## **PAIN CONTROL:**

- Discontinue or minimize provocative symptoms including prolonged sitting with knees flexed, ADLs, stairs, squats, lunges, sports that require significant quad usage
- Home icing program as needed
- VMO stim PRN
- Massage PRN

### **RANGE OF MOTION:**

- As tolerated
- Prone quad stretching
- Passive supine straight leg hamstring stretches
- Passive ITB, groin stretching
- Passive medial patellar glides and tils
- Calf stretching

# STRENGTH:

- Progress as pain allows
- Endurance:
  - Start with 10 reps 2-3x/day
  - Increase reps by 5/day to a max of 30
  - Reps then reduced to 10 and 1 pound weight added to ankle
  - Repeat until lifting 3-5 pounds for 30 reps
- Quads:
  - Modify PRN to minimize pain
  - Isometrics, terminal knee extensions, closed chain, progression to full range as tolerated
  - Emphasize VMO strengthening
- Hamstrings
- Adductors
- Glutes
- Core
- Cardiovascular conditioning
  - Nordic track, bike, slideboard
  - Progress to stairmaster, elliptical, running

#### WEIGHT BEARING:

As tolerated

#### **MODALITIES:**

- EMG biofeedback to VMO to enhance control
- Cryotherapy after exercises
- US PRN

#### BRACING:

McConnell taping +/- PF brace PRN