

MUSCULOSKELETAL PROGRAM OF CARE

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- Ontario Chiropractic Association
- Ontario Physiotherapy Association
- Ontario Society of Occupational Therapists
- Registered Massage Therapists' Association of Ontario.

WSIB acknowledges and appreciates their participation.

MSK POC Scope

The MSK POC is an evidence-based health care delivery plan. It has been developed for workers with one injury or more:

To a muscle, tendon, ligament, fascia, intra-articular structure or any combination of these structures, causing mild to moderate tissue damage (Grade I or II) but does not include complete tears, and ruptures (Grade III) which may require surgical repair.

The Evidence

The MSK POC is based on the principles of Evidence-Based Medicine (EBM), where EBM is defined as “the conscientious, explicit and judicious use of current best evidence” (Sackett et al. 1996), in making decisions about the care of individual workers. WSIB has previously used EBM in developing Programs of Care, for example for musculoskeletal injuries of the shoulder and low back. For this POC, the literature search, presentation and discussion of the key findings was conducted by the participating health professional associations noted in the acknowledgements in collaboration with WSIB.

The reviewed literature and recommended interventions are based on:

- Studies conducted or guidelines published since 2005
- Studies with working-age patients
- Comparative studies (e.g., either randomized or cohort studies)
- Systematic reviews, guidelines, and individual research studies where the quality standards were achieved through evidence-based processes.

Literature review exclusion criteria:

- Diagnoses that are covered in other POCs were excluded as search terms
- Surgical or invasive interventions
- Pharmaceutical interventions
- Fractures
- Studies primarily based on paediatric age group or age greater than 65 years
- Non-English studies or guidelines unless translated into English.

Key references for EBM, yellow flags and the outcome measure to be used in this POC are included at the end of this guide.

Objectives

The objectives of the MSK POC include:

- Providing a comprehensive assessment, working diagnosis and treatment plan that focuses on early reactivation and restoration of function
- Facilitating safe, early and sustained return to work for workers
- Timely identification of workers who are not responding to POC treatment, including use of the Patient-Specific Functional Scale as a measurement tool
- Communicating assessment findings as well as functional outcomes with workers, other treating health professionals and WSIB as appropriate
- Achieving satisfaction with quality of care among workers, providers and other stakeholders.

Target Population

The target population for this POC is workers:

- With acute, soft-tissue injuries including strains and sprains
- With an MSK injury not currently addressed by any existing POC
- With an allowed WSIB claim, as early as possible up to 8 weeks from the date of injury or recurrence
- Who may have another injury that does not preclude the worker from participating in this POC
- With no clinical evidence of red flags
- Still at work (regular or modified) or off work
- Not hospitalized.

Diagnoses which may be considered for exclusion from the MSK POC:

- Complete tears and ruptures (Grade III) that require further surgical repair
- Fractures
- Any condition that would preclude a worker from participating in an active rehabilitation program.

Assessment of Flags and Barriers to Recovery and RTW

The literature often categorizes barriers to recovery and RTW using coloured flags. Their use to identify concerns can help a worker's recovery. In this section, red, orange, yellow, blue and black flags are described. These are intended as tools to inform the identification of any barriers to success and development of a plan to achieve a positive outcome for the worker. Health professionals are not expected to adopt this nomenclature but are expected to consider the presence of these barriers.

Screening for red flags is part of a musculoskeletal assessment. Red flags are signs that a more serious condition is the cause for the symptoms with which the worker presents. These signs may include significant neurological deficits, signs of infection, tumour or a systemic condition and are reason to exclude the worker from the MSK POC and refer for other needed services.

Psychological reactions to injury that stem from psychopathology are referred to as orange flags in the literature. There are tools that can be used to inform an understanding of the presence of orange flags including the [3-Step Clinical Screening Tool](#). Workers who score high on these measures may need to be referred for appropriate assessment. Where the presence of severe psychopathology is suspected, and interferes with the worker's successful participation in the MSK POC, please contact the WSIB.

Yellow flags refer to normal but unhelpful psychological reactions to injury. Unlike red flags, the presence of yellow flags alone is not a cause to exclude or discharge the worker from the MSK POC. However, if yellow flags become a significant barrier to a worker's participation in this active rehabilitation program, the worker should be discharged and referred for appropriate care. The following are examples of yellow flags:

- The belief that pain or hurt equals harm
- Preference for passive treatment
- Fear/avoidance of activities.

In some cases, workers with yellow flags may be identified without a formal and specific assessment. Screening tools for the presence of yellow flags include the Fear Avoidance Beliefs Questionnaire (FABQ), the Tampa Scale of Kinesiophobia (TSK) and the Pain Catastrophizing Scale (PCS). Use of these tools is not mandatory however; they may be useful and should be administered at the health professional's discretion.

Blue flags refer to the social and environmental factors that may delay recovery that stem from the work environment, for example from work that is perceived by the worker as too heavy or that is perceived to be unsafe. Black flags refer to legislation, policies or procedures both within WSIB and within the broader system context that may be considered barriers to recovery. When blue or black flags are identified that may jeopardize a successful recovery and return to work, please contact the WSIB to discuss how these can be effectively addressed to enable a successful POC outcome.

Outcome Measurement

The outcome measure to be utilized is applicable to the scope of this MSK POC as described above. It has demonstrated validity, reliability and responsiveness to change and the Minimum Clinically Important Difference (MCID) threshold has been established.

This outcome tool is the Patient-Specific Functional Scale¹ (PSFS). It will be used to measure a worker's improved function from MSK POC admission to discharge. The PSFS is a self-reported, patient-specific measure, designed to assess functional change primarily in patients presenting with musculoskeletal disorders. It is not region or injury specific. The PSFS has been found to be valid, reliable and sensitive to change in workers with injuries to the knee, shoulder, upper extremity, neck and low back. The PSFS is not dependent on literacy skills, is highly relevant to the worker population and is simple to score and interpret.

The worker is asked to identify three to five tasks from the daily functional activities that are difficult as the result of the musculoskeletal injury. The worker then rates the ability to perform that activity

on a scale from zero (unable to perform the activity) to 10 (able to perform the activity at the same level as before the injury or problem). The maximum PSFS score is 10 (the total score divided by the number of tasks) and the minimum score is zero. The progress toward a score of 10 is a measure of improved function. The Minimum Clinically Important Difference (MCID) is three PSFS points.

The PSFS is to be administered at admission into the MSK POC and at discharge with the scores recorded on the POC Initial Assessment and on the Care and Outcomes Summary reports.

Duration of Treatment and Evidence-Based Interventions

The following treatment interventions should be used in the most effective combination, frequency and intensity based on clinical judgement, the clinical findings, and on the functional needs of the worker. A minimum number of visits must be provided within the MSK POC, which is up to 8 weeks in duration.

Education

Education provides workers with the context to better understand their condition and the expected treatment outcomes. The education will provide an explanation about the injury and assist in developing a plan to achieve the objectives of the POC. Education is ongoing and embedded within every intervention with the worker to maximize its benefit.

Education should include the following:

- Explanation of the injury in anatomical and physiological terms understandable to the worker
- Positive re-assurance about the prognosis of the injury
- Review of the treatment and recovery plan
- Discussion about the importance of early activity and stay at work or return to work
- Strategies to help self-manage pain
- Identification and discussion about flags as described above
- Engagement of the worker in his or her own recovery.

¹ ©1995 P. Stratford, adapted with permission.

For workers with yellow flags, especially where pain is a focus, education has an even greater importance. For these workers, education should include the explanation of central sensitization, the early signs of persistent pain and reassurance that this pain cycle can be interrupted and addressed.

Activity Modification

Appropriate activity modification emphasizes the temporary nature of any restriction as well as the activities that are safe to complete and how to safely complete them.

Graded activity is defined as a progressive and time contingent increase in activities from the baseline toward predetermined goals. Graded activity has been shown to reduce pain, disability and absence from work more effectively than other treatment interventions.

Activity modification is important for all workers in the MSK POC. However, for workers with yellow flags, task-specific rehabilitation must be done in a more supported and supervised manner than for other workers.

Exercise Therapy

Rehabilitation of muscles, tendons and ligaments should focus on restoring range of motion and strength using functional exercises as early as possible and culminating in task-focused rehabilitation.

Exercises are more effective when individualized to the worker and to functional requirements. Exercises are aimed at restoring normal activity, movement and function. Complex exercises help to achieve this and may be described in the literature as motor-learning, neuro-muscular re-educating, functional exercises, coordination exercises, stabilization programs and proprioceptive re-training. The exercise program should be supervised and reinforced with a home exercise program. Exercise should be progressive with increasing intensity as the worker recovers and improves.

Manipulation and/or Mobilization

Manipulation and/or mobilization may help joints regain normal flexibility and help other tissues regain their normal length and structure after an injury.

Massage

Massage techniques may be indicated as part of the rehabilitation of musculoskeletal injuries. These are intended to reduce pain.

Electro/thermal modalities

Ice, heat, and electrotherapy modalities may be included for pain reduction as part of the rehabilitation program.

Immobilization through bracing

Some injuries to the extremities may require temporary immobilization using a removable brace, cast or splint. The benefits of temporary immobilization include maintaining activity and usual functioning while protecting the injured site.

Staying or Returning to Work

Staying at or returning to work enhances recovery, is part of the rehabilitation process and can be effective in reducing work disability. There is evidence that staying at work and/or returning to work following injury enhances recovery, general health, and long-term employment outcomes. WSIB refers to this as Better at Work.

The following RTW considerations can be used to assess the worker's status and to enable treatment planning:

- RTW goals provided by WSIB's RTW Specialist or Case Manager
- Current work status
- Previous work history
- Completed Functional Abilities Forms (FAFs) and treatment reports
- Self-reported functional tolerance using the Patient-Specific Functional Scale.

Reporting and Communications

Timely and effective communication is an important element in the success of the MSK POC. Communication includes written reports, telephone conversations, and one-on-one discussion. The frequency of communication will depend on the individual circumstances of the worker and the extent of progress achieved.

Health professional communication during the POC may include:

- Worker
- Employer
- WSIB service delivery team such as case manager
- Treating health professionals.

The MSK POC includes measuring the worker's progress and outcomes. Measuring change and recovery includes:

- Initial assessment: baseline information collected to enable treatment planning
- Discharge process: a summary of the worker's achieved recovery
- Standard measures: collected at admission and at discharge as noted.

IMPORTANT

When the worker is not expected to return to regular duties and hours at the conclusion of the POC, the health professional is required to contact the WSIB before the end of the sixth week of the program.

In the Care and Outcomes Summary the health professional is asked if, at the conclusion of the MSK POC, the worker is able to return to all regular work duties and hours. It is expected that the response to this question is communicated with the worker.

Please submit the Initial Assessment and Care and Outcomes Summary Reports by mail or fax to:

200 Front Street West
Toronto, Ontario M5V 3J1

OR

Fax: (416) 344-4684 or 1-888-313-7373.

Evaluation

The MSK POC will evolve based on ongoing clinical and program outcome measurements and the emergence of new evidence. The MSK POC will be evaluated following implementation to determine health professional, worker and employer satisfaction as well as outcome improvements at the worker, health professional and program level.

The PSFS will be used to monitor change in the worker's functional ability and aggregate scores will be used to monitor health professional and program effectiveness.

Fee

The fee structure reflects WSIB's interest in paying for high quality, individualized and function focused rehabilitation that leads to the worker's ability to return to his or her regular work.

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