Research Project Details	
Title	Ten Year Follow-Up of Non-Operatively Treated Rotator Cuff Patients
Investigator(s)	Dr. Rich Boorman, University of Calgary
Funding Period	2018-2022
Budget	$54,758.70
Issue/Rationale	Rotator cuff tears are the most common cause of shoulder pain and dysfunction in adults, and become more prevalent with increasing age. It has generally been accepted that surgery was the best method of treatment; however, rotator cuff repair is a painful surgery with a long recovery time. Rehabilitation of 6 months or more is expected, with longer recovery times for those who don't comply with instructions, who experience complications, or have physically demanding jobs to return to. Continued physiotherapy is both expensive and time-consuming for patients. If non-operative treatment can be shown to be as effective as surgery in the long term, injured workers would have an evidence based alternative to surgery which may allow earlier return to work and significant cost-savings to WCB-AB.
Objective(s)	• To determine quality of life outcomes (using the Rotator Cuff Quality of Life Index - RCQOL) of patients 10-years after a course of non-operative treatment for a chronic, full thickness rotator cuff tear. • To determine clinical outcomes (range of motion and strength) of patients 10-years after a course of non-operative treatment for a chronic, full-thickness rotator cuff tear. • To determine anatomic outcomes (via x-ray and MRI) of patients 10-years after a course of non-operative treatment for a chronic, full-thickness rotator cuff tear.
Anticipated Results/ Impact	Based on two- and five-year results, we anticipate that the majority of patients will continue to be successful (that is, avoid surgery) with the non-operative treatment program. Further, we anticipate that quality of life scores between those previously classified as successful (no surgery) and those who underwent surgery will not be statistically significantly different. We hypothesize that most patients will have maintained their range of motion and strength from baseline. From an anatomic outcome, we anticipate that the majority of patients will not show signs of proximal humeral migration indicating cuff tear arthropathy, nor significant progression of their cuff tears as compared to their baseline imaging 10 years prior. Based on these anticipated outcomes, the evidence in favor of non-operative treatment will continue to grow and be strengthened. The general criticism that non-operative treatment delays inevitable surgery will be refuted, and Albertan workers will have an evidence based treatment alternative to surgery.
Keywords	Rotator cuff, long-term follow-up, outcomes, non-operative treatment