## PRESIDENT'S MESSAGE

*Rick Wickstrom, PT, DPT, CPE*

This is an exciting time to begin my service as the new OHSIG President. I am excited about the many OHSIG accomplishments over the past 6 years under the enthusiastic and inclusive leadership style of our Past President, Lorena Pettet Payne. We have a dynamic group of OHSIG members engaged in a number of ongoing initiatives that include:

- revising our Work Rehabilitation Clinical Practice Guideline,
- increasing awareness of occupational health policy makers and stakeholders such as OSHA to remove access barriers to safe and cost-effective physical therapy and fitness services, and
- providing education and mentoring to OHSIG members in concentration areas such as injury prevention/wellness, disability/work rehabilitation programs, and on-site services at the workplace.

The APTA goal of direct access with payment under workers' compensation remains an area that needs engagement at the grass roots level from members of all state chapters. The opioid crisis is a perfect storm to justify greater access to physical therapy professionals at the front line to deliver safe, alternative services to reduce workplace injuries and improve worker fitness for duty. I would like to invite feedback, suggestions, and active engagement from OHSIG members as we proceed to update our strategic plan. This document may be accessed by clicking on the OHSIG Strategic Plan link at our OHSIG web page: https://www.orthopt.org/content/special-interest-groups/occupational-health. We want to move forward with initiatives that improve our opportunities to deliver cost-effective occupational health services.

In this issue of *Orthopaedic Physical Therapy Practice*, the OHSIG is pleased to introduce an update to a current concepts article that was adopted in 2011 and originally titled, Occupational Health Physical Therapy: Physical Therapist Management of the Acutely Injured Worker Guidelines. The emphasis of this article was to provide practical advice to assist physical therapists with the management of work participation barriers after an acute injury to reduce productivity loss and psychosocial concerns during recovery. The article that follows may be accessed along with other current concepts documents on our OHSIG web page. My compliments to Trisha Perry, Anthony Cheung, Adrienne Asumbrado, and Katie McBee for this major accomplishment!

# Current Concepts in Occupational Health: Managing an Acute Injury that Limits Work Participation

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## INTRODUCTION

The purpose of this document is to address physical therapist management for a worker who presents with a neuromusculoskeletal injury incurred on the job, resulting in impairments, activity limitations, and participation restrictions in normal work duties. Related physical therapist interventions and modifications of work methods to prevent workplace recurrence of injury are also addressed. The concepts described for managing acute injuries that result from home or leisure activities would be similar to work-related injuries when work participation is limited, except that non-occupational injuries that are unrelated to employment would not be subject to Occupational Safety and Health Administration (OSHA) requirements.[1]

The physical therapist has unique qualifications to facilitate optimal functional outcomes through diagnosis of neuromusculoskeletal conditions and application of interventions to specific body functions and structures affected by the injury. Early physical therapy intervention during the management of the acutely injured worker reduces subsequent use of health care services and downstream costs of care.[2-4] Effective and timely management of the acutely injured worker is enhanced by participation in some form of productive duty, access to workplace-based return-to-work interventions and proactive company approaches, and convenient health care provider services and/or programs.[5-7]

Inherent in the management of an acute injury that results in work restrictions is frequent and open communication and coordination between the physical therapist and injured worker, other members of the employee health team, and employer representatives as indicated. Clear, concise, functionally relevant information about the injured worker's physical therapist management and recovery progress must be documented and conveyed in a timely manner to necessary stakeholders. Stakeholders may include the injured worker, employer representatives from human resources, safety management, the worker's supervisor and/or a department contact person, occupational health nurse, case manager, adjuster, a physician and/or surgeon, other care providers and the physical therapist.

The following describes a model for managing an acutely injured worker. Concepts discussed are intended to be used in conjunction with the most current versions of the American Physical Therapy Association's Standards of Practice for Physical Therapy,[8] the Academy of Orthopaedic Physical Therapy's Current Concepts of Orthopaedic Physical Therapy,[9] Clinical Practice Guidelines,[10] International Classification of Functioning, Disability and Health,[11] and nationally recognized occupational health treatment guidelines.

## CURRENT CONCEPTS FOR MANAGING AN ACUTE INJURY

**1. Reduce local inflammatory response for neuromusculoskeletal pain**

Injured worker management during the acute phase is focused on the control and reduction of localized inflammatory response, joint and soft tissue swelling or restriction, and the stabilization and containment of the injury or illness. Immediate, post-trauma intervention lowers the risk of subsequent medical service usage.[12]

Early intervention prevents the negative effects of physical inactivity, disability, depression, and reduces longer-term opioid use and lower-intensity opioid use for musculoskeletal pain.[3,4,12-15] The role of the physical therapist includes examination and evaluation of an individual for work-related risk factors, impairments, activity limitations, participation restrictions, or other health-related conditions that prevent workers from performing their work duties. An emphasis on instructing the worker in self-management techniques to alleviate symptoms should also be introduced.

**2. Validate physical job demands or accommodation options to reduce lost-time**

The physical therapist needs to have knowledge of the worker's physical demands for critical work tasks and modified duty options obtained through a job site analysis, video analysis, written physical job demands analysis, or through communication with the employer and/or worker. Early contact between the health care provider and employer to validate physical job demands or accommodation options is an effective workplace intervention to reduce lost-time.[6]

**3. Screen for red flags and refer for follow-up when worker is not appropriate for therapy**

During the examination and evaluation process, the physical therapist should screen for any red flags and assess the appropriateness for participation in physical therapy. The physical therapist has been equipped with the knowledge and evaluation skills to make appropriate medical referral if the worker is not able to safely participate in physical therapy.[16-18] Communication during this phase typically consists of the worker's status during the initial evaluation noting any impairments, activity limitations, participation restrictions, and whether physical therapy is recommended, or further referral is required.

**4. Progress therapeutic management to emphasize daily functional work tasks**

Once a diagnosis, prognosis, and plan of care is established, intervention is geared toward improving the worker's ability to move, reducing pain, restoring function, and preventing disability. Therapeutic exercise and functional activity training are the cornerstones of physical therapist management of the injured worker. The emphasis should be on progressive work and therapeutic activities to increase muscle performance, improve joint integrity and mobility, and improve function for the injured worker. Functional training should include instruction in pacing and body mechanics to improve tolerance for work tasks. Activities and treatment interventions should transition to more vigorous therapeutic activities to prepare the worker for return to usual work and lifestyle activities.

**5. Implement evidenced-based interventions into clinical practice**

Whenever possible, interventions should be based on evidence supporting its use in order to return injured workers to their jobs safely and in a timely manner. Clinicians are expected to integrate clinical experience with conscientious, explicit, and judicious use of research evidence in order to make clearly informed decisions to help maximize and optimize patient well-being.[19] Clinical practice guidelines and current concepts of orthopaedic physical therapy have been developed by the AOPT based on best available evidence; which provide a good starting point for evaluation, examination, and treatment for commonly encountered clinical scenarios.[9,10]

**6. Identify and address modifiable psychosocial risk factors that may prolong recovery**

Since psychosocial risk factors are predictive of future disability with work-related injuries, screening for psychosocial risk factors and integrating behavioral and cognitive modification techniques targeted to address modifiable psychosocial risk factors can reduce future disability.[20-22] Assessment tools used to help screen for any psychosocial risk factors include the Fear-Avoidance Beliefs Questionnaire (FABQ),[23-25] the Fear-Avoidance Components Scale (FACS), the STarT Back,[26] the Örebro Musculoskeletal Pain Screening Questionnaire,[27] and the Optimal Screening for Prediction of Referral and Outcome (OSPRO).[28] Early identification of workers at risk of developing chronic conditions and associated work-related disability is important for appropriate modification of a worker's plan of care and education.[24] Psychosocial issues may be as important as physical management in preventing chronicity and understanding disability.[29] Interventions in the acute stage addressing these issues may be most useful in reducing fear-avoidance beliefs and promoting return to normal activity.[20-22,29] Patient education based on a fear avoidance model consists of educating the injured worker in a way such that the worker views his or her pain as a common condition, rather than as a serious disease that needs careful protection.[30] Education in combination with exercise have decreased fear-avoidance beliefs and reduced long-term absences due to illness in individuals with low back pain.[31]

**7. Promote modified duty with work restrictions to reduce lost productivity**

Modern clinical management for most neuromusculoskeletal conditions supports having the injured worker stay at work, with modifications if needed, or return-to-work as soon as the injured worker is medically appropriate.[32-37] Workers with neuromusculoskeletal conditions who return-to-work enjoy better health than those who remain off of work.[33,37,38] Participating in work tasks is noted to: (1) be therapeutic, (2) help to promote recovery and rehabilitation, (3) lead to better health outcomes, (4) minimize the harmful physical, mental and social effects of long-term sickness absence and worklessness, (5) reduce the chances of chronic disability, long-term incapacity for work and social exclusion, (6) promote full participation in society, independence and human rights, (7) reduce poverty, and (8) improve quality of life and well-being.[38]

If the worker is unable to safely participate in normal work duties, reduction of the physical demands with transitional work or temporary modified duty with work restrictions can facilitate early return-to-work and promote work retention.[32,34,38] Reduced work hours, worksite modifications, and adjustments to job

responsibilities are commonly used strategies to provide return-to-work opportunities for workers who can participate in some work duties but have not fully recovered from their injury and are not ready to be fully re-integrated into the workplace.[5]

Physical activity and early return-to-work interventions are not associated with increased risk of recurrent injury if there is compliance with work and activity restrictions.[32-34,36-42] Modified work programs cut the number of lost work days in half, and injured workers whom are offered modified work duty return-to-work twice as often as those that are not.[6] Modified work can be introduced in a variety of ways in which each case should be individually assessed and tailored to the injured worker.[43,44] Transitional work arrangements are a way of facilitating return-to-work and is only meant to be temporary. There is also strong support that a workplace-based return-to-work program can reduce work disability duration and associated costs.[6,34-36,38] Implementing strategies early in the process with an emphasis on return-to-work, is one of the most effective ways to support positive employment outcomes for workers with impairments.[7]

**8. Minimize risks of injury recurrence by facilitating job and work station improvements**

During the return-to-work planning, the physical therapist also has a role in minimizing injury recurrence, which may include making sound and practical ergonomic recommendations for work station design, work performance and worker training to improve knowledge of personal responsibilities for fatigue control. Refer to AOPT's Current Concepts in Occupational Health: Work-Related Injury and Illness Prevention for further recommendations along with interventions and parameters related to occupational injury/illness prevention and ergonomic services as provided by physical therapists.[45]

**9. Monitor worker response to resumption of normal work tasks and modify as needed**

Resumption of normal work tasks for the injured worker is warranted when the functional goals set by the physical therapist have been met or exceeded and the worker has returned to work without any restrictions.[42] If there is uncertainty on how the injured worker would tolerate a resumption of normal work tasks, the worker may benefit from a trial of full work duty to assess tolerance of normal work activities. The ultimate anticipated goal is the restoration of the injured worker's physical and functional capacity for a safe and expeditious return-to-work. If impairments are still present and causing disability, and the injured worker appears to not be benefiting from physical therapy, the injured worker may then be referred for the need of additional interventions or the appropriateness of an impairment rating.[16-18,46]

**10. Consider referral to another health professional when disability duration exceeds guideline recommendations**

If the neuromusculoskeletal problem is not satisfactorily resolved within a limited number of visits per nationally recognized occupational health treatment guidelines, a referral for further examination and evaluation by another health professional may be indicated.[16,17] Official Disability Guidelines include physical therapy treatment guidelines as a resource that provides an evidence-based starting point for time out of work, serving as an invaluable tool for obtaining the information necessary for effective management of return-to-work following illness/injury and clinical practice recommendations.[46]

An objective Functional Capacity Evaluation (FCE) should be considered when disability duration is excessive and there is not adequate information to substantiate a worker's readiness and ability for a safe return-to-work.[47,48] An FCE is a comprehensive performance-based medical assessment consisting of a standardized battery of tests in which an injured worker's functional ability is determined and then compared to the physical job demands.[49,50] An FCE can be used to indicate physical and functional recovery following an injury and guide return-to-work readiness.[50-52] Results from an FCE, along with a review of previous treatment progression, provide input into whether a worker can physically participate in work tasks or whether they may require entry into an appropriate work conditioning or work hardening program.

## CONCLUSION

The global outcomes of effective physical therapist management of the acutely injured worker are to optimize work performance and minimize the development of work-related occupational disability. Physical therapists are uniquely skilled to manage the rehabilitation of the acutely injured worker and best positioned to assess return-to-work readiness and the timing of such readiness through a thorough evaluation and examination assessing for any impairments, and activity limitations that may hinder involvement in normal work duties. Managing acute injuries in a cost-effective manner relies heavily on collaboration and communication among all involved stakeholders. Early physical therapy intervention and participation in productive work, whether that consists of normal work duties or modified work, is essential in facilitating optimal functional outcomes, promoting quicker return-to-work duties, managing utilization costs; all while reducing the potential detrimental effects to the neuromusculoskeletal system due to physical inactivity. Proper management must also include the identification and intervention of risk factors that may impact positive outcomes or need further medical referral, while gradually advancing the injured worker toward more functional activities and occupation-specific stresses. Through adherence to evidence-based treatment guidelines and timely early intervention, physical therapists play a pivotal role in the management and prevention of recurrent workplace injuries for the acutely injured worker.

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