Category	Category 3: compensation, disability management and return to work
Year Funded:	2011-2012
Budget:	$10,050
Investigators:	Richard Boorman, University of Calgary
Funding Agency:	Workers' Compensation Board-Alberta
Title:	Development of a new clinical test for long head biceps pathology: the SAW Test
Issue/Rationale:	Injury to the long head biceps tendon (LHB) can cause pain, instability, grinding, loss of shoulder range of motion, and decreased elbow flexion and supination. Ongoing pain and disability related to a LHB injury can cause significant time loss for an injured worker while they are waiting to find out what is wrong with their shoulder, and subsequently, for it to be fixed. Because LHB pathology is highly associated with other shoulder pathologies, it can be difficult for a clinician to diagnose. MRI assessment of the LHB is also relatively poor, and often does not assist the clinician in making the correct diagnosis. Frequently, LHB pathology is only discovered/confirmed once a patient has consented for surgery for some other primary diagnosis. Different physical exam maneuvers have been described in the literature to diagnose biceps pathology, including the Yergasons test and Speeds test. However, the reported sensitivity and specificity of these tests is relatively low. A new clinical test that is simple to perform and has high sensitivity and specificity would be very useful in helping to efficiently and accurately diagnose LHB pathology.
Objectives:	The primary objective of this study is to determine the sensitivity and specificity of a new clinical test, the Saw test, designed to diagnose injuries to the long head biceps tendon in a clinical setting. Sensitivity and specificity of the Saw test will be compared to current LHB tests; the Speeds test and the Yergasons test. Arthroscopy will be considered the reference standard for identifying the “true” pathology of the LHB tendon.
Anticipated Results/Impact:	We anticipate that this new test will allow for efficient and accurate diagnosis of biceps tendon pathology in the clinical setting, which could assist surgeons in determining a patient’s appropriateness for surgery. Workers who experience an injury to their LHB will be provided with more accurate and timely diagnosis of their condition, which can lead to more timely treatment, and subsequently less time off work. Further, expensive but relatively inaccurate tests, such as MRI, can be avoided which results in further cost savings to WCB.
Keywords:	SAW test, long head biceps tendon, shoulder, diagnosis, surgery decision-making