ACL rehabilitation overview and criteria checklist adapted from: Melbourne ACL rehabilitation guide 2.0 (Randall Cooper and Mick Hughes).

1. Pre-op Phase: Injury recovery & readiness for surgery

Goals: Eliminate swelling and Regain full range of motion

Exit criteria: *0 deg passive knee extension *125 + passive knee flexion *0-1+ Stroke test

2. Recovery from surgery

Goals: Full knee extension, swelling down to mild, increase quadriceps motor control

Exit Criteria: *0 – 5 degrees Quadriceps lag test *All other exit criteria as above

3. Strength & neuromuscular control

Goals: single leg balance, muscle strength, single leg squat technique

Exit Criteria: *0 score Stroke test *Single leg calf raises >85% vs. contralateral

*Functional alignment test: 5 x single leg squat test (= 'Good')

*Unipedal stance test (eyes open: 43 sec, closed: 9 sec)

*Single leg bridge strength (20 reps) and endurance test (30 sec) and >85% contralateral

4. Running, agility, and landing

Goals: Hopping performance, agility program, modified game, full strength/balance

Exit Criteria: All hop tests >95% compared to contralateral side

- *Single leg hop test *Triple hop test *Triple cross over hop test *Side hop test
- *Single leg squat (>22 repetitions both limbs)
- *Cooper & Hughes Sports Vestibular Balance Test = Pass on both limbs
- *Star Excursion Balance Test (Gribble et al, 2012) >95% vs. contralateral side

5. Return to sport

Exit Criteria: >95/100 Melbourne Return to Sport Score (Authors: Randall Cooper & Mick Hughes)

- I. Clinical examination: *Pivot-shift test, *Prone hang test, *Effusion, *PROM flexion
- II. Functional testing: Dynamic/vestibular balance tests as above Single leg rise test (90deg flexion) *Single hop *Triple hop *Triple cross over hop test *Side hop
- III. Fatigued state (7/10 VAS scale): Single hop, Triple hop, Triple cross over, Side hop
- IV. General fitness tests: Pass/Fail sport specific
- V. Questionaries: *IKDC Subjective Knee Evaluation *ACL-RSI *Tampa Scale of Kinesiophobia.