Evidence indicates that the majority of patients can achieve comparable outcomes in community based rehabilitation post primary, unilateral hip/knee replacement versus inpatient rehabilitation provided that adequate therapy resources are available in a timely manner. The Orthopaedic Expert Panel has set a target of 90% ±10% for the proportion of patients who are discharged home from acute care with an average length of stay target of 4.4 days.

Early planning and education with patients in the pre-admission phase is a critical step in preparing patients for their surgery and discharge to home by day 4 post-op. Recognizing that each organization will implement processes in the pre-admission process in accordance with patient needs and available resources, the components recommended in this guideline reflect ideal approaches for consideration to support achievement of the new targets.

The following outlines key elements

1. **Pre-operative Education**

   There is a greater need for pre-operative education that is provided from a rehab perspective in light of the new direction to discharge the majority of patients directly home from acute care.

   Ideally pre-operative education should be offered **6-8 weeks before the date of surgery**. While education has been typically offered on the same day as the medical pre-op visit, earlier education with patients has two important benefits:

   a) Patients have more time to prepare for the discharge to home from acute care, including mobilization of family, friends or other community resources to support a safe discharge home.

   b) Patients can begin to do exercises to improve strength and fitness in advance of the surgery and support post-surgical recovery.

2 If the wait time from the patient’s first consult with the orthopaedic surgeon to date of surgery is shorter than 6 weeks, pre-operative education should be provided as early as possible following the first consult to provide enough time for the patient to prepare for surgery and discharge home.


3 Authors of a randomized control trial reported: “Our findings suggest that the key to successful early discharge of THR patients may be adequate preoperative education, exercise and training in the use of devices for assistance, and also rehearsal of postoperative physical exercise.” Siggeirsdottir, K., Olafsson, O., Jonsson Jr., H., Iwarsson, S., Gudnason, V. and Jonsson, B. Y. (2005). Short hospital stay augmented with education and home-based rehabilitation improves function and quality of life after hip replacement. Acta Orthopaedica,76(4), 555-562.
Length of class:
- Up to 1 ½ hours. Organizations that have been running classes have found that 1 ½ hours allows enough time to provide information and address questions.

Class Instructors:
- The class should be co-led by rehab professionals, ideally by one occupational therapist and one physiotherapist, who can respond to the broad range of questions that patients may pose.
- The class could also be co-led by one physiotherapist or occupational therapist and one rehab therapy assistant.
- At a minimum, the class could be led by a rehab therapy assistant alone provided that (i) the rehab assistant has the appropriate knowledge and training (i.e. Certified OT/PT Assistant graduated from a Ministry of Colleges and Universities approved Community College) and (ii) the occupational therapist and physiotherapist are available for consultation to address any questions outside of the rehab assistant’s level of expertise.
- It can be helpful to have a patient who has already undergone the surgery to participate in the information sharing part of the class.

Class Content:
- Information on the acute care stay and expected length of stay
- Information on preparing for a discharge to home by day 4 post-op (e.g. home safety, equipment needs, arranging for help with meal planning/preparation for 10 days and other household chores, daily phone contact with someone (friend, family member) to report daily status and follow up on exercises etc.)
- Information on the recovery process including pain management
- Written material to be provided

2. **Pre-operative Medical Workup**
Patients are typically seen approximately 2 weeks before the date of surgery for medical screening. The patient is typically seen by an RN, anaesthetist, other consultation services and has blood work and other tests done as needed.

3. **Discharge Destination Triage**
At the pre-operative medical visit, the patient is also assessed to confirm the discharge destination of the patient post-surgery. While the target for discharge to home has been set at 80% for patients discharged from TC LHIN acute care hospitals, there are some patients who will likely require inpatient rehabilitation.

---

4 The provincial target has been set at 90% ±10% and is to be negotiated by each organization with its own LHIN.

Guideline for Pre-admission Processes: Primary, Unilateral, Elective TJR / September 2011
The triage assessment should be conducted by an individual with a rehabilitation, social work or nursing background. However, it is recommended that members of the MSK clinical team be available for consultation to pre-empt and resolve any potential rehabilitation or psychosocial barriers that could delay discharge or preclude a discharge to home.

To conduct the triage, see Appendix A: “Discharge Triage Considerations for Patients Following Primary, Unilateral, Elective Hip/Knee Replacement.”

4. **Referral to Post Acute Rehabilitation following Triage Decision**

   a) For the majority of patients who are expected to be discharged home post surgery, a referral to outpatient/rehab is initiated in the pre-admission phase:
      
      o Referral for the first outpatient rehab appointment for patients who will receive a total knee replacement is based on the date of surgery and anticipated date of discharge on day 4 post-op. The date of the 1st appointment is to be scheduled ideally within 2-3 days and no more than 1 week of the anticipated discharge date from acute care or CCAC (if patient is expected to require CCAC post discharge.)
      
      o Mechanisms should be in place to communicate the date of the outpatient rehab appointment to the patient and inpatient acute care team; appointment to be confirmed by the inpatient team prior to the patient’s discharge from acute care.
      
      o Transportation options for outpatient rehab are discussed and provided to the patient including LHIN-subsidized programs. (See Appendix B for a list of TC LHIN funded programs)
      
      o A standardized outpatient rehab referral form has been developed: “Outpatient Rehab Referral Form: Elective Knee and Hip Surgery.” (See Appendix C)

   b) For patients who will likely require inpatient rehabilitation, an inpatient rehab bed is pre-booked using the “Rehab Pre-Admission Form: Elective Hip and Knee Surgery “ (See Appendix D)

---

5 Referral to outpatient rehab, if required, for patients who will receive a total hip replacement is typically determined at the first hospital follow-up visit.
The triage assessment should be conducted by an individual with a rehabilitation or nursing background. However, it is recommended that members of the MSK clinical team be available for consultation to pre-empt and resolve any potential rehabilitation or psychosocial barriers that could delay discharge or preclude a discharge to home.

**Referral to Outpatient Rehab or CCAC Rehab:**

All patients who do not meet the criteria for inpatient rehab as outlined below are appropriate for community-based rehabilitation upon discharge from acute care.

Determination of outpatient rehab versus a referral to CCAC is based on the following considerations:

- Patients who are able to access outpatient rehabilitation are to be referred to an outpatient clinic or private provider.
- Patients who are unable to access outpatient rehabilitation are to be referred to CCAC.

**Referral to Inpatient Rehab:**

Discharge to inpatient rehab should only be considered where there is a combination of concerns in the following areas that precludes a safe discharge to the community:

1. **Overall Functioning/Mobility:**
   - Does the patient have poor pre-operative function as demonstrated by any of the following:
     - The requirement for significant family support or formal community support services
     - Limitations in upper extremities that can impact post-op recovery in the community (particularly in cases where there will be weight bearing restrictions)
   - Is there insufficient strength/tolerance in the non-operative leg to support the patient’s post-op recovery in the community?
   - Is the patient limited in his/her ability to understand information provided?

2. **Post-op Risk:**
   - Is the patient at high risk of developing postoperative complications that may require regular monitoring by healthcare providers?\(^6\)

3. **Social Situation:**
   - Are there any barriers in the home environment that cannot be modified to support a safe discharge home (e.g. stairs; bathroom set-up; type of home)?
   - Is the patient’s need for support post-op anticipated to exceed what is currently available through informal or formal community resources to support a safe discharge to home?

---

**NB:** Patients who have limited or no social support but who answered ‘no’ to Questions 1 and 2 should be referred to CCAC and if possible seen pre-operatively to determine the risk of a home discharge.

---

APPENDIX B:

TORONTO CENTRAL LHIN - FUNDED TRANSPORTATION OPTIONS

The Toronto Ride Network, in operation for over 14 years, offers a collaborative approach to meeting unmet rides (to hospitals/clinics, doctors’ appointments, social/recreational engagements, shopping, with a priority on medical rides) requested by seniors across TC LHIN. In 2009/10, the partnership received close to 200,000 ride requests.

- Call-A-Service, Harmony Hall
- Etobicoke Services for Seniors
- West Toronto Services for Seniors
- Woodgreen Community Services
- Mid-Toronto Community Services
- St. Clair West Services for Seniors
- Humber Community Seniors Services
- Community Care East York
- Better Living Health and Community Services
- Neighbourhood Link / Senior Link
- Senior Peoples’ Resources in North Toronto (SPRINT)
- St. Christopher’s House
- Storefront Humber
- Warden Woods Community Centre
**APPENDIX C: OUTPATIENT REHAB REFERRAL FORM**

**Elective Hip and Knee Surgery – Replacements and Revisions**

The information contained herein is confidential. No unauthorized person will have access to the information without the consent of the patient/client or substitute decision-maker.

---

**Date of Referral:** Y/ _________ M/__________ D/_________

**Next of Kin/Emergency Contact:**
**Name:** __________________________________________
**Telephone:** _______________________________________

<table>
<thead>
<tr>
<th>Current Surgical Intervention:</th>
<th>Hip Replacement</th>
<th>Knee Replacement</th>
<th>Revision of Hip Implant</th>
<th>Revision of Knee Implant</th>
<th>Pin and Plate</th>
<th>Hemiarthroplasty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
</tr>
<tr>
<td>Left</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
<td>✑</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Primary Diagnosis:**
- Unknown
- Osteoarthritis (right)
- Osteoarthritis (left)
- AVN
- RA
- Other: ____________________________

**Date of Surgery:** Y/ _________ M/__________ D/__________  ❑ Date Unknown

**Secondary Diagnoses** *(Optional)*
- Unknown
- Stroke/Acquired Brain Injury
- Cardiac *(specify)*
- Diabetes Mellitus
- Respiratory *(specify)*
- Hypertension
- Other *(specify)*

**Language spoken (if not English):** ____________________________  Interpreter required: ❑ Yes ❑ No ❑ Unknown

---

**Treatment Recommendations**

**Restrictions**
- Weight Bearing _________________
- ROM _________________________
- Hip Abductors _________________

**Other Notes:**

---

**Attending Physician:**
**Name:** ____________________________  **Specialty:** ____________________________  **Phone:** ( ___ ) _____________

**Signature:** ____________________________

**Referral Contact:** ____________________________  **Phone:** ( ___ ) _____________

**Position:** ____________________________  **Pager:** ( ___ ) _____________
## Indicate risk factors that preclude safe discharge to community and necessitate inpatient rehab:

### Current Surgical Intervention:

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Hip Replacement</th>
<th>Knee Replacement</th>
<th>Revision of Hip Implant</th>
<th>Revision of Knee Implant</th>
<th>Pin and Plate</th>
<th>Hemiarthroplasty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
</tr>
<tr>
<td>Left</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Primary Diagnosis:

- [ ] Unknown
- [ ] Osteoarthritis (right)
- [ ] Osteoarthritis (left)
- [ ] AVN
- [ ] RA
- [ ] Other: ____________________________

### Secondary Diagnoses (check all that apply)

- [ ] Unknown
- [ ] Stroke/Acquired Brain Injury
- [ ] Diabetes Milletus
- [ ] Hypertension
- [ ] Other (specify): ____________________________

### Language spoken (if not English):

Interpreter required: [ ] Yes  [ ] No  [ ] Unknown

### Living Setting:

Prehospital: [ ] home  [ ] community  [ ] facility

Discharge: [ ] home  [ ] community  [ ] facility

Have discharge plans been discussed? [ ] Yes  [ ] No

### Past and relevant history:

Psychiatric: [ ] Unknown  [ ] No  [ ] Yes (specify): ____________________________

Medical: [ ] Unknown  [ ] No  [ ] Yes (specify): ____________________________

Surgical: [ ] Unknown  [ ] No  [ ] Yes (specify): ____________________________ Y/ _____ M/ _____ D/ _____

### Other Notes:

___________________________________________________________________________________________________________

### Date of Surgery:

Y/ _____ M/ _____ D/ _____  [ ] Date Unknown

### Date of Referral:

Y/ _____ M/ _____ D/ _____  [ ] Date Unknown

### Date Ready for Rehab/Self-Care:

Y/ _____ M/ _____ D/ _____  [ ] Date Unknown

### Physician/specialists involved in care of patient:

- **Name:** ____________________________  Specialty: ____________________________  Phone: ( ) __________________
- **Name:** ____________________________  Specialty: ____________________________  Phone: ( ) __________________
- **Name:** ____________________________  Specialty: ____________________________  Phone: ( ) __________________

Contact person: ____________________________  Phone: ( ) __________________

Position: ____________________________  Pager: ( ) __________________

---

APPENDIX D: REHAB PREADMISSION FORM

Elective Hip and Knee Surgery – Replacements and Revisions

The information contained herein is confidential. No unauthorized person will have access to the information without the consent of the patient/client or substitute decision-maker.

Guideline for Pre-admission Processes: Primary, Unilateral, Elective TJR / September 2011
APPENDIX D: REHAB PREADMISSION FORM

Elective Hip and Knee Surgery – Replacements and Revisions

The information contained herein is confidential. No unauthorized person will have access to the information without the consent of the patient/client or substitute decision-maker.