

# Total Knee Replacement

## GUIDELINE

REAHB SERVICES



### Purpose:

This guideline is designed to return the individual to their full activities as quickly and safely as possible, following a Total Knee Replacement. Modifications to this guideline may be necessary dependent on physician specific instruction or other procedures performed. This evidence-based Total Knee Replacement guideline is criterion-based; time frames and visits in each phase will vary depending on many factors. The therapist may modify the program appropriately depending on the individual's goals for activity following a Total Knee Replacement.

This guideline is intended to provide the treating clinician with a frame of reference for rehabilitation. It is not intended to substitute clinical judgment regarding the patient's post-operative care based on exam/treatment findings, individual progress, and/or the presence of concomitant procedures or post-operative complications. If the clinician should have questions regarding post-operative progression, they should contact the referring physician.

### Precautions:

- WBAT
- If patient has a concomitant injury/repair, weight bearing, or treatment may vary-consult with physician

PHASE	SUGGESTED INTERVENTIONS	MILESTONES FOR PROGRESSION
Pre-Op	PT to improve ROM, therapeutic exercises to improve functional strength, modalities to control pain and inflammation, manual therapy, and educate patient on upcoming surgery and post-op exercises	Instruct items as needed to address current deficit
Phase I Surgery-3 Weeks	<b>IP Therapy:</b> <ul style="list-style-type: none"><li>• Begin bed mobility, transfers, sitting EOB, standing EOB with FWW, and ambulation day of surgery</li><li>• AAROM and AROM exercises including:<ul style="list-style-type: none"><li>— Ankle pumps, quad sets, ham sets, SAQ, SLR</li></ul></li><li>• Bed mobility and transfers/gait with FWW</li><li>• Progress to independent HEP including:<ul style="list-style-type: none"><li>— LAQ, hamstring curls, polish the floor, bend on ball</li><li>— Address stair/curb training as needed</li></ul></li><li>• Begin ADL training prn including:<ul style="list-style-type: none"><li>— Reacher, sock aide, etc.</li><li>— Assist pt in acquiring equipment including bath chair, reacher, sock aide, toilet raiser, etc.</li></ul></li></ul> <b>OP Therapy:</b> <ul style="list-style-type: none"><li>• Control pain and inflammation, modalities PRN</li></ul>	<b>Goals:</b> <ul style="list-style-type: none"><li>• Skin healing</li><li>• Protection of joint replacement</li><li>• Return to least restrictive environment for continued care</li><li>• ROM 0-100°</li></ul> <b>Criteria to Advance:</b> <ul style="list-style-type: none"><li>• Healing as expected</li></ul>

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	<ul style="list-style-type: none"> <li>• Progress strengthening, muscle re-education, ROM, HEP, and independent mobility</li> <li>• Soft tissue mobilization for scar management</li> <li>• PROM/assisted stretch/grade 1-2 joint mobilization</li> <li>• Stationary bike on low resistance</li> <li>• Gait training to increase WB tolerance, decrease need for AD and progress to cane or no AD</li> <li>• Stair training using reciprocal pattern</li> <li>• SLR, assisted squats, toe taps</li> </ul>	
<b>Phase II</b> Weeks 3-6	<b>Therapy:</b> <ul style="list-style-type: none"> <li>• Regain endurance</li> <li>• Increase coordination and proprioception</li> <li>• ROM 0-110°</li> <li>• Restore normal gait, wean off assistive devices at 4 weeks</li> <li>• Control pain and inflammation with modalities PRN</li> <li>• NMES to quads if poor quadriceps recruitment is present</li> <li>• SLR without lag, add resistance towards the end of this phase</li> <li>• Progress HEP</li> <li>• Progress to closed chain exercises including:               <ul style="list-style-type: none"> <li>— Terminal knee extensions</li> <li>— Mini-squats &amp; lunges</li> <li>— Step-ups</li> </ul> </li> <li>• Strengthening in open and closed chain</li> <li>• Joint mobilization and assisted ROM</li> <li>• Proprioceptive exercises</li> </ul>	<b>Goals:</b> <ul style="list-style-type: none"> <li>• Healing &amp; swelling reduction</li> <li>• Increase in ROM</li> <li>• Improved strength</li> <li>• Neuromuscular re-education</li> </ul> <b>Criteria to Advance:</b> <ul style="list-style-type: none"> <li>• Healing as expected</li> </ul>
<b>Phase III</b> Weeks 6-12	<b>Therapy:</b> <ul style="list-style-type: none"> <li>• Return to prior activity</li> <li>• Improve flexion ROM past 110°</li> <li>• Gain eccentric-concentric control of limb</li> <li>• Independent ambulation</li> <li>• Progress to more independent HEP</li> <li>• Direct treatment to residual restrictions in ROM, strength, or function</li> </ul>	<b>Goals:</b> <ul style="list-style-type: none"> <li>• Swelling reduction</li> <li>• Increase in ROM</li> <li>• Neuromuscular re-education</li> <li>• Develop baseline of L/E control and strength</li> </ul> <b>Criteria to Discharge:</b> <ul style="list-style-type: none"> <li>• Normal gait pattern</li> <li>• Pain &amp; edema control</li> <li>• ROM goals achieved</li> <li>• Independent HEP</li> </ul>

