

A Primary Health Approach to Treating Soft Tissue Injuries: The New NS-WCB Physiotherapy Treatment Model

Recently, the Nova Scotia Worker's Compensation Board (NS-WCB) and Nova Scotia physiotherapy clinics have entered into a new service provider contract. Under this contract, a worker who sustains a workplace musculoskeletal soft tissue injury (STI) can see a physiotherapist in a primary care role. Here, the worker's access to physiotherapy assessment and treatment is direct (i.e. no medical referral) and early (i.e. within 72 hrs). The Nova Scotia physiotherapy community - represented by the Nova Scotia Physiotherapy Advisory Group - supports the new NS-WCB primary care role for physiotherapists treating workers with musculoskeletal STIs. In this article, our purpose is to briefly review the role of physiotherapy in primary health care, introduce the innovative NS-WCB STI treatment model and close with a suggestion of future physician / physiotherapy collaborations in treating STIs in injured workers.

The Role for Physiotherapists as Primary Health Providers in Musculoskeletal Injuries

Although well established in parts of Europe and the United States, direct and early access to physiotherapy is only slowly being established in Canada in private and public institutions² and in the military¹². Regardless of where physiotherapists play their primary care roles, there is evidence that direct access and early treatment of musculoskeletal STIs by physiotherapists produces favorable outcomes in three ways: The first is *therapeutic effectiveness*. Here, research shows that primary care physiotherapists are as effective as doctors⁸ and surgical residents⁴ at diagnosing musculoskeletal STIs and are more effective than non-primary care physiotherapists at improving functional outcomes¹--particularly where physiotherapy treatment is delayed beyond three days after injury¹⁰. This suggests that timing of a physiotherapy intervention is critical. The second improved outcome, *cost effectiveness*, is centered on time loss-from-work, since it accounts for up to two-fifths of the cost of managing MSK injuries⁷. When a physiotherapist treated patients within 5 days of injury, they had significantly less time loss-from-work, as compared to patients who received treatment beyond the five-day mark¹⁴. This is a strong financial case for early physiotherapy intervention in soft tissue injuries. Finally, the literature shows evidence of patient *satisfaction* with treatment outcomes^{1,5} and physician *satisfaction* with primary care physiotherapists' proposed management plans³ and patients' functional outcomes¹³.

The New NS-WCB Physiotherapy Treatment Model

Appropriate care, by the appropriate person, at the appropriate time—the new Health Canada maxim¹⁵: *Appropriate care* in the NS-WCB physiotherapy treatment model emphasizes return to work and prevention of disability (a disabled worker is unable to perform pre-accident job at the pre-injury level of function). In the context of this article, the *appropriate person* emphasizes both direct access to a physiotherapist and a multi or interdisciplinary team approach to treatment that includes defined communication roles and prescribed timelines for case management^{10,11}. Finally,

appropriate timing is achieved through early access to physiotherapy. This facilitates treatment in the acute / sub-acute phases to prevent disability¹, reduces treatment delays¹⁰, and allows prompt measurement of the injured worker's functional abilities¹⁴. This also facilitates early identification of barriers to successful treatment, such as psychosocial, financial, and transportation issues⁶.

Timelines: The new NS-WCB Physiotherapy Treatment Model for STIs is divided into two time frames--based on the stages of healing: Weeks 1 to 4; Weeks 5 to 8.

- In weeks 1 to 4 (acute / sub-acute), the focus is on return to work. Based on the Presley Reed Group's *Medical Disability Advisor*¹⁶, the expectation is that 75% of workers with STIs will return to work in this time frame. In support of the return to work focus, physiotherapists play primary roles in assessment, treatment and communication during this time. Here the physiotherapist:
 - Evaluates the worker by conducting the standard physiotherapy examination and Functional Abilities Assessment and administering a psychosocial risk factors questionnaire to identify barriers to recovery⁶
 - Treats with a primary goal to reduce functional restrictions (e.g. inability to lift or to climb stairs) and a secondary goal of treating the injured worker's impairments (e.g. weakness, pain).
 - Communicates with the WCB-NS and other health care providers (i.e. assessment findings, functional restrictions, treatment plan) and the employer (i.e. confirm job demands, determine availability of transitional work). Note, that transitional work is defined as "*tasks or jobs that are not expected to be the final outcome of a worker's return to work*"¹⁷
- In the second treatment stage (weeks 5 to 8), the focus remains on return to work, and identification of barriers to recovery, but also expands to include a *Fit For Work / Work Preparation* theme. Here, the physiotherapist's role expands to include job simulation with job specific treatment goals.

The new model in action: To illustrate safe and effective physiotherapy management of an injured worker within this NS-WCB STI model, consider the actual case of John D., a 36 year old delivery person who slipped and injured his knee on an icy street. On that same day Mr. D. was seen by a physiotherapist who reported that the patient had impairments consistent with a medial collateral ligament sprain, minimal restriction of functional abilities, and no psychosocial risk factors. In conversation with the physiotherapist, the patient's employer readily arranged for him to return to transitional work on Day 2. By Day 6, post-injury, the physiotherapist suggested an expansion in Mr. D.'s hours and duties and by Day 12, the worker had returned to full hours; full duties. Given ongoing strength and functional deficits, Mr. D. continued attending physiotherapy treatments. On Day 29, it was determined that Mr. D.'s return to work was durable and he was discharged from physiotherapy.

This brief case scenario presented an uncomplicated injury in a motivated patient who worked for a cooperative employer. Nonetheless, this case is "typical" in that--as predicted in the *Medical Disability Advisor*¹⁶--this patient was one of 75% of workers with an STI who would return to work within the first month post-injury. This case could

be deemed a success from different points of view. This could also be deemed a win-win success:

- For the worker, success was measured by an early and durable return to work with no residual physical impairment.
- For the employer, there was minimal lost work time and minimal replacement / retraining costs.
- For the NS-WCB, success could be measured financial terms, since the worker lost just ½ day of work and required only 14 physiotherapy treatments

Looking to the Future

Within the dual concepts of direct access / early access, physiotherapists treating musculoskeletal STIs can fulfill many primary health care roles. These vary from consultation in general practitioner's offices⁹ and early interventions in primary care clinics¹, to collaboration in military settings regarding specification of duties and return-to-work¹². These are new roles for physiotherapists, and the results to date are promising for patient care and cost containment¹¹.

Similarly, the new NS-WCB musculoskeletal STI treatment model presents new roles for physiotherapists, but can the program change patient outcomes and contain management costs for Nova Scotians with work-related STIs? Recent analyses of time-lost-to-work statistics of current NS-WCB STI cases presents compelling evidence of the effectiveness of the new program. Since this program was introduced in eight months ago in 2005, the Nova Scotia Worker's Compensation Board has reported a 42% reduction in the time duration of STIs. These statistics reinforce recent research reports that early, direct access to physiotherapy decreases time-lost-to-work¹⁴ and improves functional outcomes¹⁰. The patient we profiled in our case study returned to work during the first stage (Weeks 1 to 4) and did not require the services of the multi or interdisciplinary team inherent in the new NS-WCB model, including the family physician, medical / surgical specialists, and psychologists. As such, we cannot comment on the effectiveness of those components of the program.

In closing, Nova Scotia physiotherapists welcome the opportunity to move to a primary care role in treating STIs in injured workers. We believe we possess the necessary education, practice behaviors, and skills, to yield safe and effective management of workers with work-related STIs, all in a spirit of collaboration—collaboration with third party payers such as the NS-WCB and collaboration with the Province's doctors in this new model. Collaboration is at the heart of Canada's primary care initiative and will be the key to the success of the new NS-WCB soft tissue injuries treatment model.

This article has been a collaborative effort between the following members of the Nova Scotia Physiotherapy Advisory Group:

- The Private Physiotherapy Practitioners of Nova Scotia
- College of Nova Scotia Physiotherapists
- Canadian Physiotherapy Association – Nova Scotia Branch
- Dalhousie University School of Physiotherapy
- Representatives of public physiotherapy practitioners

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