

# Total Knee Replacement Protocol

## Weeks 1-4

- PROM/AAROM/AROM – stretching for flexion (>90°) and extension
- Stationary bicycle – partial revolutions, increasing to full revolutions, without resistance
- Isometrics – quadriceps, hamstrings, glutes
- SLR in 4 planes (flexion, abduction, adduction, extension)
- Patella femoral and tibial femoral joint mobilization as indicated.
- Gait training with and without assistive device – weaning off between 2-4 weeks post-op

## Weeks 4-6

- Continue as above
- Add sit to stand and other chair exercises to increase flexion during functional activities
- Front and lateral step-ups and step-downs

### *Criteria for progression to next phase:*

- AROM 0-110°
- Good voluntary control of quadriceps
- Independent ambulation without assistive device or gait abnormalities
- Minimal pain/inflammation

## Weeks 7-12

- Progress current exercises by including resistance and increasing repetitions
  - Provide open and closed chain exercises as appropriate
- Begin and progress balance and proprioception activities

### *Criteria for progression to next phase:*

- AROM 0-115°
- 4+/5 MMT of all lower extremity musculature
- Minimal to no pain or swelling

## Week 12-16

- Continue progression of current exercises
- Begin return to specific recreational activities: i.e. golf, walking, biking)

### *Criteria for discharge:*

- Normal gait, not antalgic
- Independent with stairs, with step over step climbing
- Pain-free AROM
- Strength at least 4+/5 for all lower extremity MMT
- Normal, age-appropriate balance and proprioception
- Independent with home program

### References:

Adapted from Total Knee Arthroplasty Protocol of Department of Rehabilitation Services, Brigham & Women's Hospital, Boston, MA