

Your Integrated Orthopaedic Care Guide

A Patient's Guide to:

Knee Replacement Surgery



Dear Patient,

Welcome to the Toronto Western Hospital, University Health Network (UHN). We are privileged to provide you with your joint replacement surgery care. Our primary value is the needs of patients come first and we are committed to ensuring you receive a patient-centred, coordinated approach. Our team of health care professionals have come together as **one TeamUHN** to integrate your surgery and recovery care, to help you return to your everyday activities as soon as possible.

We are pleased to provide you with your Integrated Orthopaedic Care Guide to help you prepare for your upcoming surgery and recovery at home, which includes outpatient rehab through UHN's Altum Health rehabilitation clinics. Please use this guide in conjunction with UHN's My Surgery booklet that will be provided to you. We encourage you to read and refer to these guides frequently at all your appointments and visits. Additional information is also available for your review on our website www.uhn.ca/Arthritis.

Our orthopaedic team at UHN is an industry leader in hip and knee replacement, utilizing the most current technology and specializing in handling complex cases. We treat more than 3,500 orthopaedic inpatients and 45,000 outpatients annually. On behalf of our TeamUHN, we look forward to providing you with your joint replacement surgery and supporting you through your recovery at home.

Sincerely,

Christian Veillette, MD, MSc, FRCSC
Division Head, Orthopaedic Surgery
Schroeder Arthritis Institute
Toronto Western Hospital
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Your Integrated Orthopaedic Care Guide

Acknowledgements

Clinical Experts:

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Orthopaedic Surgeon Offices
Inpatient Orthopaedic Unit
Pre-Admission Department
Operating Room and Day Surgery Departments
Pre-Operative and Post-Anesthesia Care Unit
Anesthesiology Program
Allied Health Department
Patient Blood Management Program
Altum Health

Patient Partners:

A sincere thank you to our patients who partnered with us to review and provide feedback on the guide. Your input has ensured that patients and families will find the information meaningful in supporting them through their joint replacement journey.

Project Team:

A special acknowledgment to our Schroeder Arthritis Institute Integrated Care Team for leading the toolkit development with our UHN teams and patients: Marsha Alvares, Advanced Practice Physiotherapist (APP), Clinical Bundle Care Manager, Samra Mian-Valiante, Director, Strategy & Transformation, Division of Orthopaedics and Sandralee Rose, Clinical Care Coordinator.

For any requests for changes to the document, please email: mskbundledcare@uhn.ca

Schroeder Arthritis Institute
Toronto Western Hospital
University Health Network
www.uhn.ca/Arthritis



KEY CONTACTS

For questions or concerns about:	Call:
Your pre-admission date Your surgery date Changes in your medical condition	Your Surgeon's office
Your outpatient rehabilitation Appointment, date, time, location.	UHN Altum Health (See page 6 for your clinic's phone number)
Any concern or question AFTER surgery including but not limited to: <ul style="list-style-type: none"> - Your incision (red, warm to touch AND has pus and a bad smelling odour) - A fever (temperature of 38 C or higher for 2 days). - Pain that seem unmanageable, despite taking pain medicine. - Sharp pain or tenderness in the back of your calf or numbness and tingling in your foot. 	Orthopaedic Help Line (416-603-5126) 24 hours a day / 7 days a week

If you have:

- Chest pain, tightness or shortness of breath.
- The worst headache of your life that is not relieved by pain medication.

Call 911 for an ambulance to take you to the nearest emergency department.

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GUIDE OVERVIEW

Welcome to Toronto Western Hospital, the goal of this guide and your integrated care team is to help you prepare for a successful total joint replacement surgical journey.

Your Integrated Orthopaedic Care Guide offers information to support you through each step of your total joint replacement journey, including surgery, your recovery at home and outpatient rehab through UHN's Altum Health rehabilitation clinics. This guide should be used in partnership with your UHN My Surgery book and the UHN Schroeder Arthritis Institute website.

Throughout the guide you will see the following symbols:



'My Surgery book link' symbol.

It means you can find additional information about that topic in the UHN My Surgery book, on the page number indicated.



'Remember' symbol.

It means the information beside this symbol is important and something you need to remember.



'UHN Schroeder Arthritis Institute website' symbol.

It means the UHN Schroeder Arthritis Institute website offers additional resources about the topic next to the symbol.

UHN COVID-19 PREPAREDNESS

Current Toronto Western Hospital practices may change from the information provided in this guide, in response to the COVID-19 pandemic.



What to expect when arriving at Toronto Western Hospital

Everyone arriving at Toronto Western Hospital will be screened at the hospital entrance for symptoms of COVID-19, or exposure to a known case of COVID-19. Everyone entering is required to wear a mask. You will be provided one at the entrance.



COVID-19 testing before surgery

All surgical patients will be required to have a COVID-19 swab test completed prior to surgery. You will be contacted a few days prior to your surgery day with the date, time and location of your scheduled test. After your swab, you are required to self isolate at home until your surgery.



Visitor policy

UHN values the involvement of family and community members in the care of our patients. To ensure the safety of staff and patients, there are times when we must modify our visitor policy. Please see www.uhn.ca/covid19 for up-to-date policy information.



Follow-up appointments

Some of your appointments may be scheduled as a virtual visit (appointment). During a virtual visit, you do not come to the hospital to meet in person. You will speak with your healthcare team using a regular telephone, smartphone or your computer/tablet.

For the most up to date information, call your surgeon's office or visit www.uhn.ca/covid19

Integrated Care

The team of health care professionals at UHN has come together as your **TeamUHN**. The Integrated Care model means every step of your journey, from the time we first assess your pain, through to your surgery and recovery at home, will be supported and coordinated for you by your **TeamUHN**. Under this new model, your rehabilitation after surgery will be provided by UHN Altum Health.

Your **TeamUHN** includes your surgeon, residents and fellows, physician assistants, physiotherapy practitioners, anesthesiologists, nurse practitioners, pharmacists, registered nurses, physiotherapists, acute pain service, administrative staff and most importantly, **You**.



UHN Altum Health

Altum Health, a division of UHN, reaches beyond rehabilitation to deliver a full range of health care services, including prevention, acute care, surgical care and rehabilitation. Working alongside surgeons and specialists and as part of **TeamUHN** to ensure timely, integrated and coordinated care, to help you achieve the goals of your surgical journey. With 11 sites across Southern Ontario, our team of therapists are able to offer you individualized, evidence based care plans closer to your home. There is also potential for virtual rehabilitation, if appropriate, which can be discussed with your Altum Health team.

During your surgical journey, you will be provided a list of Altum locations for you to choose from. Your first appointment will be scheduled before your surgery date to ensure a smooth transition home after surgery.

ABOUT US



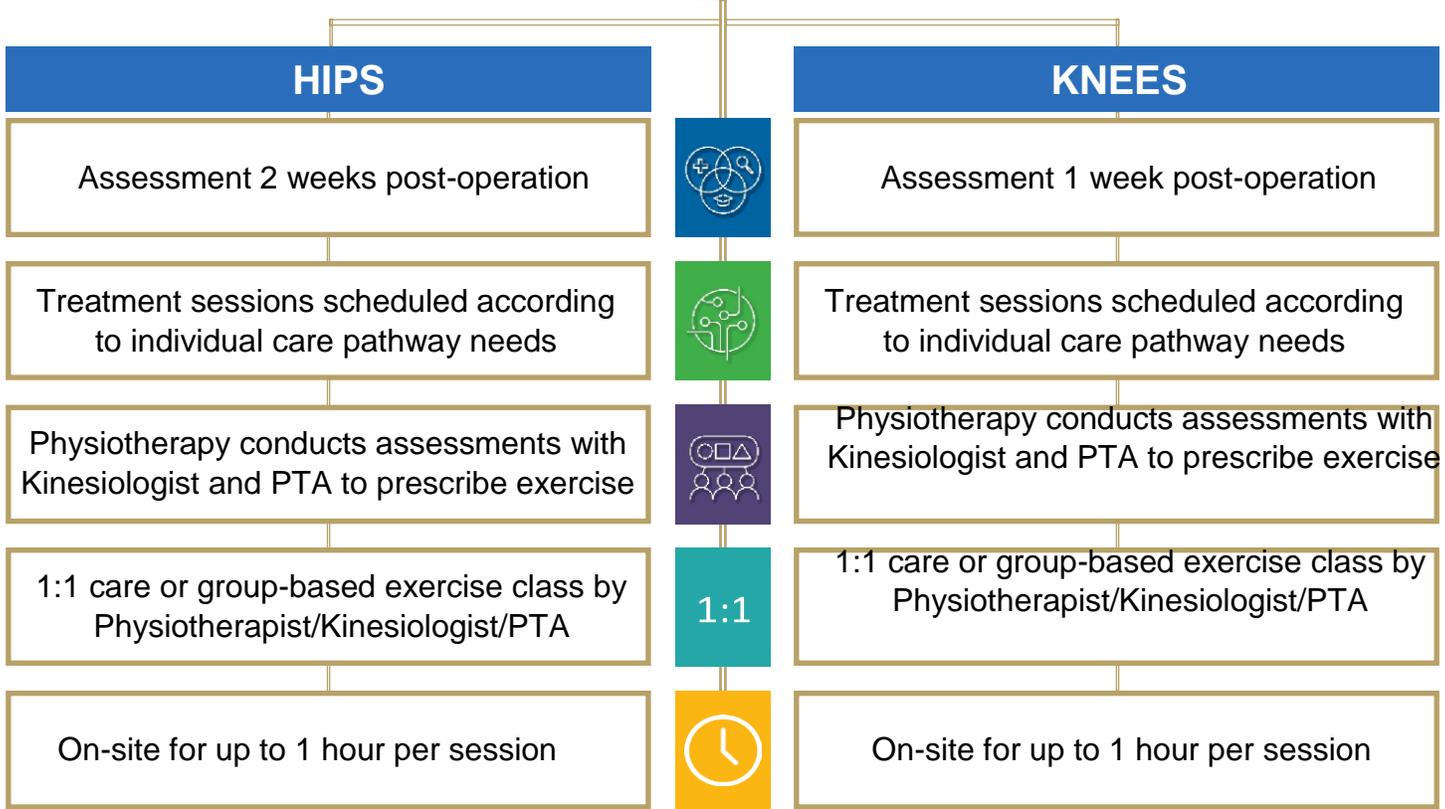
Leading the new way in Canadian health care.

What is Altum Health?

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CARE PATHWAY



Ajax

235 Salem Road, Unit 10, L1Z 0B1
Tel: 905-427-6555
Fax: 905-427-5551
Site Manager: Chris Jackson

Barrie

11 Lakeside Terrace, Suite 502, L4M 0H9
Tel: 705-726-1113
Fax: 705-726-2221
Site Manager: Chuck Ingoldsby

Brampton

10545 Bramalea Road, Unit 1-4, L6R 3P4
Tel: 905-458-9118
Fax: 905-799-6830
Site Manager: Jennifer Tremblay

Cambridge

745 Coronation Boulevard, Unit 101, N1R 0B6
Tel: 519-622-5885
Fax: 519-622-2280
Site Manager: Hailey Albright

Hamilton

910 Queenston Rd, Unit 11A, L8E 5J2
Tel: 905-664-3300
Fax: 905-664-3310
Site Manager: Kristina Smart

Mississauga

2 Robert Speck Parkway, Suite 110, L4Z 1H8
Tel: 905-897-7007
Fax: 905-897-3301
Site Manager: Sandra DiTella

Oakville

519 Dundas Street West, Unit 6/7, L6M 1L9
Tel: 905-257-0073
Fax: 905-257-0903
Site Manager: Jennifer Tremblay

Oshawa

38 Simcoe St. South, L1H 4G2
Tel: 905-240-5533
Fax: 905-240-5544
Site Manager: Chris Jackson

Scarborough

2901 Sheppard Ave East, Unit 301, M1T 3J3
Tel: 416-901-5854
Fax: 416-901-5747
Site Manager: Erika Uguccioni

Toronto Western Hospital

60 Leonard Avenue, M5T 2R1
Krembil Discovery Tower

4th Floor

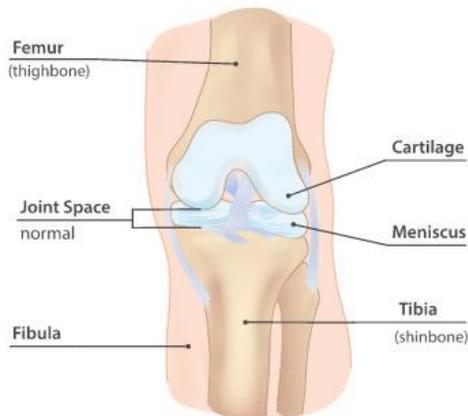
Tel: 416-603-5092
Fax: 416-603-5406
Site Manager: Charmody Laughton

Vaughan

8707 Dufferin Street, Unit 14/15, L4J 0A2
Tel: 905-738-0007
Fax: 905-738-0017
Site Manager: Erika Uguccioni

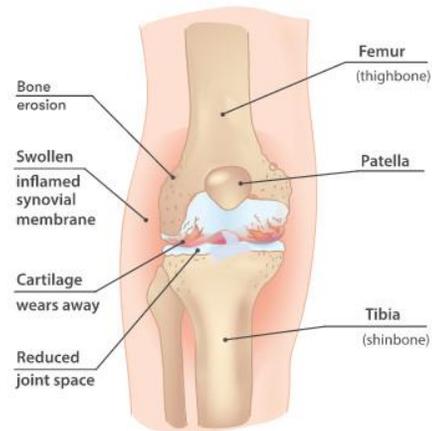
Step 1: UNDERSTANDING YOUR JOINT SURGERY

Understanding the Knee Joint

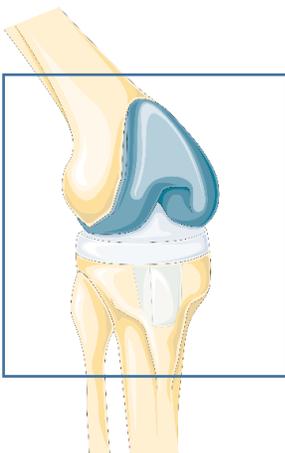


In a healthy knee joint, there is a smooth cushion of cartilage where the ends of tibia and fibula meet the end of the femur, allowing the joint to bend and move smoothly, without pain.

Impact of Arthritis on the Knee Joint



Arthritis is a disease that causes the cartilage on the joint surface to erode and becomes uneven. This can cause pain, stiffness, swelling, instability and difficulty walking.



Total Knee Replacement Surgery

A knee replacement involves the surgeon removing the joint that has worn out, usually due to arthritis, and replacing it with an artificial implant.

The specially designed metal and plastic parts are custom fit to your joint to help improve your mobility, pain and function.

"Total Knee Replacement" image by Laboratoires Servier:
www.commonswiki.org/wiki/File:Replacement_surgery_-_Total_knee_replacement_-_Smart-Servier.png
All other images retrieved from: www.injurymap.com/free-human-anatomy-illustrations

Step 2: PRE-ADMISSION CLINIC

Virtual Visits

You may be scheduled for **virtual visits** (appointments). During a virtual visit you do not come to the hospital to meet in person. You will speak with your care team using a regular telephone, smartphone or your computer.

We are using virtual visits more often at UHN to reduce how many people come to the hospital. This is to protect our patients, staff and the community from the spread of COVID-19.

For more information, please visit

www.uhn.ca/PatientsFamilies/Health_Information/Health_Topics/Documents/Virtual_Visits_at_UHN.pdf

Appointments

- **Preadmission appointment**

Your surgeon's office will contact you to provide your pre-admission appointment. Parts of your appointment may be completed virtually online or in-person at Toronto Western Hospital (1st floor, Main Pavillion, Room 406).

- **Surgery appointment**

Your surgeon's office will contact you to provide your surgery date, time and any additional instructions.



See *UHN My Surgery* book page 21 for additional information.

- **Physiotherapy appointment after surgery**

You will be provided the list of Altum Health locations and asked to choose the location you would like to attend for rehabilitation. This will usually occur during your initial appointment with the surgeon. Your choice will be reconfirmed during your pre-admission appointment.

Altum Health will contact you before your surgery with the date and time of your first physiotherapy appointment, that is to occur after surgery.



Pre-Admission Clinic Appointment

The purpose of the Pre-Admission Clinic appointment is to prepare you for your surgery. Members of your **TeamUHN** will make sure you are medically fit for surgery and anesthesia. They will also give you information about what to expect before, during and after your hospital stay.

- Your appointment may be conducted in person or virtually over the telephone and may be up to **6 hours in length**.
- Your surgeon's administrative assistant will contact you to book this appointment and provide instructions.
- **Complete your Patient Reported Outcome Measures (PROMS)** before your pre-admission clinic appointment. If you are unable to complete them, let the nurse know during your appointment. See **page 14** for more information on PROMS.

If your pre-admission appointment is **in-person**:

- **Bring all medications, herbal supplements, over-the-counter medication and vitamins in their original containers to your preadmission clinic appointment**
- You may eat on the day of your appointment, unless told otherwise by your surgeon.
- Wear clothing that is easy to put on and take off for examinations and tests.

One week before your surgery, the surgeon's administrative assistant will give you an appointment time for your preadmission bloodwork and swab test. This appointment will happen 1-2 days before your scheduled surgery and will be at Toronto Western Hospital.

Nursing Consultation

During your visit, a registered nurse will answer questions relating to your surgery and provide a complete check of your health, including:

- Any special needs you may have so that you can be better looked after in hospital.
- How you can look after yourself at home when you leave the hospital.
- Confirmation of your Altum Health rehabilitation location.

Depending on your health history, other health care professionals may also speak with you prior to your surgery.

Pharmacy Consultation

Your **TeamUHN** pharmacist will speak with you to discuss your current medications and answer any questions you may have.



Please have all of your medications with you in their original containers, including:

- Prescription medicines
- Over the counter medicines
- Herbal medicines
- Vitamins
- Cannabis
- Please notify the pharmacist of any street drug use

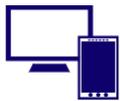


See ***UHN My Surgery*** book page 16 to 23 for additional information about your preadmission appointment.

Patient Blood Management Program

The risk of requiring a blood transfusion during your joint surgery is very low. However, the Patient Blood Management Program provides medical and surgical options to reduce the likelihood of requiring a blood transfusion.

Your surgeon MAY recommend you take iron supplements 4-6 weeks prior to your surgery. If your surgeon has instructed you to do so, please visit the link below for information on how to purchase iron supplements.



View the Patient Education Pamphlet at www.bit.ly/uhn-pbmd

For more information about the blood management program, call:

Lucia Evans RN, BScN

Patient Blood Management Coordinator

Phone: (416) 603-5164



See *UHN My Surgery* book page 19 for more information about the Blood Management Program.

Anesthesia Consultation

An anesthesiologist is a member of your **TeamUHN** who ensures you are safe and comfortable during your surgery.

Many factors influence the effect of the drugs used for anesthesia:

- Age
- Weight
- Alcohol
- Tobacco
- Prescription medicine
- Kidney and liver diseases
- Heart and lung diseases
- Street drugs
- Pregnancy

Anesthesia and surgery can affect all the major systems of your body. **It is important you discuss all your medical problems with your anesthesiologist** so that you can be given anesthesia in the safest and most comfortable way.

Your anesthesiologist will talk to you about the potential risks and benefits of spinal, regional and general anesthetic. Together, the anesthesiologist and you will make an anesthetic plan that best suits your needs.

A spinal/regional anesthetic is the most common anesthetic used during total joint replacement surgery.

Regional anesthesia, sometimes called “nerve blocks”, is also often used for joint replacement surgery.

- Anesthetic (freezing) medicine is injected into the part of your body needing surgery, numbing the area.
- Regional anesthesia provides excellent anesthesia and effective pain relief after surgery. It lowers the chance of side effects like nausea, sleepiness, sore throat and constipation.



See ***UHN My Surgery*** book page 30 to 31 for additional information on anesthesia.



Co-Pilot

A co-pilot is a trusted person of your choosing, who is able to help you at various points during your surgical journey. Most importantly, they are recommended to be available on the day you are discharged home from the hospital.

You need to confirm your co-pilot before your pre-admission clinic appointment.

- Your co-pilot can be a family member, friend, neighbour, or hired care provider. The individual should be over the age of 18.
- Your co-pilot does not need to be available 24/7, but should be available to help when needed before and after surgery.
- For Same Day Discharge patients, it is strongly encouraged you have your copilot stay with you on the first night after surgery.
- On your day of discharge, your co-pilot can pick up your discharge prescriptions at Shoppers Drug Mart on main floor of TWH, before you leave the hospital.

For the most up to date information about co-pilots accompanying you in the hospital, please **call our 24/7 Orthopaedic Help Line (416) 603-5769.**

Pre-Admission Education Class

An education class will be provided either in-person or virtually online, prior to your surgery.

A physiotherapist and a nurse practitioner on your **TeamUHN** will review the next steps in your surgical journey. There will be opportunities to ask questions during and after the education class.



The video presentation is also available on the UHN website at:
http://bit.ly/uhn_kneesurgery

Monitoring My Progress

Before and after your surgery, we will ask you to complete questionnaires, known as '**Patient Reported Outcome Measures**' or **PROMS**. This will help us learn if your joint replacement has helped to improve your mobility, pain and function.

What information do PROMS measure?

- Pain
- Functional status (how well you can perform your normal daily activities)
- Quality of life
- Surgery experience

When and how do I fill out PROMS?

You will receive a phone call or email with a registration link, individual username and password. You will be asked **to complete your PROMS before the following clinic visits:**

- Pre-admission clinic
- 6 weeks after surgery
- 3 months after surgery
- 1 year after surgery

PROMS can be completed, using the registration link, on any electronic device that has internet access.

How do PROMS help me and my team?

Your answers help your **TeamUHN** track your progress over time, measuring how well you are functioning before surgery and how well you are healing afterwards.

Step 3: PREPARING FOR SURGERY

Preparing Your Home

Taking the time to prepare your home before surgery, will help to provide a safe and comfortable environment for your recovery.

Common Areas

- Remove any potential tripping hazards or obstacles (such as rugs, cords and small objects) to ensure there is a walker-sized path through all main common areas of your house.

Bathroom

- We strongly encourage the use of a raised toilet seat and grab bars in the toilet, bathtub and shower areas. This will make your bathroom safe and easy-to-use.
- See the *Equipment and Devices* section on page 16 for descriptions and purchasing information.

Kitchen

- Ensure all food products and kitchen accessories are placed in accessible, easy-to-reach locations.
- Consider stocking up on groceries and precooking meals to store for your recovery.

Bedroom

- It is important that your bed height is accessible and your mattress is supportive.



See *UHN My Surgery* book pages 6 to 7 for additional information on preparing your home for surgery.

Equipment and Devices

You will need a variety of equipment at home to help you in the days and months after your surgery. This equipment can be rented or purchased at a local vendor. **Ensure to tell your vendor your height and weight before you buy or rent specific equipment.** Plan to have all of your equipment delivered to your home before your surgery day.



You will need a **2-wheeled walker** to assist you in getting around at the hospital and home in the early stages of your recovery.

Please bring your 2-wheeled walker to the hospital on the day of your surgery.



If you have stairs in your home, you may need a cane to assist you going up and down.

You do not need to bring your cane to hospital, unless you require it for walking before surgery.

Here are examples of additional equipment that you may wish to rent/purchase to improve your comfort and make your household activities easier:



Raised toilet seat or commode



Bath bench



Grab bar



No-slip bath mat



Hand-held shower head



Bath rail

Equipment images used with permission from www.huntshealthcare.ca



For information on equipment vendors, see *Community Resource* (page 18) or visit bit.ly/uhn_vendors.



Bathing Before Surgery

To reduce the risk of infection, your surgeon has asked you to follow the shower protocol below:

1. Starting 5 days before your surgery, shower everyday using your **NORMAL SOAP**.
2. 24 hours before your surgery, shower using **CHLORHEXIDINE SOAP**.
IMPORTANT: If you have been given a pre-admission appointment on this day, please shower with the chlorhexidine soap **after** you have attended your appointment.
3. Day of your surgery, shower before your surgery using **CHLORHEXIDINE SOAP**.



- The **CHLORHEXIDINE SOAP** is available for purchase under the names Stanhexidine or Chlorhexidine Wash 2% at any pharmacy.
- Do not use this soap if you have psoriasis or eczema. Speak with a pharmacist about other options.

How to take a shower using CHLORHEXIDINE SOAP:

1. Use the chlorhexidine soap from your neck to feet, washing the groin and anal areas last. Avoid contact with your face, ears and eyes.
2. Use your usual shampoo on your hair.
3. Rinse the soap from your body.
4. Use your usual soap or cleanser on your face.
5. Use a clean towel each day to dry yourself. Dry the groin and anal areas last. Do not apply lotion.

- Test a small area for sensitivity. If your skin develops irritation, rash or allergic reaction from the chlorhexidine soap, stop using the chlorhexidine soap. Continue following shower timeline and instructions using your regular soap.
- **Please notify your POCU nurse on the day of your surgery if you were unable to complete the chlorhexidine wash.**



DO NOT shave the hair on the area of your surgical site for 5 days before surgery.

Exercising Before Surgery

See **Step 9: Exercises** on **page 37** for exercise instructions. Please ensure you are following the right section for your type of surgery. We recommend you do the same exercises before and after your surgery, as tolerated.

Community Services and Resources

There are a variety of services and resources (such as respite care, in-home nursing care, grocery delivery) available for purchase within the community, to assist with your recovery.

To access a list of community services and resources, please visit:

https://www.uhn.ca/Arthritis/Orthopedics/Pages/community_resources.aspx

Step 4: DAY BEFORE SURGERY



DOs and DON'Ts the Day Before Surgery

- **DO NOT** shave the hair at your surgical site **for 5 days before surgery.**
- **DO NOT** use lotion or powder after your shower.
- **DO** have a light supper (no fried or fatty food) on the **evening before surgery.**
- **DO NOT** eat solid food after **midnight** on the night before surgery.
- **DO** drink **clear liquids** (ex. water, apple juice, clear broth, tea or coffee without milk or cream), unless otherwise advised by your surgeon. **STOP drinking clear liquids 5 hours before your surgery.**
- **DO NOT** drink alcohol 24 hours before surgery.
- Take off all piercings and jewellery, including wedding rings. Please see a jeweler to cut jewellery off, if needed.
- Remove nail polish on fingernails and toenails.



See *UHN My Surgery* book pages 24 and 25 for the 'Before my Surgery checklist' and additional preparation information.

Packing your Bag

Please bring the following with you on the day of your surgery. Please limit the amount personal belongings you bring to the hospital, only bring the most important items.

- Bring your 2-wheeled walker to the hospital. You do not need to bring the other equipment to the hospital.
- Loose non-slip, closed toe footwear (other than slippers)
- Bring your cryo-cuff, if you have one (optional)
- A bag of your toiletries and personal belongings
- All medication in their original bottles
- You will need your wallet and healthcard, but do not bring any other valuables with you to the hospital.



See *UHN My Surgery* book pages 26 to 27 for a list of recommended personal belongings to bring to hospital.



The hospital cannot be responsible for money or valuables.

We understand that you may have personal items with you in hospital, such as clothing, medications and personal support aids (for example, eyeglasses, contact lenses, dentures, hearing aids, mobility aids such as a cane, walker, prostheses or wheelchair). The hospital cannot be responsible for these items if they are damaged or go missing.

Step 5: DAY OF SURGERY



IMPORTANT REMINDERS

- **DO NOT** take any of your medications the morning of your surgery, unless your healthcare team has said it is okay.
 - If told to take medication, you can take it with sips of water
- Remember to take a chlorhexidine shower the morning of your surgery.
- You can brush your teeth the morning of your surgery, but **DO NOT** swallow any liquids.
- **Remember to bring your:**
 - Medications in the original bottles
 - Personal belongings bag
 - 2-wheeled walker
 - Non-slip shoes
 - Wallet

Arriving at the Hospital

Your surgeons office will provide you with the time and instructions on where to go in the hospital, in advance of your surgery day.



You should arrive at the hospital **3 hours** before your scheduled procedure time. However, if your **surgery is at 8:00am, please arrive at 6:00 am.**

On the day of your surgery, you will arrive and register in the pre-operative area. Here your nurse will complete your pre-operative assessment and prepare you for surgery. The anesthesiologist will review all your information with you and make the final decision about your anesthetic.



See *UHN My Surgery* book pages 28 to 29 for additional information about the Pre-operative Care Unit.

Surgery



See *UHN My Surgery* book pages 29 to 36 for what to expect during surgery.

Post-Anesthesia Care Unit

After your surgery, you will go to PACU to recover from sedation. Here the registered nurses will check your vital signs, bandage, toes (for colour, feeling and movement), and raise the head of your bed to get you sitting. You will also receive pain medicine.

Once you have fully recovered from your sedation and your vital signs are stable, you will be moved to **9A inpatient unit** (9th floor).

If you are scheduled for same day discharge, you will be discharged from the Day Surgery Unit when you have met the discharge goals (see page 23).



See *UHN My Surgery* book page 38 for what to expect in the post-anesthesia care unit.

Step 6: HOSPITAL STAY

Visiting Hours

Visiting hours on 9A are flexible, please be respectful of your roommates. , please **call our 24/7 Orthopaedic Help Line (416) 603-5769** for additional information.



See *UHN My Surgery* book pages 12 to 14 and 34 to 35 for additional information.

Your Hospital Stay:

Your **expected day of discharge** is reviewed by your TeamUHN each day. Many patients are ready to go home the same day (Day Surgery) or the next day (inpatient surgery), once they have met all the discharge goals. We will not send you home if it is unsafe.

Your discharge goals include:

- Using your walker independently
- Getting in and out of bed on your own
- Walking up and down stairs (if needed)
- Your pain is well controlled

Physiotherapy

Your physiotherapy starts within a few hours after your surgery, once you regain sensation in your legs.

The physiotherapist will teach you:

- How to start doing basic exercises
- How to get in and out of bed
- How to walk properly with a gait aid or walker
- How to climb stairs, if needed

Physical activity level to expect after joint replacement:

Day	Type of exercise to expect
Day 0 (Surgery day)	<ul style="list-style-type: none">• Sit at the side of the bed• Sit-to-stand at the side of the bed• Transfer to the chair with help• Start with basic exercises (as you are able)• Walk with a Physiotherapist or Physiotherapy Assistant• Practice going up and down the stairs (as you are able)• Prepare for discharge home (Day Surgery patients)
Day 1 (Day after surgery)	<p>If you are not discharged on Day 0:</p> <ul style="list-style-type: none">• Continue with basic exercises• Walk with a physiotherapist or Physiotherapy Assistant• Practice going up and down the stairs• Prepare for discharge home



DO NOT WALK ON YOUR OWN until your physiotherapist or nurse has determined it is safe for you to do so.

Exercises After Surgery

A complete exercise guide can be found in **Step 9 on page 37** of this book. To help you best recover after your surgery, **try to do your exercises 3 to 4 times a day** by yourself or with the help of your family or caregiver at home.



See **UHN My Surgery** book pages 42 to 44 for additional information

Medication and Pain Control

Continuing your Regular Medication

While you are in the hospital, the doctors, nurse practitioners, nurses, and pharmacists review your regular medicines and assess whether you should continue taking them after your surgery.

Make sure that you have a list of all medicines you take and the name and phone number of your regular pharmacy, in case we need to check them.

Managing Pain in Hospital

You will recover and feel better sooner after your surgery when your pain is well controlled. While the medicine will not take away all of your pain, we will help you to manage your pain as low as possible. Please talk to anyone on your **TeamUHN** about your pain, such as your doctor, nurse, acute pain service team or physiotherapist.

The Acute Pain Service Team will visit you after your surgery to help manage your pain. They are a special team of nurse practitioners and anesthesiologists who will help create a pain medicine plan, using a variety of medicine.

- We encourage you to take your pain medicine to keep your pain within your comfort level and at a level that will help you take part in activities such as physiotherapy, exercises and walking.
- Ice is another way to help control pain and swelling.



See *UHN My Surgery* book pages 40 to 42 for additional information about managing your pain after surgery.

Blood thinners

You will be prescribed a blood thinner medication after your surgery. You will start taking it in the hospital to prevent blood clots. Blood thinner medicine may be given in the form of a pill or injection.

We recommend that you fill this prescription at the TWH outpatient pharmacy (in the Shoppers Drug Mart on the main floor) because many pharmacies in the community do not have the medicine in the injection form.



Please bring your private drug insurance card information or some form of payment. **This medication is not covered by OHIP or Ontario Drug Benefit.**

Preventing Falls

While you are in the hospital, we will take measures to keep you safe from falling.

We will put these items within your reach:

- Pull cord for light
- Bedside and bathroom call bells
- Bedside table, meals and drinks
- Personal items, eyeglasses and hearing aids
- Walker or gait aid (if you are able to use one on your own)

We will make sure:

- You know the members of your health team and their roles.
- To check on you often and that your pain is managed
- To check if your medicines put you at risk for of falling
- Your bed is in the lowest position, with brakes locked
- You know your room and bathroom and they are well lit
- Your path to the bathroom, doorways and hallways are clear and free of spills.

How you can help stay safe:

- Wear non-skid footwear
- Call for help if you feel weak or dizzy. For example, call if you feel weak or dizzy when getting into and out of your bed/chair or when walking.
- Do not lean on equipment for support, as most hospital equipment is on wheels.

Step 7: GOING HOME

Inpatient discharge time is 11:00 am.

Transportation Home

If you are having day surgery, the day surgery unit will contact your copilot when you are ready to be discharged.

If you stay in hospital overnight, please arrange for your co-pilot, friend or family member to arrive at 11:00am the day after your surgery to provide your transportation home.

Discharge Instructions

Before discharge, you will be given the following information:

- A **prescription for blood thinner medicine, pain medicine and a laxative**. You are encouraged to buy the blood thinner medicine at the Shoppers Drug Mart, on the main floor of the hospital, as not all pharmacies carry the specific medicine.
 - **You may experience wait times up to one hour at the pharmacy.**
- A **follow-up appointment with your surgeon** (6 weeks or as determined by your surgeon).
- A **staple remover**. Bring to your family doctor to remove your staples 14 days after your surgery.
- Confirmation of your **UHN Altum Health outpatient rehab location**. Call your Altum Health location number on page 9 of this guide, with any concerns.



Remember to book an appointment with your family doctor for 2 weeks after your surgery. Bring the staple remover to this appointment.

Managing your Medicine at Home

- Continue to take your blood thinner medicine as you have been instructed in the hospital, when you get home.
- You may or may not have pain at the time of discharge. **Your pain will get worse before it gets better in the days following your surgery.** Pain is a normal part of surgery and is to be expected. Pain should start to improve gradually 1 week after surgery.
- Keep taking your pain medicine as needed. You may need to take it regularly in the first few days after surgery but less frequently over the as the pain improves. **It is especially important that you take your pain medication 30 minutes before you do any physical activity.**
- As your pain level improves, try to extend the interval of time between your doses of pain medication to wean off this



Please refer to page 31 of this guide for information about taking opioid medicine and how to wean off your pain medicine.

During your recovery at home after surgery, you can contact our health care team with any questions or concerns you have at:

Call 416-603-5126

24 hours/7 days a week



In case of an Emergency, call 911 or go to your nearest Emergency Department.

Step 8: RECOVERY INSTRUCTIONS

When to Seek Help:

If you have a **blood clot in your lung**, you may experience:

- Shortness of breath
- Fast heartbeat
- Possible pain in your mid-back

THIS IS A MEDICAL EMERGENCY. Call 911 or go to the nearest emergency department.

If you have a **blood clot in your leg**, you may experience:

- Swelling in your leg, in addition to
- Extreme pain in your calf
- Possible redness at the back of your calf

Call (416) 603-5126, we are available 24 hours a day, 7 days a week. If for any reason you are unable to reach us, go to the nearest emergency department.

If you have an **infection**, you may experience:

- A fever
- Increased discharge and redness at the surgical incision
- Signs of infection in any part of your body

Call (416) 603-5126, we are available 24 hours a day, 7 days a week. If for any reason you are unable to reach us, go to the nearest emergency department.

Bandage Care

- Your incision, the cut made during surgery, will be covered with a bandage (dressing) after surgery.
- Watch around the bandage for increased redness, any fluid leaking or a bad smelling odour. **If this happens, call the 24/7 Orthopaedic Help line (416) 603-5126.**
- **The bandage is waterproof and can be worn in the shower. Do not submerge the bandage underwater, or take a bath.**
- If the bandage begins to peel away from your skin and your wound becomes exposed, **call the 24/7 Orthopaedic Help Line at (416) 603-5126.** Do not apply any cream to your incision.
- Your bandage will remain in place for 2 weeks after your surgery.
- You will follow up with your family doctor or surgeon 2 weeks after your surgery. They will remove your bandage and staples (if you have any) to check your incision.
- Do not submerge yourself in a bathtub, pool or hottub until the wound is completely healed (approximately 3 weeks after surgery).



See *UHN My Surgery* book page 46 to 50 for additional information about dressing care after surgery.

Swelling

Swelling is normal and should be **expected to last for several weeks to 6 months after your surgery.** You can manage your swelling in hospital and at home with the following:

- **Ice pack** (Apply for no longer than 10-15 mins at a time and always place something between the skin and the ice pack, like a thin cloth).
- **Game Ready or Cryocuff System** (speak to your nurse, surgeon or physiotherapist).

Pain Medication Management

The information in this section includes:

- **How to control your pain**
- **Why you need to wean off your pain medicine**
- **How to wean off slowly**
- **What happens if you stop suddenly**

You may be prescribed opioid medicine to help you with pain. Opioid medicines are a stronger pain medicine that your doctor or nurse practitioner gives you a prescription for. Your pain should improve slowly over time.

As your pain gets better, you will need to wean off your opioid pain medicine. This means slowly reducing the amount you take until you are not taking it anymore. This is important because this kind of medicine can be addictive.

If you are not sure how to wean off your opioid medicine, talk to your family doctor or nurse practitioner. You can also talk to the doctor or nurse practitioner who prescribed the opioid medicine for you.

How can I control the pain?

Your doctor or nurse practitioner may prescribe opioid pain medicine for you. As you slowly reduce the opioids, you can use other medicines to help you control your pain. While you were in hospital, these medicines may have been ordered for you. Some examples are:

Non-steroidal anti-inflammatory drugs (NSAIDs)

- These are drugs that prevent swelling, like ibuprofen (Advil), celecoxib (Celebrex) or meloxicam (Mobicox). NSAIDs also have daily limits on the amount you can safely take.

Acetaminophen (Tylenol)

- Taking too much Tylenol may damage your liver. If you already have a problem with your liver, you will need to reduce the total daily amount of Tylenol you can safely take.

Once you are off the opioids, you can wean off the other pain medicine. You can wean off more quickly, until you are not taking any more pain medicine.

Side effects of opiate medicines:

- Drowsiness
- Nausea and vomiting
- Itching
- Constipation

Signs and symptoms of an opioid overdose

- Weak or no breathing
- Dizziness
- Confusion
- Pale or bluish colour under the lips, gums, around eyes, and nails
- Cold or clammy skin
- Extreme drowsiness — unable to wake up or move, even when shouted at or shaken
- Choking or coughing or gurgling or snoring sounds
- Pupils are very, very small

If you notice these signs, call 911 right away and give naloxone, if available.

- Naloxone is a medicine that can help to reverse the effects of the overdose. More than one dose may be needed. The effects of naloxone are temporary.
- Naloxone is available from your pharmacy without a prescription.

How do I wean off?

Do not stop taking the opioid pain medicine right away. You should slowly reduce the amount you are taking until you are off the pain medicine.

You may be taking 2 kinds of medicine:

- A long acting (sustained release) pain medicine such as Hydromorph Contin, Oxyneo, or MS Contin
- A short acting (immediate release) pain medicine such as oxycodone, hydromorphone, morphine, or codeine
- ✓ **Wean off the long acting medicine first.**
- ✓ **Then wean off the short acting medicine.**

If you are taking Percocet (which contains 5 mg of oxycodone and 325 mg of Tylenol in each tablet), limit the total amount of Tylenol you take. Ask your family doctor, nurse practitioner or pharmacist to help you with this.

How slowly should I wean off?

There is a Canadian guideline for using opioids safely.

If you have been taking this medicine for less than 1 month after surgery:

- Slowly wean off the pain medicine.
- See the examples on next page.

If you have been taking pain medicine for more than 1 month:

- Wean off the medicine more slowly.
- Speak with the doctor or nurse practitioner who orders your pain medicine. They can help you with this weaning process.

Examples:

Do this to wean off long acting pain medicine:

Slowly reduce the dose you are taking. For example, you may take 1 less dose of the medicine every day. Do this over several days.

Your family doctor or nurse practitioner can help you cut down on the medicine. For example, if you are taking this medicine:

- 3 times per day, reduce to 2 times per day for 4 to 5 days
- 2 times per day, reduce to 1 time per day for 4 to 5 days
- 1 time per day, try stopping

Important: Never cut, chew or crush this kind of medicine.

Do this to wean off short acting pain medicine:

1. When you start weaning off the medicine, increase the amount of time between doses. For example, if you are taking a dose every 4 hours, extend that time:
 - Take a dose every 5 to 6 hours for 1 or 2 days.
 - Then, take a dose every 7 to 8 hours for 1 or 2 days.
2. After step 1, start to reduce the dose. For example:
 - If you are taking 2 pills each time, start taking 1 pill each time.
 - Do this for 1 to 2 days.
 - If you are taking 1 pill each time, cut the pill in half and take only half a pill each time. Do this for 1 to 2 days.

You may need to wean off opioid pain medicine faster than the above examples if:

- The medicine is too strong for you (you feel sleepy)
- You have sleep apnea (you have short but repeated stops in your breathing during sleep)

Safely store and dispose of your pain medicine

Pain medicine that is not stored or disposed of safely could be stolen or taken by mistake.

Safe storage

- Store pain medicine in a locked drawer or cabinet.
- Do not share your pain medicine. Pain medicine prescribed to you can be dangerous to others.

Safe disposal

- It is dangerous to keep unused or expired pain medicine that you no longer need.
- Take unused or expired pain medicine to a pharmacy for safe disposal.
- Do not flush medicine down the toilet.
- Do not throw medicine in the garbage.

What happens if I stop suddenly?

If you stop your opioid medicine suddenly, you may have symptoms of withdrawal. These can include:

Physical (body) symptoms like:

- Sweating
- Vomiting (throwing up)
- Fever
- Nausea (wanting to throw up)
- Diarrhea
- Shaking
- More pain

Other symptoms like:

- Cravings
- Feeling agitated or irritable
- Feeling tired and having trouble sleeping
- Aggression (feeling angry towards people)
- Anxiety (worried all the time)

These symptoms may start from 6 to 24 hours after taking your last dose of opioid pain medicine.

You can wait for the symptoms to pass over the next day or two. Or you can speak with your family doctor, nurse practitioner or pharmacist. They can give you medicine to help control your symptoms of withdrawal.

Withdrawal symptoms are not a sign that you are addicted. They are a sign that your body is used to taking the opioid regularly and needs to wean off it slowly.

Opioid medicines are not usually addictive if you take them for pain. But they can lead to addiction if you do not manage them carefully. So it is important to wean yourself off these medicines as soon as possible.

To prevent addiction, you may need to stop taking the opioid medicine and accept a moderate amount of pain.

If you have trouble reducing your pain medicines, please contact your family doctor, surgeon, prescribing doctor or nurse practitioner for help.

Remember:

- Do not drink alcohol while using opioid pain medicines
- Do not use sleeping pills or sedatives without talking to your doctor or nurse practitioner first.

Step 9: EXERCISES

You should complete the exercises in this chapter **before and after your knee replacement surgery**. Altum Health physiotherapy clinic will build on this program, providing you with new exercises, as your rehabilitation progresses.

Heel Slides with Belt



Repeat: 5 10 times

Hold for 15 20 seconds

How to prepare:

- Lie on your back with your knees straight.
- Put a belt or strap around your foot.

How to do:

- Gently pull the belt to bring your heel towards your behind and bend your knee towards the ceiling.
- Do not go past 90 degree of hip flexion.
- Keep your heel in contact with surface.
- Straighten your knee to return to the start.

Knee Extension Isometric



Repeat: 3 times

Hold for 5 seconds

How often: 3 4 times a day

How to prepare:

- Lie flat on your back.

How to do:

- Tighten the muscles on the top of your thigh by pushing the back of your knee into the floor and lifting your heel off the ground.
- Relax.

Quadricep Isometric (towel roll)



Sets: 3

Repeat: 10 times

Hold for 5 seconds

How often: 3 4 times a day

How to prepare:

- Lie flat on your back with a towel rolled under your knee, as shown.

How to do:

- Tighten the muscles on the top of your thigh by pushing the back of your knee into the towel roll.
- Relax.

Knee Extension Eccentric (roll)



Sets: 2 3

Repeat: 10 times

Hold for 3 5 seconds

How often: 3 4 times a day

How to prepare:

- Lie flat on your back.
- Place a roll underneath your knee, as shown.

How to do:

- Straighten your knee as much as you can.
- SLOWLY lower your leg back down.

Straight Leg Raise VMO Bias



Sets: 3

Repeat: 10 times

Hold for 5 seconds

How often: 3 4 times a day

How to prepare:

- Lie flat on your back with your legs straight.
- Rotate your foot to the outside.

How to do:

- Keeping your knee straight, lift your leg.
- Keep the other leg flat against the floor.
- Return to the start position.

Marching (may be modified or not done in hospital)



Sets: 2 3

Repeat: 8 10 times

Speed: SLOW

How often: 3 4 times a day

How to prepare:

- Stand with good posture, feet shoulder-width apart.
- Use a chair to balance yourself.

How to do:

- Lift one knee up as high as you can, then relax it back down.
- Lift other knee up as high as you can, then relax it back down.
- Maintain good posture and keep your hips level.

Side Stepping (may be modified or not done in hospital)



Sets: 2 3

Repeat: 8 10 times

Speed: SLOW

How often: 3 4 times a day

How to prepare:

- Stand in front of a countertop, hold on to it with your hands, as shown.

How to do:

- Lift leading leg to step to the side.
- While holding onto counter, step weight onto leading leg.
- Step other leg to side of leading leg.
- Repeat.

Sit to Stand (may be modified or not done in hospital)



Sets: 2 3

Repeat: 8 10 times

Speed: SLOW

How often: 3 4 times a day

How to prepare:

- While holding armrests, scoot your bottom forward on chair.

How to do:

- Incline your trunk slightly forward.
- Put your knees over your toes.
- Rise up to standing.
- Squeeze glutes as you rise to stand.

Walking



How long: 5 minute

How often: 3 4 times a day

- Walk as much as you can, either indoors, outdoors (weather permitting) or on a treadmill.
- Bring your walker/cane with you walking for the first few weeks.

FREQUENTLY ASKED QUESTIONS

What if I need to have another surgery or procedure?

Before having any surgery or procedure done for the first year after your joint replacement surgery, tell the health practitioner doing the procedure that you have had your joint replaced.

Antibiotics should not be routinely needed for procedures performed more than 3 months after your joint replacement. If your health practitioner is concerned, you can speak to your orthopaedic surgeon to determine if any special precautions are needed.

What do you need to know about having dental work before and after surgery?

Maintain good oral health. Plan to have any cleanings or dental work you need, done a minimum of 2 weeks before your surgery date.

Avoid dental cleaning and dental work for 3 months after joint replacement surgery, if at all possible.

Antibiotics should not be routinely needed for dental procedures performed more than 3 months after your joint replacement surgery.

If you do need to see the dentist within 3 months of surgery, talk to your orthopaedic surgeon to see if any special precautions are needed.

What if I get an infection in any part of my body?

If you think you may have an infection in any part of your body, please see your family doctor for assessment and treatment instructions.

When will I be able to climb stairs?

You will practice going up and down the stairs safely before you leave the hospital, if necessary.

When will I be able to go back to work?

This depends on the type of work you do. We encourage you to discuss this with your surgeon at your follow-up appointment.

How soon will I be able to walk on my own, without a walker or a cane?

About 4 to 6 weeks.

When will I be able to go swimming or play sports?

Ask your surgeon before swimming, taking part in any hydrotherapy activities or sports.

How long will the hardware (prosthesis) last?

This depends on your activity level after your surgery. Usually the prosthesis lasts 20 to 25 years.

Can I sleep on my side?

You can sleep on either side, as tolerated. Placing a pillow between your knees often improves comfort in the first few months after surgery.

How soon will I be able to travel?

Air travel and other forms of longer-distance travel can increase the risk of complications, especially in the first 6 weeks after surgery. Please speak with your surgeon if you anticipate a need to travel soon after surgery.

When can I have sex again?

About 6 weeks after surgery.

When can I drive again?

Most people will need to wait 6 weeks before driving, but this depends on the type of surgery you have. Please ask your doctor for more information before you resume driving again. Also check with your car insurance company.

For my PROMs, how is my health information collected and stored?

The information you give through your PROMs is collected and stored in a UHN data system called DADOS in collaboration with the ISAAC (Integrated Symptom Assessment and Collection) platform through Cancer Care Ontario.

DADOS and ISAAC are secure web-based electronic platforms. Only your health care team, staff who work with the DADOS/ISAAC platforms and Cancer Care Ontario can see your personal health information.

What if I change my mind about sharing my personal health information?

If you no longer want to share your personal health information through PROMs then your hospital can remove your information from the DADOS/ISAAC system

Who can access my personal health information?

The staff involved in treating you have access to your PROMs information.

Your information is also combined with the information of other patients treated in the clinic to see if there are any trends and for the purpose of quality control and provincial reporting.

Why is Cancer Care Ontario gathering my information?

Cancer Care Ontario is an agency of the Ministry of Health and Long-Term Care. It has been collecting patient reported outcome measures for more than 10 years and receives more than 30,000 new entries every month.

Since Cancer Care Ontario already has this experience and infrastructure in place, the Ministry of Health and Long-Term Care has commissioned Cancer Care Ontario to collect this data from orthopaedic patients.

Important: This guide does not include a full list of vendors, brands, or products. The University Health Network (UHN) does not recommend one company, brand, or product over another and is not responsible for the care or services provided, or for products listed. Please contact the vendors, agencies, and companies directly to receive up to date information or find out more about their products or services.

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