

## Houston Methodist Lower Extremity Active Performance (LEAP) Inventory

Patient: \_\_\_\_\_ Injury: \_\_\_\_\_ Laterality: \_\_\_\_\_

Date of Surgery: \_\_\_\_\_ Date of Testing: \_\_\_\_\_ Sport: \_\_\_\_\_

Strength:	Result		Percent of Contralateral
1. SL squat	L: _____ cm	R: _____ cm	
<b>Functional Hop Testing:</b>			
2. SL hop for distance	L: _____ cm	R: _____ cm	
3. Triple hop	L: _____ cm	R: _____ cm	
4. Crossover hop	L: _____ cm	R: _____ cm	
5. Timed 6 meter hop	L: _____ sec	R: _____ sec	
6. SL lateral hop	L: _____ cm	R: _____ cm	
7. SL medial hop	L: _____ cm	R: _____ cm	
<i>Functional Hop Test Aggregate</i>	<i>(Sum of percentages ÷ 6) =</i>		
<b>Optional Advanced Functional Testing:</b>			
1. Modified T-test	L: _____ sec	R: _____ sec	
2. Max SL vertical jump	L: _____ cm	R: _____ cm	
3. 5-10-5 Pro Agility	L: _____ sec	R: _____ sec	
<i>Adv. Functional Test Aggregate</i>	<i>(Sum of percentages ÷ 3) =</i>		
Qualitative Assessment Comments:			

1. Gokeler A, Welling W, Benjaminse A, et al. *Orthopaedics & Traumatology*. 2017;103: 947-951.
2. Redler LH, Watling JP, Dennis ER, et al. *Phys Sportsmed*. 2016; 44(1): 46-52.
3. Gagnon SS, Birmingham TB, Chesworth BM, et al. *JOSPT*. 2017; 47(8): 557-564.
4. Hardesty K, Hegedus EJ, Ford KR, et al. *IJSPT*. 2017; 12(2):182-189.
5. Lee DW, Yang SJ, Cho SI, et al. *Knee*. 2018; 25(6): 1016-1026.

**Testing Procedures:**

Ensure adequate warm up prior to testing. Patient may perform up to 3 repetitions of each test – the average should be recorded for each limb per test. Discontinue testing if quality is inconsistent or otherwise deemed unsafe.

TEST	DESCRIPTION
1. SL squat	Stance leg is test leg. Reach opposite limb in front during single-leg squat as far as possible. Measure distance from front of stance foot to the opposite heel.
2. SL hop for distance	Single-leg hop x1 in straight line. Ensure good take-off and hold the landing x2-3 sec. Measure front of foot from take-off to landing.
3. Triple hop	Single-leg hop x3 consecutively in straight line. Ensure good take-off and hold the landing x2-3 sec. Measure front of foot from take-off to final landing.
4. Crossover hop	Single-leg hop x3 in crossover pattern with approx. 30cm lateral distance from midline. Measure front of foot from take-off to final landing.
5. Timed 6 meter hop	Single-leg hop as fast as possible in 6m distance. Cue to jump “through” the end. Time from initial take-off to crossing over 6m line.
6. SL lateral hop	Single-leg jump with 90deg rotation away from testing limb. Measure distance from lateral foot before take-off to front of foot at landing.
7. SL medial hop	Single-leg jump with 90deg rotation toward midline. Measure distance from lateral foot before take-off to front of foot at landing.

