Non-Operative Rehabilitation Program for PCL-Deficient Knee

Name: ___________________________________________ Date: ____________________

Diagnosis: ______________________________________ Date of Surgery: ____________

PHASE I - PROTECTION PHASE (Day 1- Week 4)

• **Day 1-5**
  - Brace ROM: 0-70°
  - Weight-bearing: two crutches as tolerated
  - Muscle Stimulation: muscle stimulation to quads
  - Exercises
    - Quad sets
    - Straight leg raises (all 4 planes)
    - Knee extension (60° to 0°)
    - Multi-angle isometrics at 60°, 40°, 20° (for quads)
    - Mini squats (0-50°)
    - Leg press (45-90°)

• **Day 5-7**
  - Brace ROM: 0-90°
  - Weight-bearing: progress as tolerated
  - Exercises
    - Continue all strengthening exercises
    - Initiate wall squats
    - Initiate proprioception training

• **Weeks 2-3**
  - Brace ROM: 0-115°
  - Weight-bearing: one crutch then without at week 3
  - Exercises
    - Progress exercises (listed above), using weight progression
    - Bicycle for ROM stimulus (week 2-4)
    - Pool program
    - Leg press (30-90°)
    - Vertical squats (0-60°)
    - Lateral step-ups
    - Single leg squats

PHASE II - MODERATE PROTECTION PHASE (Week 3-6)

• **Week 3**
  - Brace: discontinue
  - ROM: to tolerance (0-125°)
  - Exercises
    - Continue all above exercises (progress weight)
    - Bicycle
    - Stairmaster
    - Rowin
    - Knee extension (90-0°)
    - Mini squats (45-60°) (0-60°)
    - Wall squats (0-75°)
    - Step-ups
• Hamstring curls (light resistance) (0-45°)
• Hip abduction/adduction
• Toe-calf raises
• Proprioception training (biodex stability system)

• **Week 4-6**
  o Brace: fit for functional brace
  o Exercises
    ▪ Continue all above exercises
    ▪ Pool running
    ▪ Agility drills

**PHASE III -MINIMAL PROTECTION PHASE**
• Exercises
  o Continue all strengthening exercises
  o Initiate running program
  o Gradual return to sport activities
• **Criteria to Return to Sport Activities**
  o Isokinetic quadriceps torque to body weight ration
  o Isokinetic test 85% > of contralateral side
  o No change in laxity
  o No pain/tenderness/swelling
  o Satisfactory clinical exam

**Comments:**

**Frequency: _____ times per week**
**Duration: ____ weeks**

**Signature:_________________________________________**
**Date: ____________________**