub
- Grab bars in the bathtub/shower stall and by the toilet are very useful. Removable grab bars are available. **DO NOT** use towel racks or toilet paper holders to assist you to stand or sit



Seating after knee surgery

It will be easier for you to sit and get out of higher surfaces, so it is important to choose a chair with a seat that is two inches above knee height. This includes chairs, beds, and toilets.



- Use a firm foam cushion (high density) or furniture risers to increase chair height. The cushion should be firm enough that it will not compress when you sit on it. Plan to take your foam cushion with you to adapt chairs outside of the house.
- Set up a firm chair with armrests (not a rocking chair)
- Set up a table beside your chair for frequently used items
- If your bed is too low, add another mattress or place the frame on furniture risers

Exercise

Exercising before surgery will help you have a faster and easier recovery. Do activities that put less stress on your joints such as:

- Exercises in water (e.g., swimming or water walking at a community pool)
- Cycling
- Nordic pole walking
- Gentle stretching and strengthening
- Specific exercises suggested by a physiotherapist
- Balance exercises (valuable in preventing falls)

Be sure to strengthen your arm muscles. You will need strong arms after your surgery to use walking aids, get in and out of bed, and get on and off a chair. Do strengthening exercises for at least 3 weeks before surgery.

For example: Push up through your arms while seated. Work up to 10 repetitions 2 times each day.



If this exercise causes you discomfort or if you are new to exercise and/or have other health conditions, always talk to your family doctor before starting a new exercise program. If you don't know how to get started, talk to a physiotherapist.

Remember: After surgery, daily exercise is essential to your recovery!

Final check list: One day before surgery

By now you should have picked up your medical equipment and set up your home. Here is a final checklist of things you need to do before coming to the hospital:

- Plan for transportation to and from the hospital. Your surgery may be cancelled if you do not have transportation home.
- Plan for someone to stay with you for at least the first 24-48 hours after you leave the hospital.
- Perform your skin preparation as explained in your preop visit.
- Dressing changes and supplies for home: You will have a dressing over your incision. This should stay in place for 3 days after the day of your surgery. If you have a dressing with an absorbent pad that is covered with one piece of see-through tape (looks like plastic wrap), you can shower because it is waterproof. If your dressing has tape that is cloth-like, it is not waterproof, and you will either need to cover it with plastic wrap or wait 3 days after surgery to take your shower. After the 3 days, if the dressing is falling off or is more than one third full of drainage, remove this dressing and cover the wound with a strip-type dressing (also called an Island Dressing) or 4" x 4" sterile gauze and tape. Change this new dressing if it is falling off or after you shower or every 3 days, whichever comes first. Make sure you wash your hands before changing the dressing. You can purchase dressing supplies at the QCH gift shop or at a pharmacy.
- If you have rented a Game Ready machine or are using a cryo-therapy ice machine, please follow the manufacturer's directions for use.

Day of Surgery

When you arrive at the hospital

- Please bring your 2-wheeled walker into hospital labelled with your name.
- From Patient Registration, you will be directed to the Day Surgery Unit (DSU). One care partner can accompany you and stay with you once you are admitted. You may designate this care partner to be the person to call after surgery.
- The surgeon, anesthetist and operating room (OR) nurse will see you and answer any questions that you may have. The surgeon will mark the limb that they will be operating on.
- You may have a nerve-block and/or spinal anesthetic instead of general anesthetic. This will be determined prior to your surgery. In this instance you will go to the “block room” and not directly into the OR to have your spinal anesthetic started. You will be cared for by a nurse or an anesthetic assistant while in the block room. You will then be transferred to the OR.
- Most people who have joint replacement surgery have spinal anesthetic. This freezing goes into your back through a needle and makes you numb from the waist down and stops you from feeling pain. The anesthetist will make sure you are comfortable throughout the surgery, giving you medication through your IV that makes you relaxed and sleepy, so you are not aware of the procedure. If you have a spinal anesthetic, you may not be able to move your legs for up to 4 hours after surgery.
- Some people receive general anesthetic. This is a combination of drugs that will make you unconscious during the surgery.

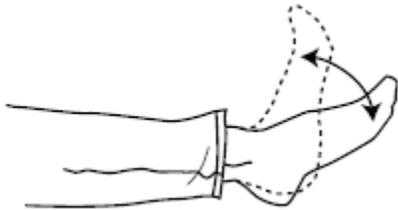
After surgery: Recovery Room

- Your operation can last from 1 to 1 ½ hours.
- You are moved from the Operating Room to the Post Anesthetic Care Unit (PACU).
- Your nurse monitors your vital signs, including your pulse and blood pressure and will look at your incision frequently.
- Your nurse will check the circulation, sensation and movement of both legs. Your legs will feel heavy and will be difficult to move for a few hours after the spinal anesthetic. They will slowly return to normal.
- If you feel any pain, nausea or itchiness tell your nurse. You will be given medication to help you feel better.
- You may be drowsy after the surgery, as you become more alert, we will encourage you to do ankle exercises and deep breathing exercises (see below). These exercises will help to prevent post-operative complications.

- If you are being admitted to the hospital, you will be transferred to your room when your nurse determines it is safe to move you and when your room is ready.
- If you have sleep apnea, you may be required to be monitored in the PACU for a longer period. If you have your own CPAP machine, you need to bring it with you to the hospital
- If you are being discharged the same day as your surgery, you will go to the day surgery unit.

Ankle exercises:

Point your toes toward your head, then toward the foot of the bed. Make your feet go around in circles 5 times. This exercise should be done at least every hour while you are awake for the first few days.



Deep breathing exercises:

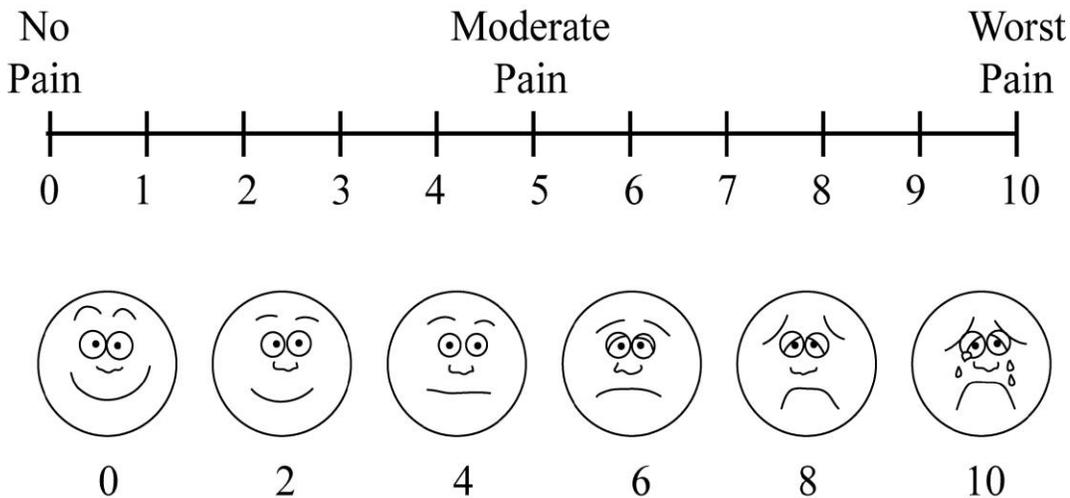
Take a deep breath, in through your nose and slowly blow out through your mouth. Repeat these 3 times. This should be done every hour while you are awake for the first day, then every 2 hours for the next 1-2 days.

Length of your hospital stay

Your time in hospital is very short. Best practice is that people go home the same day as surgery. We will make sure that you are medically stable and able to go home. You should have someone stay with you for at least 24-48 hours post discharge. Make sure that someone can pick you up and that travel arrangements are flexible because you may be discharged later in the day or early evening.

Pain Management after Surgery

When in the hospital, your healthcare team will ask you to rate your pain on either the number or FACES scale (see below). Pain is rated from 0 (no pain) to 10 (worst pain). You should also rate your pain at home and take medications accordingly. You must be able to exercise and move around your house – don't stop taking pain medication if you cannot do these activities. This is painful surgery, and you will likely have some bruising and swelling post op. Expect to have pain and difficulty sleeping due to pain for 6 weeks post op.



A combination of medicines will likely be used to manage your pain after surgery. This normally would include acetaminophen (e.g. Tylenol™) plus an anti-inflammatory (e.g. celecoxib or Celebrex™) and/or a narcotic (e.g. hydromorphone). You should take your acetaminophen and/or anti-inflammatory regularly and add additional narcotic pain medication, if necessary. By taking a combination of these medicines, you may be able to reduce the side effects of any one of these medicines alone and improve pain management. It is important to talk to your healthcare team to understand how and when to take these medicines to best manage your pain and symptoms. Recommend setting an alarm during the night to take some pain medication.

The use of narcotics is usually necessary after surgery. Side effects such as constipation, drowsiness, and nausea/vomiting can be managed. Discuss with your pharmacist, family doctor, or surgeon if you are concerned. Addiction is usually not a concern with the short duration of narcotic use after surgery.

If your pain becomes increasingly worse or if you have pain in a new part of your body, seek medical attention immediately.

Here are some ways to manage your pain:

- Take pain medications as directed. It is normal to have increased pain or symptoms during physical activity or physiotherapy sessions. It may be helpful to take a dose of pain medicine one hour before engaging in these activities in the first weeks after surgery. It is better to take medicine before the pain is severe.
- Pace yourself. Do not push yourself. Regular rest is an important part of your healing process.
- Relax. Use relaxation techniques such as breathing exercises or progressive muscle relaxation. Progressive muscle relaxation is when you tighten and relax each part of your body, starting with the toes and working up to your neck.
- Distract yourself. Listen to music, visit with friends, write letters or watch TV.
- Think positively. You will become more and more comfortable as you recover from your surgery.

Nausea/Vomiting

Nausea/vomiting can be a problem after surgery, especially within the first 24 hours. It is most likely due to medication(s) given during and after surgery. Nausea/vomiting are common side effects of narcotics such as hydromorphone (Dilaudid™). There are several medications available for nausea/vomiting.

Anticoagulant medications

After hip replacement surgery, you are at risk of developing a blood clot in your leg (see “Complications” page). It is important to prevent these clots from forming and travelling to the lungs. Blood clots can cause death, if untreated. You will get a prescription for either a pill or an injection to prevent clots prior to leaving the hospital.

Going home

Post-operative discharge plan

Your discharge plan must be arranged and in place prior to your surgery.

When you get home, someone should be with you for the first 24-48 hours. When you are ready to be discharged, someone from the hospital will contact your driver to pick you up. Please ensure they are available.

The person picking me up from hospital is:

Please complete the choices below as to where you are going after discharge:

- Home: I have a capable and competent caregiver living with me for 48 hours post op. My caregiver is: _____
- Someone Else's Home: I will be going to my _____ (e.g. friend, daughter) home.
Please provide name and address: _____

- Respite: I will be going to _____ (name of respite home) for _____ (number) of days. This has been arranged prior to admission to hospital for surgery.
Contact person at respite: _____
- Your planned discharge is on the day of your operation. Most people will be discharged home. Arrangements for private respite care, if desired, should be made by you or your family before you are to come to the hospital.
- You will need to continue your physiotherapy exercises at home for at least 3-4 months, and an outline of the home exercise program is shown in the home exercise section of this booklet (see Appendix 2). Be sure to continue to manage your pain at home so you can move around and exercise.
- You will be given a discharge prescription for medications. Please ensure you fill it on your way home.
- You may not drive yourself until your surgeon agrees that you are able (usually six weeks after surgery). You may want to check with your insurance company for guidelines. If you are taking narcotics, you should not drive a vehicle.
- Transportation for people with disabilities is available through public transportation services, community organizations, and private companies. Please speak to your physiotherapist, occupational therapist, or social worker before your surgery to get more information about arranging these services as there maybe wait times to process forms.

- Be aware that artificial joints sometimes make grinding or clicking noises. Do not be alarmed – this is normal.

Follow-up medical appointments

Plan for the following appointments:

- Your surgeon: _____
- Your physiotherapist: _____
- Have your clips removed from your surgical incision (your surgeon will tell you before you go home where and when this will occur). If your family doctor is going to remove the clips, you will need to take a clip remover home with you to take to your family doctor.
- You should make an appointment with your family doctor once you are back on your feet to review your general health.

Most people have less and less pain in the 6 to 12 weeks after surgery. If pain is preventing you from caring for yourself, sleeping and/or exercising, talk to your physiotherapist or doctor.

Bundled Care

Bundled care is a service delivery and funding model that is designed to promote greater integration in health care delivery, drive high-quality, efficient care and improve patient outcomes and experience after certain orthopedic surgeries. An “episode” is a short series of physiotherapy sessions focused on reaching functional goals after surgery (such as feeling safe and stable while climbing stairs). In a bundled care approach, health care providers receive a single payment to cover the care needs of a patient for a specific health issue.

You will be given a list of hospitals and private community physiotherapy clinics that the Queensway Carleton hospital can refer you to after surgery. Your post operative physiotherapy will only be funded at one location so all your treatment must be completed at the same provider for it to be funded.

On the day of your surgery we will confirm where you plan to do your post operative physiotherapy, a physiotherapy referral will be faxed to the clinic only after surgery is completed. Please call the physiotherapy clinic within 7 days of being discharged from hospital to schedule your appointment.

For successful recovery, your outpatient physiotherapy appointment should be booked once you are discharged from hospital within.

- Knee replacements 7- 10 days

Best practice for planned elective joint replacement patients is to have physiotherapy in an outpatient setting. If the rehab team you work with during your surgical stay at QCH identifies that you meet specific home care criteria, they will coordinate physiotherapy at home for you.

Patient Eligibility for Bundle of Care:

1. Undergone an elective primary (first replacement) unilateral/ bilateral hip, knee or shoulder replacement surgery.
2. The patient has a valid OHIP card
3. The patient's primary diagnosis meets Ministry of Health (MOH) Quality Based Procedures (QBP) eligibility criteria.

Patients not included within bundle care: (NOTE: You would be required to follow OHIP guidelines/criteria for funded physiotherapy, attend the Queensway Carleton Hospital for physiotherapy, or pay at a private clinic in these situations)

1. Hip or knee revision surgeries
2. Emergencies surgeries, fractures, trauma cases
3. Patients who are readmitted to acute care hospital after their surgery for **any reason**
4. WSIB claims do not apply to bundle care model

If you would like the most up to date list of bundle care providers, have questions about bundled care physiotherapy, or would like to provide feedback about your physiotherapy experience from one of our providers, please email bundle@qch.on.ca

Car transfer

See Appendix 5 for car transfer instructions.

Activity guidelines

Walking

- You can expect to use walking aids, such as a 2-wheeled walker, crutches or cane for up to three months or longer after surgery.
- Most patients start by using a 2-wheeled walker. A cane will be introduced when appropriate (i.e., when your muscles are strong enough).
- Start by walking short distances in the house every hour while awake. You will be educated on the walking pattern before you are discharged.
- When walking with a walker, lead with the walker, then your operated leg and then the other leg.
- By 4 to 6 weeks after your surgery, you should be walking with more strength and be able to walk longer distances.
- Regular physiotherapy after your surgery will help you to get the most out of your new joint. Physical activity will help you have a faster recovery and will get your blood moving. This will also reduce your risk of developing complications.
- Please use a gait aid until your first out-patient physiotherapy session.
- Your weight bearing status will be determined by your surgeon.

Stairs

You will practice the stairs with the physiotherapist prior to leaving the hospital so that you are able to manage stairs safely and independently, if required.



ASCENDING STAIRS

1. Face the stairs and place the cane close to the first step.
2. Push on the cane, straighten the elbow and then place the strong leg on the first step.
3. Straighten the strong knee and lift the cane and the operated leg on the same step.



DESCENDING STAIRS

1. Stand with the toes of the stronger leg placed close to the edge of the step.
2. Lower the cane and the operated leg on the next step while bending the knee of the stronger leg to balance.
3. Lean on the cane and lower the body by placing the stronger leg on the same step.

“UP WITH THE GOOD, DOWN WITH THE BAD”

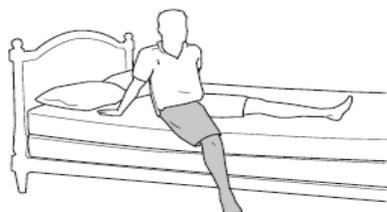
Getting into bed

A firm mattress is recommended for sleeping. Avoid waterbeds, futons or low beds.

- Sit at the side of the bed. It may be easier to get into bed on your stronger (non-operated or non-surgical) side but not required
- Slide back across the bed using your arms for support
- If necessary, a half bed rail can allow you to get in and out of bed more easily. A half bed rail consists of a handle with 2 long metal rods that are placed between the mattress and the box spring.
- If your operated leg needs help, you may use a “leg lifter” (this may be the belt from your housecoat or a crutch turned upside down), hooked over your foot so that you can help lift the leg using your arms if needed.

Getting out of bed

- Slide your body to the edge of the bed
- Use your arms to push yourself to a sitting position
- Slide your operated leg off the bed
- Bring your body to a sitting position at the bedside



Sitting in a Chair

- Use a firm chair with arm rests
- Back up to the chair until you feel the edge of the seat behind your knees
- Move your operated leg forward so that your heel is even with your toes on your unoperated leg and reach back for the arm rests.
- Slowly lower yourself into the chair
- Set up a firm chair with armrests (not a rocking chair)
- Set up a table beside your chair for frequently used items

Dressing yourself

Shoes:

- Comfortable, flat, closed toe and heel shoes with non-slip soles are the safest option.
- Your shoes should be roomy since you may have some swelling in your feet after surgery.
- A long-handled shoehorn will also be useful.

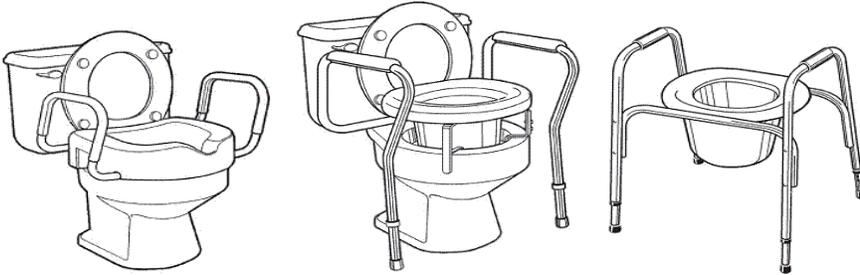
Bathroom safety

Falls can happen anywhere but are most likely to occur in the bathroom. Here are ways to reduce the risk:

- Do not rush. Plan to use the toilet often to avoid having to rush. Have a bedside commode if needed.
- When bathing, use a bench or chair, non-slip bathmats, grab-bars and/or a removable tub clamp.
- Make sure the route from your bedroom to the bathroom is well-lit and free of clutter.
- Wear sensible, non-slip shoes or slippers
- If you feel dizzy or unsteady, do not get into the bathtub to avoid having a fall.
- You can always take a sponge bath and wash your hair in the kitchen sink if you do not feel up to taking a full shower.

Using the toilet

- Make sure that the toilet seat has secure armrests or that you can install grab bars to help you stand or sit. DO NOT use towel racks or toilet paper holders to help you stand or sit down.
- Sit down as you would in a chair (see above)



Bathtub transfer

When you are allowed to bathe, or shower, see Appendix 5.

Post-operative Concerns

If you have concerns after surgery, for example swelling or drainage from your incision, increasing pain, etc., please contact your surgeon's office directly.

If your surgeon is not available, please contact the orthopedic surgeon on call – dial 613-721-2000 x 0 and ask to speak with the orthopedic surgeon on call. The orthopedic surgeon on call will speak with you and provide directions between the hours of 7:00a.m. - 10:00p.m.

If it is after hours or you cannot reach the orthopedic surgeon on call, come to the Emergency Department at Queensway Carleton Hospital.

Complications

After surgery, there is a risk of complications that need medical treatment. Here are some possible complications:

- Constipation
- Deep Vein Thrombosis (blood clots)
- Swelling
- Infection
- Anemia
- Pressure injury

Constipation

Constipation can be a problem after surgery. A change in your diet, less activity and taking pain medicine (narcotics) may make your constipation worse. It can be very uncomfortable and may be a problem after your discharge from the hospital. Here are some ways to have regular bowel movements at home:

- Drink 6 - 8 glasses of water or low-calorie fluids a day
- Eat fiber such as prunes, bran, beans, lentils, fruits and vegetables
- Move around as much as you can – do your exercises!

You may need to take laxatives or stool softeners at home. If you have constipation, talk to your doctor or pharmacist. Constipation can be a serious problem - do not ignore your symptoms.

Deep Vein Thrombosis

Deep Vein Thrombosis (DVT) is a blood clot in a deep vein and is a major health concern that should be discussed with your physician.

You may be at risk for developing a DVT for any of the following reasons:

- Recent surgery
- Immobility
- Previous DVT
- Problems with circulation
- Obesity
- Increasing age
- Acute medical illness

DVT most commonly occurs in the legs, usually the calf. Signs and symptoms to watch for include calf pain or tenderness, swelling, redness or discoloration, a knot in the calf that you can feel and that is warm to touch, fever, shortness of breath, rapid heart rate, chest pain or light headedness.

If you experience any of these symptoms go to the Emergency Department or call 911 for immediate assistance.

To reduce the risk of DVT/blood clots:

- Remember to take your blood thinner medication exactly as prescribed and instructed by your doctor, nurse and pharmacist.
- Walk short distances at least once an hour (except when you are sleeping).
- When you are sitting or lying in bed, pump your ankles and flex your leg muscles.

Leg Swelling/ Icing

Your leg will swell as you become more active after surgery. It's normal for your joint to be warm and swollen for many weeks after surgery.

- To control the swelling, don't sit for more than 60 minutes at a time.
- Raise your operated leg 3 to 4 times a day for 20-30 minutes.
- The use of ice, or cryotherapy, can relieve pain, swelling, & inflammation. It is important that you are consistent with your icing program. You should continue a regular and consistent icing program as long you experience symptoms.
Remember ice is your friend!

Applying Ice:

- **Use a barrier:** Always place a thin cloth or towel between the ice pack and your skin to prevent frostbite or skin irritation.
- **Time it right:** Apply ice for 15 to 20 minutes per session.
- **Take Breaks:** Rest your skin for at least 60 minutes between icing sessions.
- **Frequency:** Always after your exercise 3x a day and several times throughout the day
- **Don't use it during sleep:** Avoid using ice on your skin while you are sleeping.
- **Cold Therapy Machine:** Please follow the specific instructions that accompany the unit you have.

Infection

Less than 1% of people have an infection around their new joint. An infection in the body can reach the new joint through the bloodstream. People who develop joint infections need antibiotics and, on rare occasions, further surgery. To prevent infection or incision problems, it is important to keep the incision and dressings dry. Do not touch or pick at the incision and be sure that the surrounding skin is always clean. Wash your hands often.

Artificial joints can become infected at any time, even several years after your surgery. It is important that if you have a skin or any other infection, at any time, you need to see your doctor for treatment right away.

Tell your surgeon or go to the nearest Emergency Department if you have any of these signs of infection:

Incision Infection:

- The area around your incision is becoming redder, there is a red streak, or puffiness and the skin feels warm to the touch.
- New drainage (green, yellow or bad smelling) from the incision site. It is common for new surgical incisions to have some drainage for the first 3-5 days after surgery, but this will slowly stop, and the incision should stay dry.
- There is increased pain, soreness or tenderness of the incision site and surrounding area.
- Fever above 38°C or 100.4°F.
- A tired feeling that won't go away.
- Remember: Call your surgeon if you think you have a possible incision infection.

Urinary tract infection:

- Pain or burning when you urinate.
- Frequent or an urgent need to urinate.
- Foul smelling urine.
- Fever above 38°C or 100.4°F.
- Remember: Call your family doctor if you think you have a urinary tract infection.

Sore throat/chest infection:

- Swollen neck glands and pain when you swallow.
- Frequent cough, coughing-up yellow or green mucous, shortness of breath or chills.
- Fever above 38°C or 100.4°F.
- Remember: Call your family doctor if you think you have a throat or chest infection.

Call 911 immediately if you have:

- Shortness of breath
- Sudden chest pain

Anemia

If you have signs of anemia, see your family doctor. You may need an iron supplement. The signs of anemia are:

- Feeling dizzy or faint
- Feeling very tired, pale and having no energy
- Shortness of breath
- Rapid pulse

Pressure Injury

A pressure injury is a skin breakdown (bed sore) that develops from sitting or lying in the same position for long periods of time or from sliding down in the bed. It is most often seen over the tailbone and on the heels. Some of the key things that can be done to help prevent these sores are avoid sitting in bed with the head of the bed higher than 30 degrees for long periods of time, reposition yourself or ask for help to do so at least every 2 hours, and use pillows under the full length of your legs, to avoid having your heels directly on the bed.

Sleeping

Please sleep on your non-operative side or back with a pillow between your legs.

We hope you found the information in this booklet useful. We wish you a speedy recovery and many happy years with your new joint.

Total Knee Replacement

- [Knee Replacement \(youtube.com\)](#)
- [Bathroom Safety \(youtube.com\)](#)
- [Knee Replacement - Knee Exercises \(youtube.com\)](#)

Appendix 1

Patient Reported Outcome Measures (PROMs)

Queensway Carleton Hospital (QCH) is working with the Ministry of Health and Long-Term Care (MOHLTC) to improve your health care services. Patients all across Ontario who are having a joint replacement must be offered the opportunity to complete short surveys about how they are feeling before and after their surgery at 2 different times. The survey, referred to as Patient Reported Outcome Measures (PROMs), takes about 5 minutes to complete.

How do PROMs help me and my health care team?

Your answers are used to measure how well you are doing before your surgery and how well you are healing afterwards. These surveys track your progress over time. This information helps to plan the best possible care for your unique needs. Your hip and knee PROMs survey tells your health care team about your:

- Pain
- Functional status (how well you are able to do your normal daily activities)
- Overall quality of life
- Orthopedic care

The same survey will be completed each of the 2 times. The 2 survey times are:

- 1- 6 weeks before surgery
- 1 year after your surgery

How will I complete the PROMs surveys?

Queensway Carleton Hospital Patients

- At Queensway Carleton Hospital, the first surveys will be completed 1 to 6 weeks before surgery through your electronic patient portal.
- Because you will not be returning to the hospital to see your surgeon after your surgery, we will ask you to complete the last survey online, at home, on any device that has a connection to the internet (e.g. desktop computer, laptop computer, smartphone, etc.).
- This will be sent 1 year after your surgery.
- You should have signed a consent form to give us permission to send you a link to survey by email on the same day you signed your consent for surgery.

- At home, you would input your OHIP number and then answer the same questions. It would take about 5 minutes to complete.
- If you do not have access to the internet, please let us know and we will make other arrangements.

Do I have to fill out the PROMs?

No. You do not have to fill out the PROMs but the information from PROMS helps your health care team plan the best care for you.

Appendix 2

Knee Home Exercise Program

Important: DO NOT lie with a pillow only under your knee. If you need to prop your leg up, place the pillow longways, supporting both the back of your thigh and lower leg/foot.

These exercises should be done with your operated leg. For optimum results, do the following exercises 10 to 20 times, 3 times a day.

Apply ice to knee, over a damp cloth 10-15 minutes after exercising, walking and frequently during day to control pain and swelling. Icing your knee is critical to becoming mobile

1. Heel Slides (Belt)

- Gently pull the belt to bend your knee towards your buttock
- Keep your heel in contact with the surface
- Straighten your knee to return to the start
- Reps: 10-20 reps Hold: 5 seconds Frequency: 2-3 times a day



2. Quadriceps over roll

- Lying on your back in bed, place roll under the knee of your operated side.
- Lift your foot off the bed to straighten your knee, keeping the back of your knee touching the roll.
- Slowly lower your foot onto the bed.
- Reps: 10-20 reps Hold: 5 seconds Frequency: 2-3 times a day



3. Knee Extension Stretch with heel raised

Preparation:

- Laying on your back
- Elevate your heel so that your knee is off the ground
- Push the back of your knee towards the bed to straighten
- Reps: 10-20 Hold: 30sec Frequency: 2-3 times a day



4. Knee Extension sitting in chair

- Sit in a chair with good posture
- Lift your foot off the floor and straighten your knee as much as possible.
- Slowly lower your foot to the floor.
- Reps: 10-20 reps Hold: 5 seconds Frequency: 2-3 times a day



5. Knee Flexion with overpressure

- Sit with good posture, cross un-operated leg over the operated leg ankle.
- Try and bend affected knee, using opposite leg to assist the movement
- Reps: 10-20 reps Hold: 5 seconds Frequency: 2-3 times a day



Appendix 3

Sexual activity after knee replacement

While many people don't feel like participating in sexual activities while recovering from joint replacement surgery, the pain and stiffness from arthritis can affect sexual activity even before surgery. Many people's sex lives improve after surgery because after the joint heals it is usually free of pain and stiffness that may have previously affected sexual activity.

- You may return to sexual activity when you feel ready and comfortable and the incision is healed. This is often 4-6 weeks after surgery, but this is a very individual decision.
- You may need to consider trying some new positions. Talk to your partner
- You and your partner may need to plan ahead for sexual activity. As you may have less energy right after the joint replacement surgery, pace your activities and make time for sexual activity when you won't be tired. To minimize pain, try positions where your partner takes the more active role, at least at first.
- If you have questions or concerns about how to protect your new knee during sexual activity, talk to your physiotherapist or surgeon.
- Visit the website: www.aboutjoints.com for illustrations of sexual positions that maintain hip precautions.

Appendix 4

Guide to using equipment

Peri-Care Assist Options

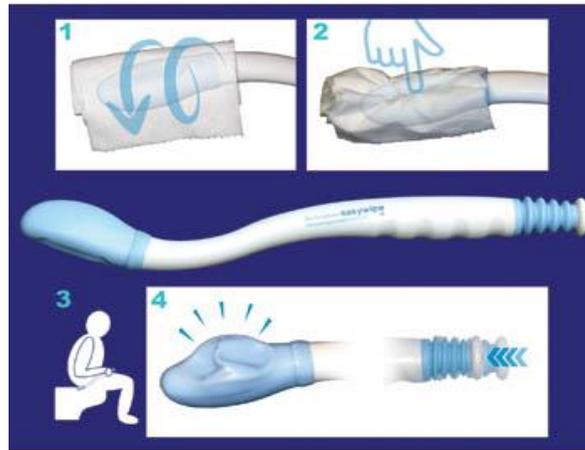
Portal Bidet Options	Photos
<p data-bbox="154 426 418 464">Hygienna Solo</p> <p data-bbox="154 489 529 527">Approximate cost: \$20</p>	
<p data-bbox="154 898 451 936">Brondell Go Spa</p> <p data-bbox="154 961 529 999">Approximate cost: \$20</p>	

Self-Wipe Options

Buckingham Easy Wipe

Approximate cost: \$75

Contact local vendor



Bottom Buddy

Approximate cost: \$85

Contact local vendor



Self-Wipe Toilet Aid

Approximate cost: \$85

Contact local vendor



<p>Toilet Aid</p> <p>Approximate cost: \$20</p> <p>Contact local vendor</p>	
<p>Other options:</p> <p>Tongs</p> <p>Dollar Store</p> <p>Approximate cost: \$2-3</p>	

Speak with your occupational therapist for more details

Appendix 5

Using the adaptive devices

Putting on Pants and Underwear using a Dressing Stick or Reacher

	
<p>It is easier to put the more effected leg into the pants first</p>	<p>Using a dressing stick or reacher hook the waistband and lower the pants down to your foot</p>
	
<p>Pull the pants up your leg</p>	<p>When you can safely reach the pants, remove the dressing stick or reacher and pull the pants over your foot</p>



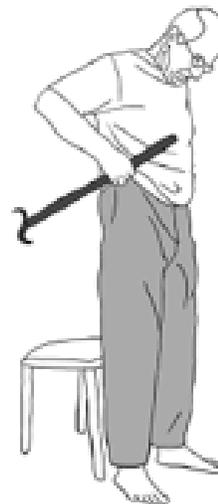
Use the dressing stick or reacher to lower the pants to the floor



Lift your other leg into the pants and use the dressing stick or reacher to pull up



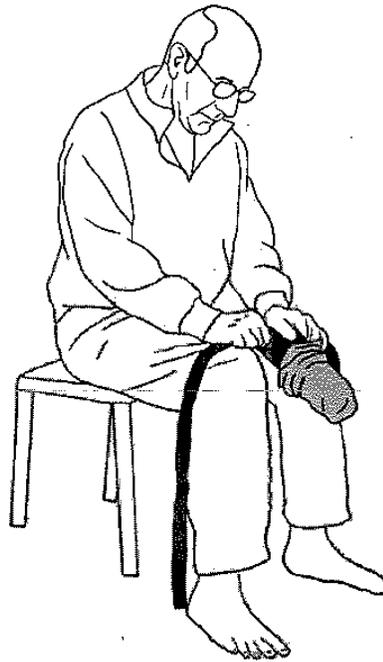
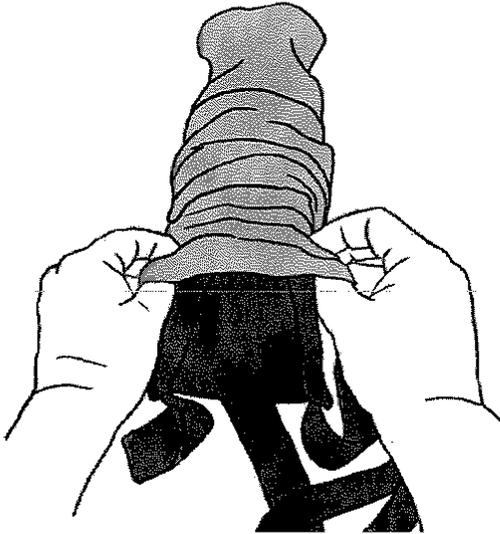
Pull the pants up as far as possible while sitting



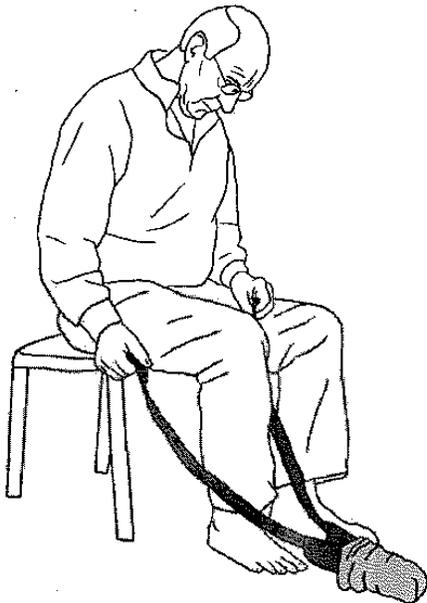
Stand and finish pulling up the pants

Putting on and removing socks and shoes using a sock aid

1. Gather a sock over the sock aid
2. Keeping hold of the straps, toss the sock aid to the floor



3. Position the sock aid in front of your foot
4. Start to pull the sock aid over your toes. Point your toes and lift your heel off the floor.



5. Pull the sock aid completely out, leaving the sock on your foot
6. To remove your sock, use your dressing stick or reacher to hook the back of the sock and push it off.

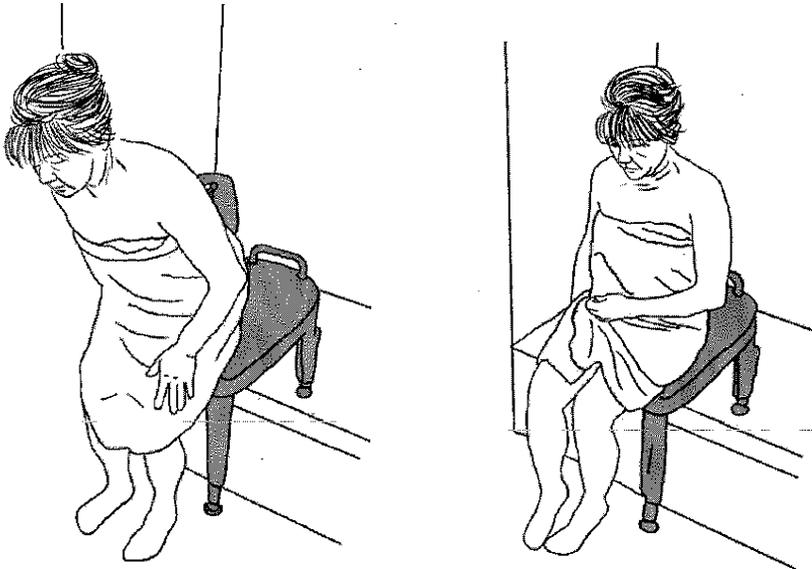


7. Wear slip on shoes or replace the laces with elastic laces or Velcro closures. Use a long-handled shoehorn to help you get your shoe on.
8. Remove your shoe using the dressing stick to push it off from the heel.

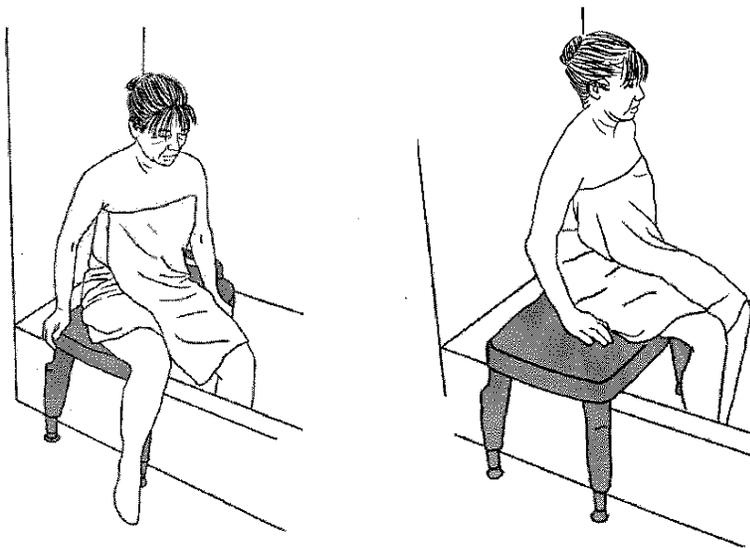


Transfer to tub using bath transfer bench (left)

1. Back up to the tub bench until you can feel it against the back of your legs.
2. Reach back for the tub bench and lower yourself onto the seat. Scoot back as far as you can.

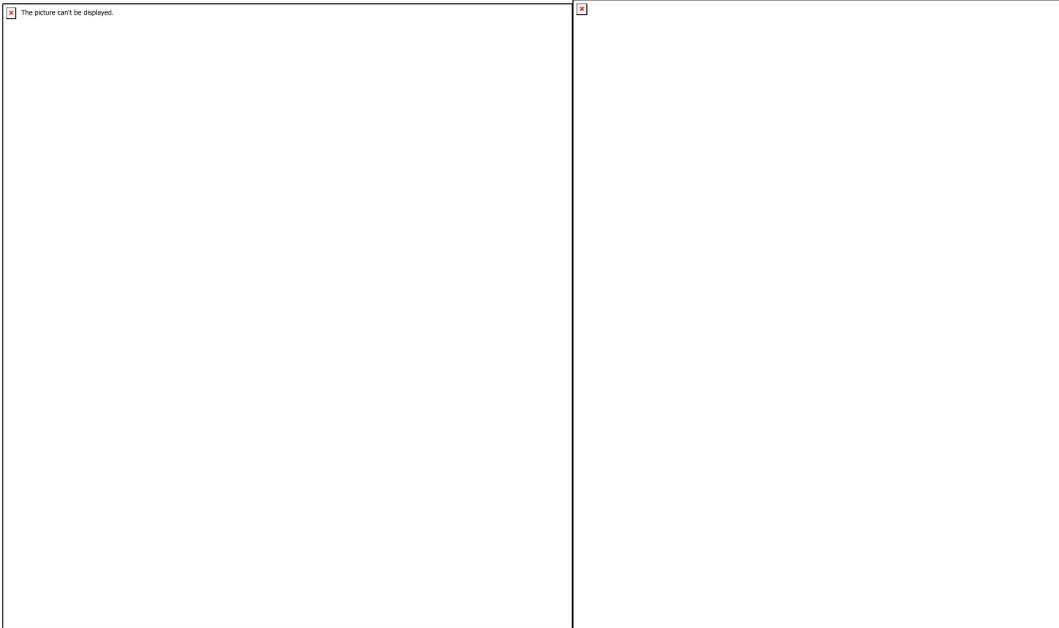


3. Turn your body to the left, in towards the tub and lift your left leg into the tub.
4. Scoot your bottom farther onto the seat and lift your right leg into the tub. To get back out, reverse the steps.

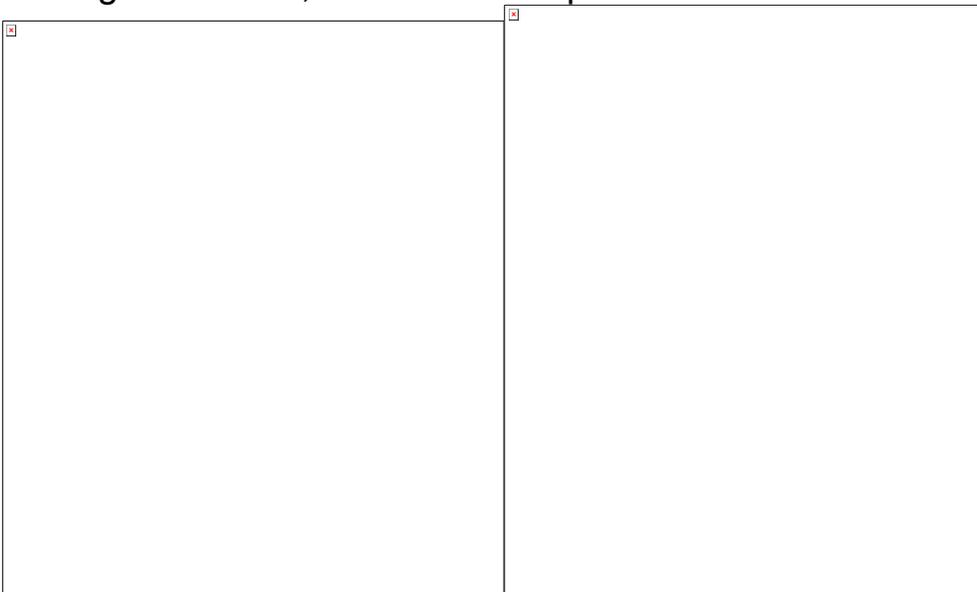


Transfer to tub using bath transfer bench (right)

1. Back up to the tub bench until you can feel it against the back of your legs.
2. Reach back for the tub bench and lower yourself onto the seat. Scoot back as far as you can.

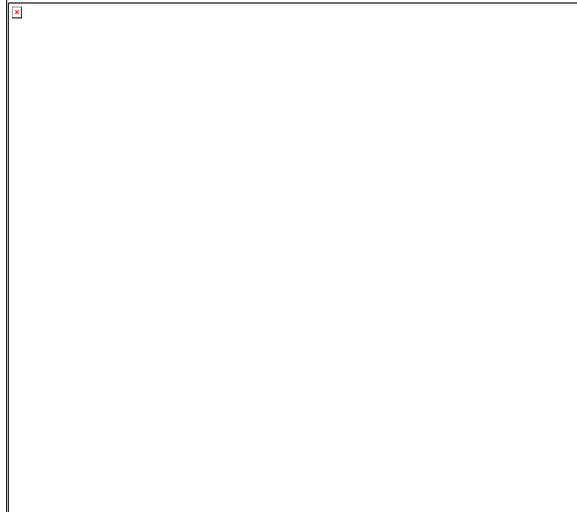


3. Turn your body to the right, in towards the tub and lift your right leg into the tub.
4. Scoot your bottom farther onto the seat and lift your left leg into the tub. To get back out, reverse the steps.



Transfers in and out of a car

5. Position the seat back as far as possible. Place a folded towel in the bucket of the seat to make it flat as possible. Use plastic trash bag on the seat to make it easier to slide. Push the seat all the way back. Recline the seat to allow your leg to clear the door without breaking the 90-degree rule.
6. Back up to the car until both of your legs are touching the seat of the car.



7. Place one hand on the dashboard and one on the back of the seat. Tuck your head and lower yourself onto the edge of the seat.
8. Move back onto the seat as far as possible. Lift your legs into the car one at a time. Maintain any precautions you have been instructed to follow. Remove trash bag while driving. Reverse this process to exit the car.

