My Guide to Total Knee Replacement

Updated April 2011

This is a guideline only.

Please ask our staff if you have any questions or concerns.
Pre-Surgical Checklist

In preparation for your surgery, YOU MUST:

☐ Do not shave below the waist for 48 hours prior to your surgery

☐ Bring the following with you to the hospital:
  ✓ Standard Walker (no wheels)
  ✓ Cane or crutches
  ✓ Shoes or slippers with a rubber sole or grip
  ✓ Light weight robe
  ✓ A small overnight bag with clothes and personal care items

☐ Have a ride home arranged any time starting at 2 days after your surgery – you may be discharged home at this time

☐ Have a set plan for help at home - it is important that you are not home alone immediately after your surgery

☐ Have all your equipment set-up at home (e.g. raised toilet seat, bring bed down to main level, railings installed on stairs, etc.)

☐ Be prepared to participate in physiotherapy while in hospital and upon discharge home
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Contact Information

Patient Name: ________________________________

Surgery Date and Time: ________________________________

Arrival Time: ________________________________

Surgeon: Dr. Rajgopal

Office 3rd floor, Suite 332

Office Phone Number: 519-245-5775

If you have any questions about the contents of this booklet, please contact the physiotherapy department at Strathroy General Hospital at: 519-246-5901
This booklet was created to help address the many questions and concerns you may have about your upcoming total knee replacement. It includes information on what the surgery includes, how to prepare yourself for the surgery, what to expect in the days following the surgery, how to prepare your home for when you are discharged from the hospital, and tips that will hopefully make this experience as positive and stress-free as possible.

Please read this guide thoroughly and write down any questions you may have. Bring this booklet with you on the day of your surgery and for follow-up visits.
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The Healthy Knee

- The knee joint is the largest joint in the body and is made up of the kneecap (patella), thigh bone (femur) and shin bone (tibia)
  - Articular cartilage is a smooth elastic tissue that covers and cushions the surfaces of these bones and allows them to move smoothly
  - Menisci are “pads” of cartilage found between the femur and tibia that act as shock absorbers to protect bone surfaces
  - Ligaments give support to the knee in all directions
  - The knee moves like a hinge; these movements are generated by powerful leg muscles
Total Knee Replacement

A healthy knee moves without pain because the joint surfaces are covered and protected with cartilage. When the cartilage wears away, the bones rub together causing pain. Bony spurs can form in the knee joint or under the kneecap, which can make weight bearing, walking and even sitting very painful. This damage to the knee structures can be caused by osteoarthritis, rheumatoid arthritis, and previous knee injuries.

When other treatments no longer work and you cannot carry on with normal activities because of pain and limited movement, your doctor may recommend a total knee joint replacement.

There are 3 parts to the artificial knee:

1. The metal shell on the end of the thigh bone (femur)
2. The metal and plastic trough at the top of the shin bone (tibia)
3. The plastic button on the back of the kneecap (not shown on diagram)
Responsibilities Before your Surgery

You will need to begin making plans for your hospital stay and discharge home before your surgery:

1) Assistive Equipment
2) Preparing Your Home
3) Support at Home
**Assistive Equipment**

The following is a list of equipment that may assist you in your everyday activities following surgery. You will need to get these devices before your admission to the hospital and it is recommended you practice using these devices before your surgery. All of the equipment can be either rented or purchased within the community. For a list of vendors in your community, please visit [www.jointreplacement.thehealthline.ca](http://www.jointreplacement.thehealthline.ca) and click on “Medical Equipment and Supplies”

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gait Aids</strong></td>
<td><strong>Standard Walker (Mandatory).</strong> Will assist with your walking. It should NOT have wheels.</td>
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<tr>
<td></td>
<td><strong>Cane and/or Crutches (Mandatory)</strong>. Will assist you on the stairs and with your walking later on in your recovery.</td>
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<tr>
<td></td>
<td><strong>Handrails</strong>. These should be installed along stairs at home for safety.</td>
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<tr>
<td><strong>Bathroom Equipment</strong></td>
<td><strong>Raised Toilet Seat with Arms</strong>. Clamp-on or molded plastic styles for regular or oval toilet bowls.</td>
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<tr>
<td></td>
<td><strong>Grab Bars</strong>. Can be mounted into a studded bathroom wall or clamped to the side of the tub.</td>
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<tr>
<td></td>
<td><strong>Bathtub Transfer Bench</strong>. Useful for getting into and out of the tub. You will not be able to bathe until your staples have been removed (usually 2 weeks after your surgery) or until instructed by your surgeon.</td>
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<tr>
<td></td>
<td><strong>Hand Held Shower</strong>. For use with the tub bench.</td>
</tr>
<tr>
<td><strong>Dressing Devices</strong></td>
<td><strong>Sock Aid</strong>. To help put on socks or hosiery.</td>
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<tr>
<td></td>
<td><strong>Long-Handled Reacher</strong>. To help reach objects on the floor, overhead, or for dressing.</td>
</tr>
<tr>
<td></td>
<td><strong>Long-Handled Shoehorn</strong>. Useful to put on shoes or take off socks.</td>
</tr>
</tbody>
</table>
Assistive Equipment

- Standard Walker - MANDATORY
- Raised Toilet Seat with Arms
- Bathtub Transfer Bench
- Long-Handled Shoehorn
- Sock Aid
- Reacher
How to Prepare your Home

- If there are a lot of stairs to go up to your bedroom, consider moving your bed to the main floor temporarily. Look into borrowing or renting a bed if necessary.

- If you don’t already have them, install handrails on at least one side of each stairway, including any stairs outside the house. Consider installing a temporary ramp to access the house if needed.

- Remove scatter rugs and lose electrical cords as they may cause you to fall.

- Place things that you use often where you can easily reach them such as a telephone or lamp by your bed

- Place a rubber mat in your tub and/or shower.

- Make sure there is a clear, well-lit path from your bedroom to the bathroom.

- Install a sturdy grab bar in your bathroom. DO NOT use a towel rack as a grab bar; these are not safe.

- Arrange for someone to come in and help with household chores upon your return home. You will not be able to do tasks that require heavy lifting or bending, such as vacuuming, washing floors, laundry, and washing the tub.

- It is important that you have a good supply of nutritious foods at home.
  - Stock your freezer with healthy foods and pre-cooked meals
  - Arrange for family or friends to do your grocery shopping
  - If it is available in your area, you can have meals delivered to your house via Meals-on-Wheels. Contact your nearest Community Care Access Centre (CCAC) for details
Support at Home after your Surgery

It is important that you have someone (spouse, family member, friend, neighbour) to help you out at home when you leave the hospital.

If you live alone, you have several options:
- Arrange to stay with a family member or friend or have them stay with you. Consider going to the house/apartment that requires the least amount of stairs.
- Arrange for a convalescence / respite bed at a retirement or nursing home for a few weeks while you recover. For a list of available beds nearest you, please contact the Community Care Access Centre (CCAC) intake office at 519-473-2222. These beds will need to be arranged prior to your surgery (based on availability) and will cost a fee.

Community Care Access Centre (CCAC)

CCAC is responsible for home support services. You may have a visit from one of their therapists before your surgery to go over safety within your house, equipment, etc.

While in the hospital, you will have a consult with a CCAC case manager to discuss needs at home when you are discharged. You will likely be set-up with in-home physiotherapy for a few weeks after your surgery as well as nursing for dressing changes (if needed). CCAC typically DO NOT supply personal support workers for everyday needs, therefore if is important for you to arrange for help at home as stated above.
Day of Surgery

- **DO NOT** shave below the waist for 48 hours prior to your surgery or your surgery will be cancelled.

- Please plan to arrive at patient registration to ensure your arrival to SDC **two hours before surgery**.

- Expect to be in hospital for **2-4 days**. You need to arrange for a ride home anywhere from **2 days** after your surgery as you could be discharged home at this time. Discharge time is 11:00am.

- Do not eat or drink after midnight the night before your surgery except **a sip of water** with morning medications.

- The admitting nurse will review your operating room checklist, pre-op questionnaire, consent and surgical safety checklists and other assessments including any questions you or your family might have.

- You will have blood work taken and an intravenous will be started

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**What you need to bring to the hospital:**

- Standard walker (no wheels) and cane or crutches to assist with walking
- Shoes/slippers with rubber soles or grips
- A light weight robe
- A small overnight bag with clothes and personal care items
- Guide booklet
# Your Recovery in Hospital

<table>
<thead>
<tr>
<th>Tests and Treatment</th>
<th>You will have:</th>
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<tbody>
<tr>
<td></td>
<td>- An IV continued</td>
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<tr>
<td></td>
<td>- Vital signs checked at regular intervals</td>
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<td></td>
<td>- Dressing checked and changed throughout the day</td>
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<tr>
<td></td>
<td>- Blood tests</td>
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<tr>
<td></td>
<td>- Icing and/or wrapping of the knee regularly</td>
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<table>
<thead>
<tr>
<th>Medications</th>
<th>You may have medication for:</th>
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<tbody>
<tr>
<td></td>
<td>- Pain control</td>
</tr>
<tr>
<td></td>
<td>- Nausea</td>
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<tr>
<td></td>
<td>- Anti-Blood Clotting</td>
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<tr>
<td></td>
<td>- Antibiotics</td>
</tr>
<tr>
<td></td>
<td>- Your usual Medications</td>
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</table>

*Pain following surgery is normal. Please inform your nurse if you are experiencing pain or nausea.*

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>You will be offered a regular diet as your nausea level permits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>- Maintain regular sips of fluids after surgery to stay hydrated</td>
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<thead>
<tr>
<th>Consults</th>
<th>Physiotherapy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCAC</td>
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<tr>
<td></td>
<td>Anesthesia may follow you for pain control</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Education</th>
<th>Review post-op precautions, activity, and exercises</th>
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<tbody>
<tr>
<td></td>
<td>Review pain management and wound care</td>
</tr>
<tr>
<td></td>
<td>Review follow-up appointments and care of your knee at home</td>
</tr>
</tbody>
</table>

| Discharge Planning | CCAC will review home care needs (physiotherapy, nursing) |
|                   | Discharge is 2-4 days after surgery |
|                   | Follow-up phone calls |
|                   | Discuss post-op clinic check-ups, staple removal, etc. |
## Therapy Following Surgery

<table>
<thead>
<tr>
<th>Day 0</th>
<th>Your nurse may help with:</th>
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<tbody>
<tr>
<td>(day of surgery)</td>
<td>- Sit-up/stand at bedside</td>
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<tr>
<td></td>
<td>- Transfer to commode or bathroom</td>
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<td></td>
<td>- Deep breathing and coughing exercises</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Day 1</th>
<th>A physiotherapist will review:</th>
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<tbody>
<tr>
<td>(first day after)</td>
<td>- How much weight you may put on your leg</td>
</tr>
<tr>
<td></td>
<td>- How to protect your knee when moving</td>
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<tr>
<td></td>
<td>- How to move safely in bed and get in/out of bed</td>
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<tr>
<td></td>
<td>- How to transfer safely into a chair</td>
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<tr>
<td></td>
<td>- Exercises and stretches</td>
</tr>
<tr>
<td></td>
<td>- How to walk correctly using a walker</td>
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<tr>
<td></td>
<td>- Use of ice and/or wrapping</td>
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<table>
<thead>
<tr>
<th>Day 2-4</th>
<th>You will:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Participate with physiotherapy 2 times per day</td>
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<tr>
<td></td>
<td>- Do range of motion and strengthening exercises</td>
</tr>
<tr>
<td></td>
<td>- Walk short distances using a walker</td>
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<tr>
<td></td>
<td>- Sit in a chair</td>
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<table>
<thead>
<tr>
<th>Days 2-4</th>
<th>You will:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>- Continue with your exercises and walking with your therapist</td>
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<tr>
<td></td>
<td>- Practice climbing stairs with a cane or crutches</td>
</tr>
<tr>
<td></td>
<td>- Walk to/from bathroom independently</td>
</tr>
<tr>
<td></td>
<td>- Continue icing/wrapping your knee</td>
</tr>
<tr>
<td></td>
<td>- Be discharged home from the hospital with follow-up physiotherapy visits from CCAC</td>
</tr>
</tbody>
</table>

**IMPORTANT:** Upon discharge home, you will have several visits from a home care physiotherapist. After completion of therapy at home, it is your responsibility to arrange beforehand for additional physiotherapy appointments at an out-patient clinic in your area. These outpatient appointments may or may not cost a fee, depending on where you live.
Precautions

- **Doctors recommend that you do not drive a car for at least 6 weeks after your surgery.** It is therefore important that you arrange for transportation ahead of time.

- Many people are afraid to bend their knee after surgery, believing this could be harmful, especially since bending the knee is painful at first. But while certain movements should be avoided, you are encouraged to start bending your knee right away. Do it gently at first, but keep doing it!

- Do NOT rest your operated knee over a pillow. This can cause stiffness in both your knee and hip, making it harder to straighten your leg.

- Pain following surgery is normal and will continue over the next few months. Talk to your doctor about pain control options if pain is interfering with normal daily activities.
Post-operative Knee Recovery

**WHEN YOU GET HOME:**

- Use your walker or crutches until instructed otherwise by your physiotherapist.
- Continue the exercises 2-3 times per day as taught by the physiotherapist. The home care physiotherapist will not come to the house everyday so it is your responsibility to do your exercises regularly, especially knee bending and straightening as much as possible.
- Go for several short walks daily, with rest breaks in between.
- Ask your surgeon or physiotherapist when you are ready to use an exercise bike.
- Avoid jogging, jumping, lifting heavy weights, twisting, or any other activity that places excessive stress on your new knee.
- Place an ice pack (frozen peas or corn work well) around your knee for 15 minutes several times daily to help reduce swelling and pain.

**REST:**

- Sit in a chair or lie down after walking exercise. Do not let your legs hang down for longer than 1 hour – elevate your leg with a stool if needed.
- Don’t overdo it at the start. Slowly increase your walking distance to find your limits.
- It usually takes a few weeks to regain your energy.

**CARE OF YOUR INCISION:**

- You will have a follow-up appointment with the surgeon to have your staples removed (usually around 2 weeks after your surgery).
- Do not shower or get your incision wet until the staples have been removed and your incision is healed or instructed by your surgeon.
- Do not apply any creams or lotions to the incision unless given permission by the surgeon.

**FOLLOW-UP:**

- You will have several follow-up appointments to see your surgeon. It is very important you keep these appointments, or call to arrange another date.
- Call your surgeon immediately if any problems occur at home, such as a sudden increase in pain, redness, swelling, bleeding, discharge, or fever.
- Out-patient physiotherapy may be necessary after your CCAC home physio. It is your responsibility to make these arrangements.
- Ask your surgeon when you can return to work or resume driving.
- Handicapped parking stickers can be obtained from the Ministry of Transportation with a request form signed by your family doctor or surgeon.
Knee Exercises

1. Lie on your back with operated leg straight.
2. Tighten your thigh and buttock muscles, pushing the back of your knee down into the bed.
3. Hold 5 seconds, repeat 10 times, 3 times per day.

1. Lie on your back with legs straight.
2. Bend operated leg at hip and knee, sliding your heel toward buttock (you may use your strap to help).
3. Hold 5 seconds, repeat 10 times, 3 times per day.

1. Lie on your back with a can or roll under knee.
2. Raise your heel off the bed until your leg is straight.
3. Hold 5 seconds then slowly lower; Repeat 10 times, 3 times per day.

1. Lie on your back or in sitting with leg straight out.
2. Place strap around your toes and pull them up toward your hips until you feel a comfortable stretch in the back of your leg.
3. Hold for 15-30 seconds, repeat 5 times, 3 times per day.

Note: Place ice or a cold pack around the operated knee before and/or after your exercises for 10 mins to help reduce swelling & pain.
Stairs

* When you are first home, have someone with you when you do the stairs – that person should be close behind you on the way up and should be one step below you on the way down.

**Going UP stairs using a handrail – The GOOD leg steps up first**

1. Stand close to the step and hold onto the handrail with one hand, the cane in the other hand.
2. Put your weight through the handrail and on the cane.
3. Step up with the good leg.
4. Straighten the good leg and step up with the operated leg, and then bring up the cane.

* Shaded leg is the operated leg

1. Step up with the good leg.       2. Cane and operated leg step up together.

**Going DOWN stairs using a handrail – the OPERATED LEG steps down first**

1. Stand close to the edge of the step and hold onto the handrail with one hand, the cane in the other.
2. Bring the cane down to the lower step followed by the operated leg.
3. Put your weight through the handrail and on the cane.
4. Step down with the good leg.

* Shaded leg is the operated leg

1. Cane down first, followed by operated leg.       2. Step down with the good leg.
Other Resources

1) The Health Line  www.jointreplacement.thehealthline.ca

This website provides resources that will help prepare you for what to expect **before, during and after joint replacement surgery**, including access to patient guides and community resources within the South West Local Health Integration Network (LHIN) region of Ontario.

2) Middlesex Health Alliance Patient Education Guides

http://www.mhalliance.on.ca/MHA_Health_Info_Online_Library

Collection of health information developed by the Middlesex Hospital Alliance for patients that include topics such as how to use crutches, energy conservation strategies, and installing ramps.