Phase II: POW 4-6 (Controlled Stability Phase)
GOALS:
Independent ambulation without assistive device and no deviations
Independent with stairs
ROM 0 to 130+ degrees of motion
Single leg balance for greater than 15 seconds

POW 4-6
EXERCISES:
Continue with above but begin working on endurance by increasing the number of repetitions done, more biking, gait training WBAT, adding resisted side stepping (straight, diagonal CW, CCW), increase the level of the total gym and move to single leg as tolerated. Add wall slides and single leg stance activities for balance (heel raises, reaching activities, soule roll, BAPS, CKC activities.
MODALITIES:
As indicated
FREQUENCY:
1-2 times per week

POW 6-8
EXERCISES:
Continue as above. Add elliptical trainer/Nordiac track, step ups (2”, 4” 6”, 8”), balancing activities (static and dynamic), sport cord, treadmill forward and backward, leg press, leg press, leg curls, mini-trampoline, whole body balance strategies.
FREQUENCY:
As indicated
Post op

Phase III: POW 10 to POM 4 (Functional Strengthening)
GOALS:
Increase strength to allow for functional progression
Improve balance and proprioception to allow for functional progression
Restore local muscular and cardiovascular endurance

Criteria for entering Phase III
1. Satisfactory clinical exam
2. Full A/P ROM
3. Normal gait pattern and reciprocal stair negotiation

EXERCISES:
Begin 4-6 sets of 8-20 repetitions of the current weight program. Progress to single leg activities and eccentric control. Emphasis on closed chain activities. Progress to unstable surfaces for balance/coordination – slide board, Swiss ball, balance beam, fitter etc. Endurance activities – internal training: Bike, stair stepper, elliptical trainer/Nordic track, slide board, treadmill walking, aquatic activities.
FREQUENCY:
As indicated.

Phase IV: POM 4-6 (Return to Function)
GOALS:
Normalize strength, proprioception and endurance
Prepare for return to sports/occupation
Provide confidence in performance of knee
Criteria for entering Phase IV
1. Satisfactory clinical exam
2. Girth within 1” or isokinetic test less than 25% deficit
3. Equal single leg stance

EXERCISES:
Continue with Phase III activities decreasing the number of exercises while increasing the intensity of the program. Progress to a maintenance program by decreasing sets and reps, increase the load, decrease time and increase power, increase rest and recovery.

FREQUENCY:
As indicated.
Prepare for return to sports by progressing eccentric strength for control of increased speeds, loads and directions and progress for direction, speed, and variations.
Recognize that impulse loading activities such as jumping needs to be minimized during the early period of functional return.

Step 1: Jog Progression
Fast walk, high knee march, cariocias, figure “8”, 4 way reaction drill, eccentric step-offs/loading, jog

Step 2: Double leg jump progression
Shuttle (speed/load), jump rope (speed/duration), line jumps (direction/height/speed), box jumps (direction/height/speed),
distance jumps (direction/height/speed).

Step 3: Sprint progression
Increase speed of all above drills, add sport replication activity

Step 4: Single leg hop progression
Shuttle (speed/load), jump rope (speed/duration), line jumps (direction/height/speed), box jumps (direction/height/speed),
distance jumps (direction/height/speed).

RETURN TO SPORT/OCCUPATION CRITERIA
1. Satisfactory clinical exam
2. Less than 10% isokinetic strength deficit for quads
3. Satisfactory completion of sport replication activity
4. Pass single leg functional tests, the average of 3 trials with less than 15% deficit.
   a. Single leg hop for distance
   b. Single leg triple cross-over hop for distance (15 cm wide)
   c. Single leg hop for time over 6 meters
   d. Single leg hop for vertical height