Shoulder and Back Injury Management Programs

WorkSafeNB has been working with shoulder orthopaedic surgeons in the Southwest region and is starting to work with back orthopaedic surgeons in the Southwest and Southeast regions to improve injury management for claimants. The objectives are twofold: (1) to reduce pressure on physicians to provide medical solutions for claimants at risk of prolonged disability from psychosocial factors, in the absence of objective clinical findings; and (2) to facilitate early access to orthopaedic surgeons for non-emergency claims, when claimants have specific objective clinical findings.

Claimants at risk of prolonged disability from psychosocial factors often have little or no objective clinical findings. Many have a tendency to pain catastrophizing and fear avoidance. Research shows that pain catastrophizing predicts: (1) *pain intensity* (Buer and Linton 2002; Demmelmaier, Lindberg et al. 2008; Campbell and Edwards 2009; Beneciuk, Bishop et al. 2010; Demmelmaier, Asenlof et al. 2010), (2) *chronic pain disability* (Turner, Jensen et al. 2000; Buer and Linton 2002; Picavet, Vlaeyen et al. 2002; Turner, Jensen et al. 2002; Shaw, Pransky et al. 2007; Demmelmaier, Lindberg et al. 2008; Campbell and Edwards 2009), (3) *submaximal performance on muscle testing* (Verbunt, Seelen et al. 2005); (4) *analgesic intake* (Jacobsen and Butler 1996; Severeijns, Vlaeyen et al. 2004) – *opioid intake* (Jensen, Thomsen et al. 2006); (5) *post-surgical pain and disability* (Granot and Ferber 2005; Pavlin, Sullivan et al. 2005; Roth, Tripp et al. 2007; Forsythe, Dunbar et al. 2008; Papaioannou, Skapinakis et al. 2009; Riddle, Wade et al. 2010; Sommer, de Rijke et al. 2010), (6) *poorer response to radiofrequency, nerve blocks and injections* (van Wijk, Geurts et al. 2008); (7) *activity intolerance* (Buer and Linton 2002; Sullivan, Rodgers et al. 2002); (8) *work absence* (Sullivan and Stanish 2003; Sullivan, Ward et al. 2005; Wideman, Adams et al. 2009); and (9) *higher health care utilization* (Severeijns, Vlaeyen et al. 2004; Jensen, Thomsen et al. 2006).

Building on its experience in the High Risk study (*see NBMS Winter 2010 newsletter "STI Claims at High Risk for Prolonged Disability"*), WorkSafeNB has developed caremaps with the shoulder orthopaedic surgeons for claimants with shoulder injuries who are on benefits at 4 weeks from accident or recurrence (*see NBMS Summer 2009 newsletter "Shoulder Injury Caremap-SW Pilot"*). WorkSafeNB is working with back orthopaedic surgeons to develop similar case management caremaps for claimants with back injuries.

At nine months into using the shoulder injury caremaps, referrals for imaging and consultations in the absence of objective clinical findings are significantly down. Average claim duration for non-surgical cases is 15 weeks – down from 38 weeks. Return to work is 98% – up from 78%. Some claimants with firm indications for surgery are challenging for the surgeon because they exhibit pain catastrophizing and fear avoidance. These claimants are at risk for prolonged post-op recovery. WorkSafeNB case managers and medical advisors are working with surgeons to see what pre-op cognitive-behavioural interventions might improve recovery.

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Shoulder and Back Injury Management Programs

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