



PATIENT INFORMATION

Knee or Hip Arthroplasty Same Day Discharge

***Please bring this book to the hospital
on the day of your surgery.***

THE OTTAWA HOSPITAL

Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified health-care provider. Please consult your health-care provider who will be able to determine the appropriateness of the information for your specific situation.

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Information About Knee Arthroplasty

The knee is a hinge type joint made up of bones, muscles, tendons and ligaments. With osteoarthritis there is a degeneration of the bony surfaces. Instead of the cartilage rubbing against each other the bones of the thighbone and the shinbone rub together. This may cause pain when you move your knee or try to support your weight on your knee. The knee may become painful, swollen, or unstable and surgery may be necessary.

Your surgeon may recommend either a total knee replacement (arthroplasty) or unicompartment knee replacement (arthroplasty).

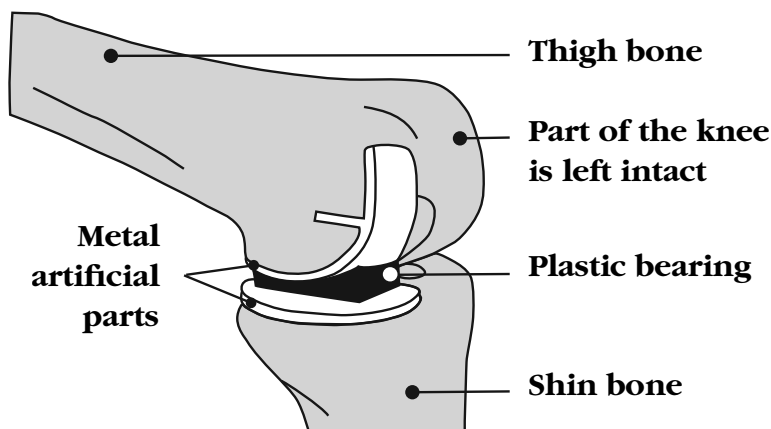
Total Knee Arthroplasty

There are three (3) parts to a total knee arthroplasty surgery:

- 1) A metal part that fits over the thighbone (femur).
- 2) A plastic piece that fits into a metal tray that is attached to the shinbone (tibia).
- 3) A small button on the under-surface of the kneecap (patella).

Unicompartment Knee Arthroplasty

Unicompartment knee arthroplasty is an operation that replaces only one of the three parts of the knee joint, that is only the diseased portion of the knee joint. These are referred to either as medial (inner), lateral (outer) or patellofemoral (kneecap).



***Illustration
of a left
unicompartment
knee replacement.***



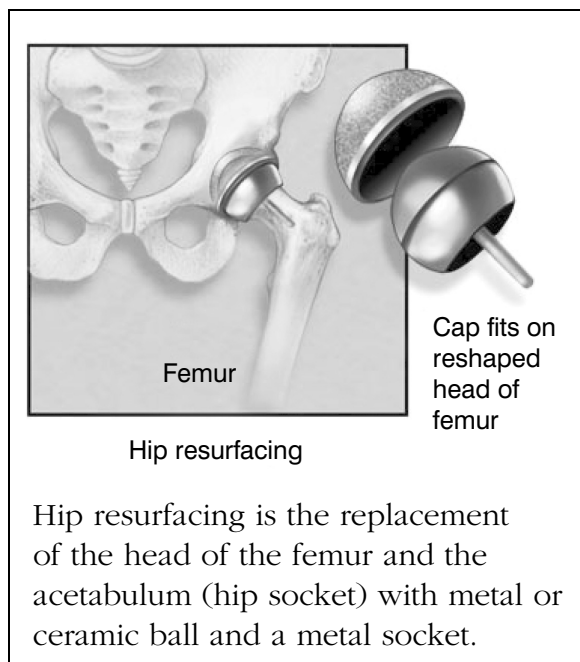
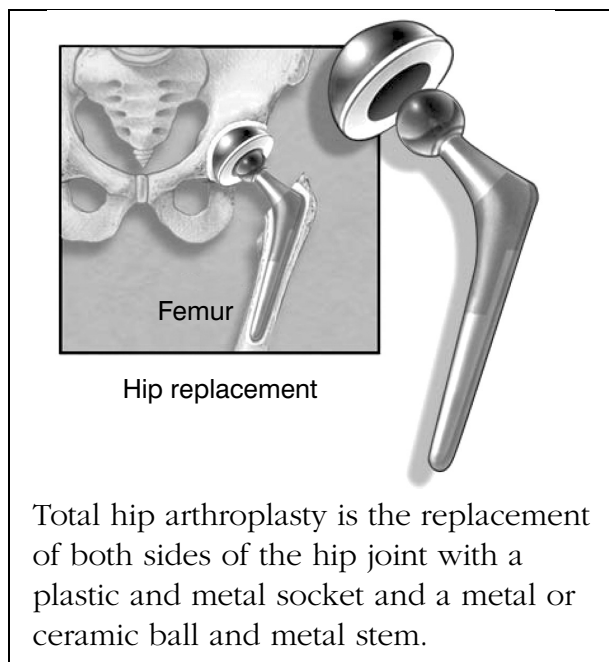
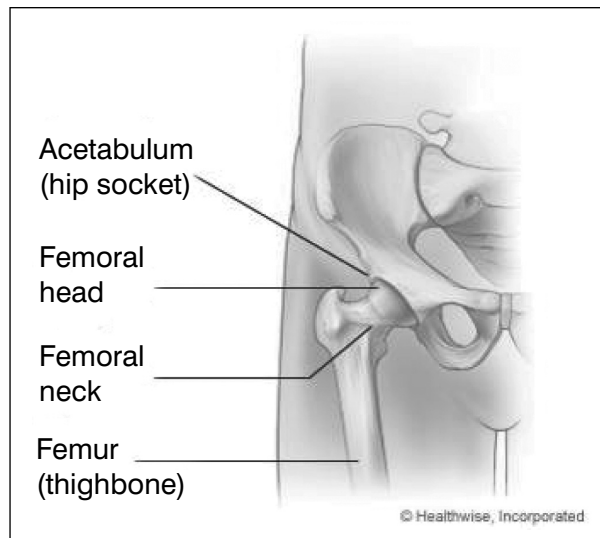
Information About Hip Arthroplasty

The hip joint is a ball and socket type of joint. The hip joint allows your leg to turn in and out, move forward, backward and side to side.

The head of the femur (long bone in the leg) forms the ball side of the joint.

The acetabulum (located in the pelvic bone) forms that socket portion.

Cartilage (a smooth, elastic type of tissue) covers and protects the surfaces of these bones. Hip pain occurs when the cartilage is destroyed and irregular bony surfaces appear. The muscles weaken and the joint becomes stiff resulting in pain and/or a loss of hip movement.



The following three pages show the clinical pathway for your condition. There is more detailed information after the clinical pathway.

Patient Clinical Pathway – Knee or Hip Arthroplasty Same Day Discharge			
	Pre-Admission Unit (PAU)	Surgical Day Care Unit (SDCU) / Pre-op	Post-Operative (PACU)
Tests	<ul style="list-style-type: none"> • Blood tests • ECG, chest x-ray as necessary • X-rays as necessary 	<ul style="list-style-type: none"> • Blood tests as necessary 	<ul style="list-style-type: none"> • Blood tests as necessary
Treatments		<ul style="list-style-type: none"> • IV insertion 	<ul style="list-style-type: none"> • IV • Dressing • Pain assessment • Oxygen as necessary
Medications	<ul style="list-style-type: none"> • Make sure you have your prescription for pain medication and blood thinner 	<ul style="list-style-type: none"> • Antibiotic • Pre-op pain medication by mouth 	<ul style="list-style-type: none"> • Pain medication
Activity	<ul style="list-style-type: none"> • Remind to practice post-op exercises for deep breathing, coughing, leg and knee 	<ul style="list-style-type: none"> • Bring crutches or walker to hospital • Bring cooling device if applicable 	<ul style="list-style-type: none"> • Pillow between knees side lying • Pillow under leg when on back • Deep breathing, coughing and ankle exercises
Nutrition		<ul style="list-style-type: none"> • Nothing to eat but clear fluids up to 90 minutes before surgery 	<ul style="list-style-type: none"> • Clear fluids
Patient Teaching/ Discharge Planning	Reinforce: <ul style="list-style-type: none"> • Knee or Hip Arthroplasty Same Day Discharge patient information book • Fill prescriptions one week before surgery • Chlorhexidine scrub evening before and morning of surgery • If having knee surgery, make arrangements for physiotherapy for after your surgery • Make sure you have instructions on how to get crutches/walker, cooling device (if applicable) • Review TOH MySurgery website 	Review: <ul style="list-style-type: none"> • Pre-op teaching • Events/expectations of the day • Pain management • Self-care measures to prevent post-op complications as outlined in the patient information book 	Review: <ul style="list-style-type: none"> • Breathing, coughing and ankle exercises • Dressing • Pain management

Patient Clinical Pathway – Knee or Hip Arthroplasty Same Day Discharge		
	Post-Operative (SDCU)	Post-op Day 1
Consults	<ul style="list-style-type: none"> • Physiotherapy (in hospital) 	
Treatments	<ul style="list-style-type: none"> • IV removed after last dose antibiotic • Dressing • Pain assessment • Cooling device if applicable 	<ul style="list-style-type: none"> • Check dressing • Pain assessment • Cooling device if applicable
Medications	<ul style="list-style-type: none"> • Pain medication • IV Antibiotic • Regular medication 	<ul style="list-style-type: none"> • Pain medication • Regular medication • Blood thinner
Activity	<ul style="list-style-type: none"> • Pillow position: between knees when side lying and under leg when on back • Deep breathing, coughing and ankle exercises • Walking/stairs with crutches/walker 	<ul style="list-style-type: none"> • Pillow position: between knees when side lying and under leg when on back • Deep breathing, coughing and ankle exercises • Walking/stairs with crutches/walker • Leg and knee exercises
Nutrition	<ul style="list-style-type: none"> • Regular diet 	<ul style="list-style-type: none"> • Regular diet • Increase fiber and fluids
Elimination		<ul style="list-style-type: none"> • Watch for constipation
Patient Teaching/ Discharge Planning	<p>Review:</p> <ul style="list-style-type: none"> • Deep breathing, coughing and ankle exercises • Dressing • Pain management by mouth • Physiotherapist will review exercise program and teach ambulation with walker/ crutches (refer to TOH MySurgery website to view video for crutch walking) • Follow-up appointments with surgeon • Follow-up with outpatient physiotherapy for knee surgery 	<p>Review:</p> <ul style="list-style-type: none"> • Follow exercise program on pages 17 to 21 of this booklet as instructed by physiotherapist • Dressing/wound care • Pain management by mouth • Follow-up appointments

Patient Clinical Pathway – Knee or Hip Arthroplasty Same Day Discharge		
	Post-op Days 2, 3 and 4	Post-op Day 5
Consults		<ul style="list-style-type: none"> • Dressing removal possible
Treatments	<ul style="list-style-type: none"> • Check dressing • Pain assessment • Cooling device if applicable 	<ul style="list-style-type: none"> • Cooling device if applicable
Medications	<ul style="list-style-type: none"> • Pain medication • Regular medication • Blood thinner 	<ul style="list-style-type: none"> • Pain medication • Regular medication
Activity	<ul style="list-style-type: none"> • Pillow position: between knees when side lying and under leg when on back • Walking/stairs with crutches/walker • Leg and knee exercises • May shower with waterproof dressing on 	<ul style="list-style-type: none"> • Pillow position: between knees when side lying and under leg when on back • Walking/stairs with crutches/walker • Leg and knee exercises
Nutrition	<ul style="list-style-type: none"> • Regular diet • Increase fiber and fluids 	<ul style="list-style-type: none"> • Regular diet • Increase fiber and fluids
Elimination	<ul style="list-style-type: none"> • Watch for constipation 	<ul style="list-style-type: none"> • Watch for constipation
Patient Teaching/Discharge Planning	Reinforce: <ul style="list-style-type: none"> • Exercise program • Dressing • Walking as able 	Reinforce: <ul style="list-style-type: none"> • Exercise program • Walking as able



Preparing for surgery

You and your surgeon have decided that you will be part of the Same Day Discharge program. This means that you will be discharged from hospital the same day of your surgery.

This book will give you information to prepare you for your surgery, discharge and what to expect at home after surgery.

Your surgeon will give you:

- Knee or Hip Arthroplasty – Same Day Discharge – Patient Information Book
- Prescriptions for pain medication and anticoagulation (blood thinner)
- Referral form for outpatient physiotherapy if applicable.
- Prescription for suture removal if you live in Quebec.

You will receive information at the Joint Replacement Clinic to obtain crutches and/or walker before your surgery.

Refer to the TOH My Surgery website link to view video for crutch walking: http://www.ottawahospital.on.ca/wps/portal/Base/The_OttawaHospital/Clinical_Services/mySurgery/myRecoveryAfterSurgery.

The following is the usual plan for this program:

- 1) Surgeons office
- 2) Joint Replacement Clinic
- 3) Pre-Admission Unit
- 4) Call from hospital on the evening before your surgery for your admission time
- 5) Surgery day
- 6) Discharge home same day of surgery or as soon as you meet discharge criteria.

Pre-Admission Unit

Your surgeon will schedule you for a Pre-Admission Unit (PAU) visit one to three weeks before your surgery. **This is a mandatory visit.**

What to bring to the PAU:

- A current list of your medications and dosages. This includes over-the-counter medication and herbal remedies.
- Information about your medical history, including any allergies.
- Ontario health card
- Knee or Hip Arthroplasty – Same Day Discharge Patient Information book.

What you can expect after your visit to the PAU:

- ☐ Tests required for your surgery are completed.
- ☐ Understand the importance of stopping smoking as it places you at risk for lung complications after surgery.
- ☐ Questions about the surgery, hospitalization and after surgery care are answered.
- ☐ Know what medication to take on the day of your surgery.
- ☐ Understand what to bring to the hospital on the day of your surgery.
- ☐ Understand to fill your prescriptions for pain medication and anticoagulant (blood thinner) at the pharmacy one week before surgery.
- ☐ Understand to bring your crutches or walker and cooling device (if you have rented one) to hospital the day of surgery.
- ☐ Understand to arrange to have family or a friend provide help at home for several days and transportation home when discharged.
- ☐ Understand you will spend 8 to 12 hours in the hospital on the day of your surgery.

One week before surgery

(check when done)

- ☐ Review Surgical Day Care Guide – Planning for Outpatient Day Surgery.
- ☐ Re-read the Knee or Hip Arthroplasty – Same Day Discharge Patient Information book.
- ☐ Make sure you have made arrangements for a responsible care giver to take you home and help with your care for several days after your surgery.
- ☐ Fill prescriptions for pain medication and anticoagulant (blood thinner).
- ☐ Make sure you have your crutches and/or walker. Practice using them before your surgery! Refer to the TOH My Surgery website link to view video for crutch walking:
[http://www.ottawahospital.on.ca/wps/portal/Base/The OttawaHospital/Clinical Services/mySurgery/myRecoveryAfterSurgery](http://www.ottawahospital.on.ca/wps/portal/Base/The+OttawaHospital/Clinical+Services/mySurgery/myRecoveryAfterSurgery)

Walking aids

Two-wheeled walker
or crutches



- ☐ Prepare hospital items for example personal clothes (loose fitting shorts, sweat pants, running shoes/walking shoes) crutches/walker.
- ☐ Prepare meals in advance, shop for groceries.
- ☐ Prepare house: bed on main floor (if you have many stairs and it is easier), table for medications, bin/basket to hold medicine, phone, thermometer, remove scattered rugs if you prefer.
- ☐ Add non-slip surfaces to outside stairs and walkways.
- ☐ Ensure your bed, chair, toilet, bath chair and other sitting surfaces are at the correct height (2 inches higher than the back of your knee).

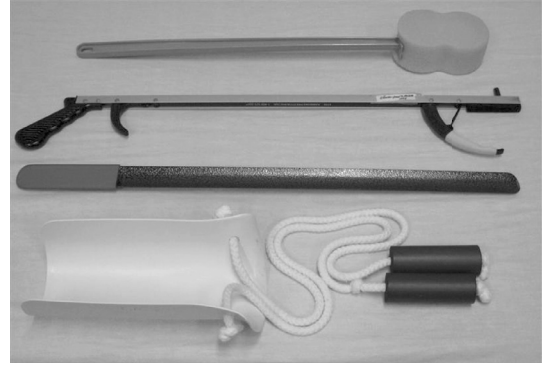
Special equipment may be needed

- Raised toilet seat with arms **OR** over-the-toilet commode with adjustable height legs.



Other self-care aids that you may need

- Long-handled sponge
- Long-handled reacher
- Long-handled shoe horn
- Sock aid



Evening before surgery

You will get a call from the hospital between 4 and 8 p.m. to give you your admission time. If you are not called by 7 p.m. you should call the Admitting Department – General Campus: 613-737-8200.

Review the Surgical Day Care Guide and follow ‘the evening before your procedure’ instructions.

Morning of surgery

- Review the Surgical Day Care Guide and follow instructions: “Checklist – The morning of surgery”.
- Go to the Surgical Day Care Unit (SDCU) on the 2nd level, Critical Care Wing for your admission time.

Just before surgery

- A nurse will meet you and ask you some questions.
- Plan to change into a hospital gown and place your personal belongings in a locker.
- You will receive pain medicine to help with pain control after your surgery.
- Your anesthesiologist will review the anesthetic and pain management plan with you.



After surgery

Post Anesthetic Care Unit (PACU)

When you wake up from your surgery, you will be in the Post Anesthetic Care Unit (PACU). The nurse will check your pulse, blood pressure, oxygen level, breathing, site of your operation and pain control frequently.

- You will have an intravenous (I.V.) and may receive oxygen.
- You will have a dressing over your knee or hip.
- Let your nurse know if you feel any of the following: unrelieved pain, nausea and/or vomiting, itchiness, difficulty urinating.
- You will stay in the PACU until you are ready to go to the Surgical Day Care Unit.

Surgical Day Care Unit after surgery

- You will be taken to this area until you are ready for discharge.
- You will be given something to eat and drink.
- You will be given an antibiotic and pain medicine.
- You may use your cooling device (if applicable).
- You will be seen by the physiotherapist who will teach/review how to get out of bed, walk with crutches/walker and use stairs (if you have stairs at home).
- Hospital staff will contact your designated caregiver two to three hours before you are ready to go home.
- You will be discharged from hospital to your home when you:
 - ✓ Independently transfer from bed to chair, walk and use the stairs (if applicable) with your crutches or walker.
 - ✓ Understand the pain management plan and the pain medications.
 - ✓ Your designated caregiver understands your care needs for when you are at home.
 - ✓ You are satisfied with your pain control and the pain does not prevent you from moving or walking.



What are the possible problems I should know about?

All surgeries have possible problems. Your surgeon will review them with you. This section will tell you about pain, blood clots and infection.

Knee/Hip pain

Pain is personal. The amount of pain you feel may not be the same as others feel, even for those who have had the same surgery. It may not be possible to be pain free after surgery, but it is important that you have effective pain relief. Our goal is to help you be comfortable enough to participate in the healing process. Your pain should be controlled

enough that you can rest comfortably and that pain does not prevent you from deep breathing, coughing, turning, getting out of bed and walking.

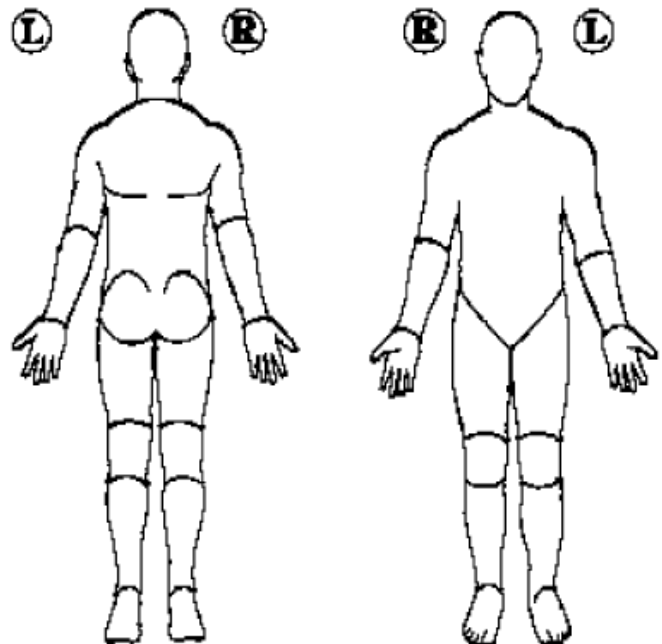
After your surgery you will be asked about your pain. Below is information about describing your pain and information on the medications you may be taking.

Describing your pain

When describing your pain, ask yourself the following questions:

Location: Where is my pain?

- Is there more than one place where I am feeling pain?
- Does the pain move to any other area?
- How bad is the pain in each area?



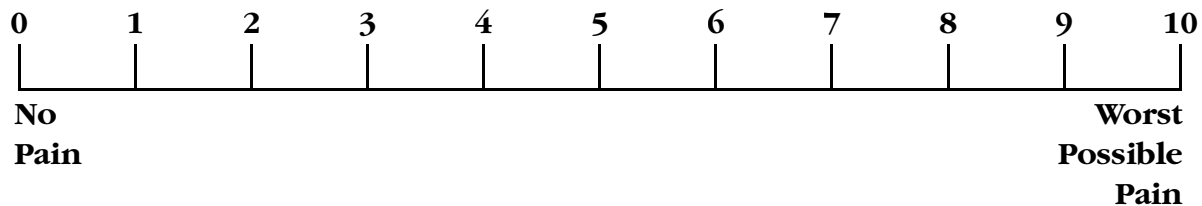
What does my pain feel like?

The words you use will help us to understand and treat your pain.

aching	excruciating	pins and needles	stabbing
burning	intermittent	pressure	tightness
constant	nagging	sharp	tingling
dull	penetrating	shooting	throbbing

Intensity: How bad is my pain?

Rate your pain on a scale of 0 to 10 both while resting (being still) and with activity such as deep breathing, moving in bed, sitting, walking. A “0” means you have no pain, and a “10” is described as the worst pain ever.



How does the pain affect my activities?

- Does the pain prevent me from doing my important activities such as sleeping, moving, walking, relations with other persons, enjoyment of life?

When did my pain start?

- How long does it usually last?
- How often does it occur? Is it constant or intermittent?

What makes my pain better or worse?

- Do I have any relief with pain medicine or other methods such as massage, ice, positioning?

Managing your pain: What are the options?

Pain is managed best when treated early and continuously. Pain is very individual. Both medicine and non-medicine methods can be used to prevent and manage pain.

In addition to taking pain medicine by mouth, you will also have a spinal anesthetic and an injection of pain medication in and around the knee/hip.

Spinal anesthetic

Spinal medications may be used to provide anesthesia during knee/hip surgery. With a spinal, the anesthesiologist places a small thin needle in your back into the fluid that surrounds the spinal cord. A single dose of medicine is injected and the needle then removed.

The medicine used is a local anesthetic (freezing). With local anesthetic, it is normal to feel numbness around your lower abdomen and legs. You will also not be able to move your legs. This can last from one to three hours. Before your surgery, the anesthesiologist will discuss the procedure, risks and benefits with you.

What is an intra-articular injection?

An intra-articular injection is commonly used to also help with pain control. This involves putting a “cocktail” of medicines including local anesthetic (freezing) in and around the knee or hip at the time of surgery. This “single injection” of medicine can last about 24 hours.

What are the other common pain medicines?

There are many pain medications available to treat different types and levels of pain. The more common ones are:

- Acetaminophen (Tylenol)
- Non-steroidal anti-inflammatory drugs (NSAID's)
- Opioids (oh'-pea-oyd)
- Other medicines (local anesthetics, anticonvulsants)

Acetaminophen (Tylenol) is used often either alone for mild pain or with other pain medicine for moderate to severe pain. Tylenol is often the first step of the ladder in managing pain. You will be given Tylenol just before your surgery and should continue this every six hours while awake for a couple of weeks. Tylenol can affect the liver if taken in high doses over a long period of time. Tell your doctor if you have liver problems.

Non-Steroidal Anti-Inflammatory Drugs (NSAID's) are also used as one of the first steps of the ladder in managing pain and can be used with other pain medicine for moderate to severe pain.

Examples of common NSAID's:

Generic name	Brand names
Celecoxib	Celebrex
Naproxen	Naprosyn, Aleve
Ibuprofen	Motrin, Advil
Meloxicam	Mobicox
Diclofenac	Voltaren

Like Tylenol, NSAID's can reduce the amount of opioids needed. You will be given a prescription for an NSAID to take for five to seven days before your surgery and for two to six weeks after surgery. Never take more than one type of NSAID at a time. They may affect the kidneys and stomach and increase the risk of bleeding. Talk to your doctor to see if there is a reason why you should not take an NSAID.

By taking Tylenol and an NSAID, together these can give better pain relief and fewer side-effects.

Opioid (oh'-pea-oyd) also called narcotics or pain killers are used for moderate to severe pain. They are often used in addition to Tylenol and NSAID. You will be given a prescription for either Hydromorphone (Dilaudid) or Tapentadol (Nucynta l) to take by mouth every four hours if needed. You should feel pain relief by 60 minutes when taken by mouth.

Many people are afraid that if they take opioids they may become addicted. The chance of addiction is very low. Taking opioids for pain relief is not an addiction. People addicted to opioids crave the opioid and use it regularly for reasons other than pain relief.

Anticonvulsants or antiseizure medicine are also used for pain relief. You may be given a prescription for Pregabalin (Lyrica). Like Tylenol and NSAID's, this can also reduce the amount of opioids you may require and therefore reduce side effects.

Keep on top of your pain—take your pain medicine when pain first begins—don't wait until pain becomes severe. It is often necessary for you to have more than one type of pain medicine to give you the best pain management and reduce the side effects.

Side effects

You may have side effects from any of these medicines. Side effects usually can be controlled or resolved over time. Discuss any concerns with your doctor or nurse.

- You may experience nausea when starting to take stronger pain medicine such as opioids. This may go away after a few days; however you may need to take antinausea medicine. Try flat ginger ale or dry crackers. This may help.
- You may feel sleepy. This is a common effect of strong pain medicine. At the same time, pain uses up a lot of energy. Once your pain is managed, your body will be able to rest and you may feel sleepy for a few days.
- Constipation from opioids is common. Prevention is the best approach. Take plenty of water, raw fruits, vegetables and exercise. You may also need to take a laxative such as a combination of stool softener and stimulant laxative.

Report any such as:

- nausea and or vomiting
- sleepiness
- visual or hearing problems
- lightheaded or dizziness
- itching
- constipation

Non-medicine methods

Non-medicine methods can help relieve pain. Some of these include:

- Meditation, relaxation, distraction with breathing and imagery techniques.
- Physical techniques such as positioning, movement, splinting, cold packs.

Relaxation can increase your comfort by calming your mind and muscles.

1. Get into a comfortable position. Breathe in slowly.
2. Breathe out slowly and feel yourself being to relax. Feel the tension leave your body.
3. Breathe in and out, slowly and regularly, at whatever rate is comfortable for you.

Distraction: Focussing your attention on something other than the pain can make you less aware of the pain. Distraction may work well while you are waiting for the pain medicine to take effect.

1. Concentrate on your breathing as described in the relaxation exercise above.
2. Close your eyes and focus on an object or a quiet place.

Positioning or elevating your leg on a pillow is very important. This will decrease swelling and improve your venous circulation.

Cold packs helps reduce swelling, relax muscles, and slow nerve transmission. This may make pain more bearable. Apply for 15 to 20 minutes at a time, four to five times per day after your knee/hip surgery.

Cold compression units: Your surgeon may have given you a prescription for a cold/compression device. This is a therapy involving a continuous circulation of cold water and intermittent compression therapy. This therapy can help reduce pain, swelling, tissue damage, and muscle spasms. A prescription is needed to obtain this device. Specific information on how to use this device is given at the time it is rented.

Pain is personal. Please tell us what works best for you to decrease the intensity of your pain and help you achieve your goal. Refer to page 31 for your pain medicine schedule for after your surgery.

Blood Clots

After your surgery, there is a small chance of developing a blood clot. This is a thick jelly like accumulation of blood. The body normally makes clots to help stop bleeding. After surgery, clots can form in the legs stopping the normal flow of blood. This is called deep vein thrombosis or DVT. A thrombus is the medical term for blood clot. They are more common in the leg and pelvis.

Signs and symptoms include:

- Pain or tenderness in the leg
- Skin is warm to the touch
- Swelling of the leg
- Redness of the skin

A blood clot can break away and, travel through the veins into the lungs. It can then block an artery in the lungs. This is called a pulmonary embolism or PE. If the blockage is big enough, it can be life threatening.

Signs and symptoms include:

- Shortness of breath
- Pain in the chest
- Feeling faint
- Coughing up blood
- Heart palpitations

If you experience any of these symptoms, contact your surgeon immediately.

Your surgeon has prescribed a blood thinner. This is a pill that you will take by mouth each morning for 14 days. This helps to prevent clots from forming.

Tell your surgeon if you are already taking blood thinners or have a bleeding disorder.

Call your surgeon if you have

- Increased bleeding at the surgical wound.
- Other bleeding; nosebleed, blood in urine, feces (bowel movement) mouth, vagina, anus or gums.

Wound (incision) infection and care

Antibiotics will be given to you before and after your surgery through your intravenous to help reduce the chance of infection.

The original dressing worn home is waterproof and may be worn in the shower. The SDCU nurse will provide you with a second dressing to take home.

- Change the dressing in **5 days or** if it is leaking **or** no longer completely sealed.

To remove:

1. Lift one corner and pull away from the pad of the dressing
2. Release
3. Repeat steps 1 and 2 all along the edge of the dressing until the whole dressing is loosened
4. Lift the dressing off and discard

To apply second dressing given to you by the SDCU nurse:

1. Ensure skin is dry.
2. Seal edges all the way around to prevent water from getting in during your shower.
 - Remove the second dressing after 5 days and leave it off.

Call your surgeon if you have:

- Drainage, redness, swelling, a foul odor or opening of incision
- Elevated temperature greater than 38.5°C



Exercises

Listed below are exercises that will help with your recovery after your surgery. Practice these exercises before your surgery. The leg exercises will help strengthen your leg muscles before you have your operation and will help you regain strength and mobility after your surgery.

- Repeat these exercises three times each day.

After surgery, flexing your knee/hip while doing the exercises may be painful. Pain medicine will make the exercises more comfortable. Take your pain medication at least 30 minutes before doing your exercises. Ice packs can be used to help reduce pain and swelling after you have finished exercising your leg.

Deep breathing and coughing

Deep breathing and coughing exercises after surgery will help keep your lungs healthy.

Deep breathing:

- Take a deep breath in through your nose. Hold for five seconds. Breathe out slowly through your mouth with pursed lips, as though you are about to whistle.



Repeat this exercise ten times each hour while you are awake and until your activity level increases. Continue these exercises for several days after your surgery.

Coughing exercises help to loosen any secretions that may be in your lungs. This can be done after your first five deep breaths. To produce an effective cough, take a deep breath and cough.

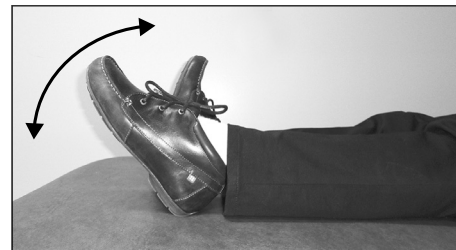
Part A: Leg Exercises

Do these exercises if you have had **either** hip or knee surgery.

Ankle and foot exercises

These exercises help the blood circulate in your legs while you are not moving much:

- Point your feet away from your body (as if you were pressing on a gas pedal).
- Point your feet towards your body.
- Move your ankles in circles.

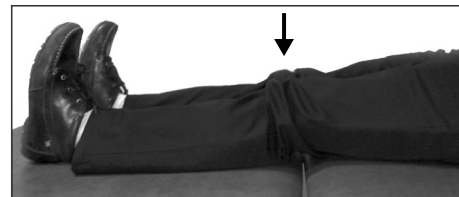


Repeat ten times each hour, while you are awake and until your activity level increases.

(Start on the day after surgery and repeat 2 to 3 times daily.)

Quadriceps strengthening:

- Tighten the muscle on top of the thigh (quadriceps). At the same time push the back of the knee down into the bed/mattress. Raise only the heel. Hold for five seconds.



Short arc quads:

- Place a towel roll under your knee.
- Straighten your knee by lifting your heel off the bed while maintaining contact with the roll.
- Hold for a count of five.
- Lower gently.



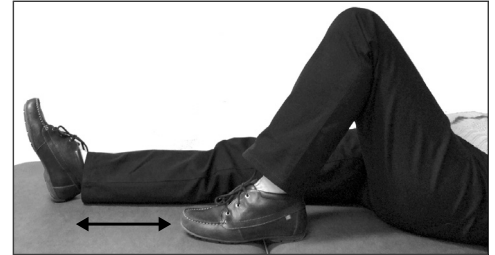
Part B: Exercises after knee surgery

Do the leg exercises in Part A after your knee surgery as well as the following exercises.

(Start the day after surgery and repeat 2 to 3 times daily.)

Flexion of the knee:

- Lying on a bed, bend the operated knee as much as you can, then lower it. The goal is to get the operated knee to flex to a 90° angle.



or

- Sit on a straight back chair. Slowly but gradually bend your operated knee. Try to bend it as much as possible without too much discomfort.



Extension of knee:

Loss of extension is the most common problem—most patients bend their knee easily but have difficulty fully extending their knee joint. While this exercise may be difficult it is very important in order to allow you to walk normally after surgery.

- Lying on a bed put a rolled towel under your heel to allow your knee to straighten as much as possible.

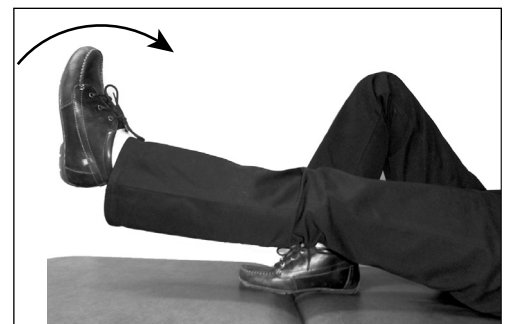


You may also do this exercise in a chair.

- Sit with legs straight and a towel wrapped around the ball of the affected foot.
- Using the towel, pull the foot up. Keep the knee straight. Hold for five seconds.
- Slowly lower and relax.

Straight leg raises

- Keep the leg that had surgery flat and straight. Keep the other leg bent with your foot flat on the floor.
- Slowly raise the leg that had surgery up about 10 cm (6 inches), keeping the leg as straight as possible.
- Hold for a count of five seconds, and then lower the leg gently.



Repeat this five to ten times. This exercise will strengthen your thigh muscles. Strong thigh muscles help with walking and help keep the knee stable.

Part C: Exercises after hip surgery

Do the leg exercises in Part A after your hip surgery as well as the following exercises. Repeat 2 to 3 times daily. (Start the day after surgery)

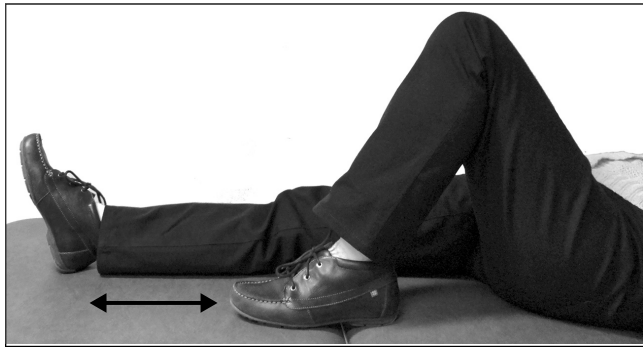
Isometric glut extensions

Squeeze the buttocks together and hold for 5 seconds. Relax.



Hip/knee flexion

Bend the leg up by sliding the heel slowly towards the buttocks.



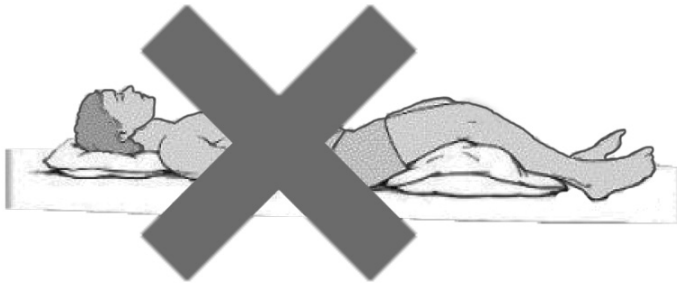
My Exercise Diary Do these 2 to 3 times per day.										
Exercises	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Part A: Leg exercises for both knee and hip surgery – repeat 2 to 3 times daily										
Ankle and foot										
Quadricep Strengthening										
Short arc quads										
Walking										
Part B: Exercises after knee surgery – repeat 2 to 3 times daily										
Flexion of the knee										
Extension of knee										
Straight leg raises										
Part C: Exercises after hip surgery – repeat 2 to 3 times daily										
Isometric glut extension										
Hip/Knee flexion										

Pillow Talk – How to place the pillows to position my new hip or knee

Lying on back

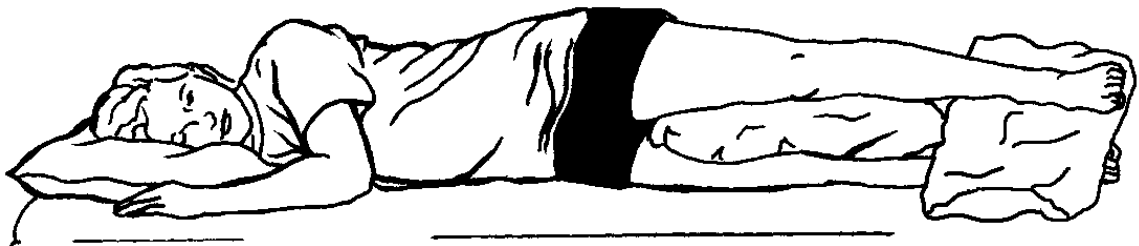
- One thin pillow lengthwise under the operated leg for comfort and to position the heel off the bed. **DO NOT** put a pillow behind your knee.
- Avoid knee flexion.
- One pillow between the legs.

This position is only to be used for the first few days after surgery, for short periods of time, for comfort.



Lying on side

- 1 to 2 pillows lengthwise between the legs.
- One pillow under the ankle/foot.
- Pillows behind the back.
- Avoid lying on the operated side.





Helpful hints for activities of daily living

Getting in and out of a chair while using crutches

Sitting down in a chair may seem difficult, but can be easily done in the following way.

First, stand in front of the chair with the back of your leg touching the chair. Then, take the crutches from under your arms and pass them to one hand. Grasp both by the handgrip, with the other hand hold the chair (armrest if present). Bend forward slightly and sit down while keeping your operated leg out in front and on the ground.

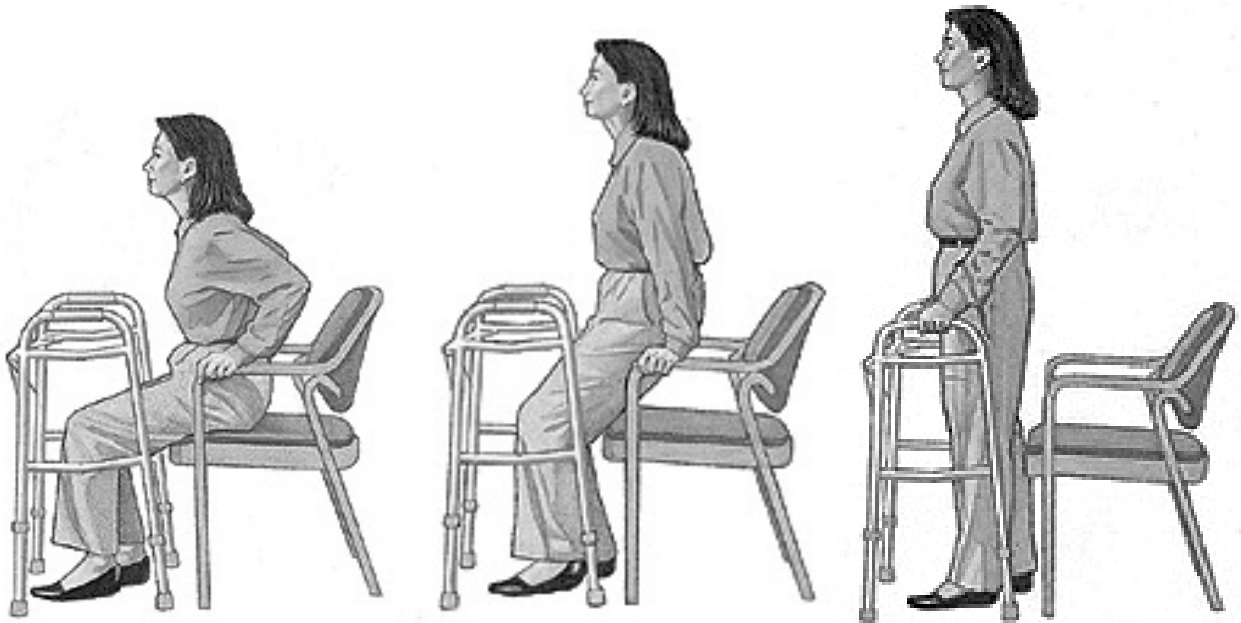


To stand up, sit at the front edge of the chair. Put the good leg on the ground. Grasp the handles of both crutches with one hand and the other on the chair (armrest if present). Lean forward and push up off the chair. Raise your body to a standing position.



Pass one crutch over to the other side. Be sure to have a steady balance before beginning to walk.

Proper standing procedure while using a walker:



Getting out of bed

- Move your body to the edge of the bed.
- Support your body with your elbow as you move from a lying to a sitting position at the edge of the bed. Do not twist the operated leg.
- Put one hand on your walker and one hand on bed or bed rail.
- Use your hands and your non-operated leg to push yourself up from a sitting to a standing position.
- Use firm beds. Avoid waterbeds, futons and low beds.

Remember:

When walking, move the walker first, followed by the operated leg. Follow with the non-operated leg. Avoid pivoting on the operated leg when standing.

Sitting

- Sit in chairs that have a firm seat and armrests.
- Avoid chairs with wheels or swivels and that are low to the floor. When sitting your hips should be higher than your knees.
- Avoid sitting for longer than an hour for the first month after surgery.

Showering

- When showering you may stand or sit on a shower chair. Adjust the seat height so that when sitting your hips are higher than your knees.
- Use a hand held shower if available for the first month after surgery. Otherwise a long handles sponge could be used when showering.
- Use a rubber mat or non-skid stick-ons on the floor or shower to prevent slipping.
- You may wish to have grab bars installed on the tub/toilet area before your surgery.
- Do not have a tub bath or get in a hot tub until your staples have been removed and your incision completely healed.

Dressing

- Sit while dressing.
- Start dressing the operated leg first, and to undress, start with the non-operated leg.
- Assistance devices such as long handled reachers, long shoehorn, or a stocking aid may be useful.
- Wear non-constrictive, comfortable clothing for the first month.
- Wear non-skid supportive shoes.

Car transportation

When transferring into a car, you want to make sure the car is parked a couple of feet away from the sidewalk or curb to give you enough space for the transfer. If you have a high truck or sport-utility vehicle, you may want to carry a sturdy foot stool to help you step up to the seat.

Placing a plastic bag on the seat may help you slide in more easily.

Transfer to Front Seat

1. Slide front passenger seat back as far as possible.
2. Recline the back support of the seat to give you more space.
3. Turn and back up to the seat until you feel the car seat on the back of your legs.
4. Use both hands to hold onto a stable part of the car such as the car seat or headrest and dashboard to stabilize yourself. Do not use car door for support as it could move.
5. Extend your operated leg.
6. Slowly lower yourself to the seat, keeping your operated leg slightly out in front of you. Be careful not to hit your head on the car's door frame.
7. Once seated, slide back until your knees are on the seat. If you've had a total hip replacement, keep your precautions in mind. You want to make sure your shoulders are behind your hips as you're sliding back.
8. Lift your legs one at a time to face forward. You can move each leg a few inches at a time. You can use your hands to help move your legs or ask for assistance from the driver.
9. Once seated, the back of the seat can be raised for comfort.
10. To exit the car, reverse the steps.



Homemaking

- Slide items along the counter-top to avoid carrying them.
- Carry hot items in containers with lids.
- To carry things consider using a utility cart, a walker bag, or wearing an apron with pockets.

Diet

- Do your grocery shopping before your surgery.
- Prepare and freeze meals before your surgery if possible.
- The opioids prescribed may cause you to become constipated. In order to prevent constipation, drink plenty of water, add fiber to your diet and remain active.



Notes and questions

Reminders

Practice the leg and knee/hip exercises before your surgery. The leg exercises will help strengthen your leg muscles before you have your operation and will help you regain strength and mobility after your surgery.

The speed and success of your rehabilitation following your surgery depends primarily on you. Exercise! Walk!

Before dental work or surgery, let your dentist know you have knee/hip prosthesis. He or she may need to order antibiotics to help prevent infection.

If you develop any infection anywhere in the body (e.g. boils, abscesses) notify your family physician, antibiotics may be necessary.

Keep in mind that your new knee/hip is designed for activities of daily living. Check with your orthopaedic surgeon before participation in sports. Your new knee's/hip's lifespan depends on how you care for it.

We hope that this book has helped prepare you for your surgery and recovery. Keep this book with you. Use this section to keep notes and to write down your questions.

My pain diary Fill in this diary on day 1 through 10 after your surgery.										
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Date:										
Pain location										
Pain intensity 0 to 10	least / 10	least / 10	least / 10	least / 10	least / 10	least / 10	least / 10	least / 10	least / 10	least / 10
	average / 10	average / 10	average / 10	average / 10	average / 10	average / 10	average / 10	average / 10	average / 10	average / 10
	most / 10	most / 10	most / 10	most / 10	most / 10	most / 10	most / 10	most / 10	most / 10	most / 10
Pain quality (words to describe the pain)										
Satisfaction with pain management 0 to 10										
Side effects										
INDICATORS:	Pain location: front, back, inner, outer Pain quality: burning, shooting, aching, stabbing, pressure, constant, occasional Side effects: nausea, vomiting, itchy, sleepy, dizzy, difficulty focusing or concentrating									
	Pain intensity (0 to 10) 0----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 No pain									
	Pain satisfaction (0 to 10) 0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Not satisfied									
	worst pain Extremely satisfied									

Pain medicine schedule for after surgery. Your doctor has prescribed some of the following medications. Cross-off the time when the medicine is taken. Write down the time when 'as needed' medications are taken.											
Medicine	Day of Surgery	Day 1 after Surgery	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Tylenol 650 mg every 6 hours	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM	6 AM 12 PM 6 PM 10 PM
Celebrex 200 mg every 12 hours	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM
Pregabalin (Lyrica) 50 mg every 8 hours	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM	6 AM 2 PM 10 PM
Xarelto (Rivaroxaban) 10 mg every morning		6 AM	6 AM	6 AM	6 AM	6 AM	6 AM	6 AM	6 AM	6 AM	6 AM
Eliquis (Apixaban) 2.5 mg every 12 hours		6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM	6 AM 6 PM
Tramadol 50 mg 1–2 tabs every 4 hours as needed											
Tapentadol 50 mg 1–2 tabs every 4 hours as needed											
Dilaudid 1–2 mg every 4 hours as needed if pain not controlled effectively by either Tapentadol or Tramadol											

This information comes from team members and patients like yourself. Your suggestions are greatly appreciated.

— *The Ottawa Hospital Orthopaedic Clinical Pathway Team* —

