

PRESIDENT'S MESSAGE

Rick Wickstrom, PT, DPT, CPE, CME

Physical therapist, Dr. Joe Tata points out in his preface to a new book about lifestyle medicine that the next evolution for physical therapy practice will be to break the glass ceiling as primary health providers to take our place as leading the profession for nonpharmacologic and noninvasive health care. Physical therapists may have regulatory direct access in all states; however, there are many examples of perceptual and organizational barriers that limit how physical therapists function in entry-point of care. For example, it makes no sense that physical therapists are not recognized as a healthcare practitioner authorized to complete athlete pre-participation evaluation forms required by State High School Athletic Associations.

It is our responsibility to drive opportunities to optimize physical activity participation where individuals live, work, and play. We must better educate all stakeholders about the ability of physical therapists to render a physical therapy diagnosis using classification labels that identify the cause and/or nature of an individual's injuries, symptoms, emergent conditions, impairments, activity limitations, participation restrictions, biopsychosocial factors, environmental barriers, and facilitators. We should bear in mind the quote by Helen Keller (below) when advocating for recognition of our professional scope of practice at the entry-point of care.

Never bend your head. Always hold it high.

Look the world straight in the eye.

—Helen Keller

To move this needle forward, OHSIG initiated a motion to communicate APTA's support for unrestricted access to physical therapists as entry-point practitioners for activity participation, wellness, health, and disability determination. This motion introduced by AOPT's Chief Delegate James Spencer was adopted by the 2022 APTA House of Delegates:

ACCESS TO PHYSICAL THERAPISTS AS ENTRY-POINT PRACTITIONERS FOR ACTIVITY PARTICIPATION, WELLNESS, HEALTH, AND DISABILITY DETERMINATION

HOD P08-22-12-14 [Position]

The American Physical Therapy Association supports unrestricted access to physical therapists as entry-point practitioners for activity participation, wellness, health, and disability determination.

Physical therapists make unique contributions to the health care system and participation in society. Physical therapists, as part of a comprehensive management plan:

- Deliver a broad range of services including, but not limited to, examination, evaluation, diagnosis, prognosis, intervention, coordination of care, prevention, wellness, and referral to other health care practitioners when indicated.
- Identify the cause and/or nature of an individual's injuries, symptoms, emergent conditions, impairments, activity limitations, participation restrictions, biopsychosocial factors, environmental barriers, and facilitators.
- Render diagnoses, using relevant diagnostic tests and classification labels.
- Determine an individual's functioning and extent of physical disability in all aspects of life (such as health, recreation, employment, daily living, transportation), and for regulatory, insurance, and legal purposes.
- Prescribe or recommend physical activity, accommodations, adaptive and assistive technology, diagnostic tests, and other interventions to optimize functioning and participation in society.

The case study that follows by Joshua Prall, PT, DPT, EdD, OCS and Michael Ross, PT, DHSc, OCS, FAAOMPT is a great example of the value of physical therapy entry-point care at the worksite. Enjoy!

ON-SITE INJURY TRIAGE BY A PHYSICAL THERAPIST IN AN INDUSTRIAL WORK SETTING: A CASE STUDY

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INTRODUCTION

A crucial topic that has been discussed recently in physical therapy practice, as well as the physical therapy literature, is the rising costs associated with musculoskeletal disorders (MSDs) occurred by employees in the industrial workplace. ^{1-8,9} Musculoskeletal disorders are defined as pathological injuries to the bones, ligaments, joints, muscles, nerves, and vascular system that can affect the overall function of the human body. Workrelated MSDs (WMSDs) are injuries to the musculoskeletal system occurring in the workplace, often labeled overexertion injuries by the Occupational Safety and Health Administration (OSHA). ¹⁻⁵ These overexertion injuries include bending, crawling, twisting, lifting, pushing, and pulling. Most overexertion injuries in the workplace happen slowly over time and are a product of repetitive motions. ^{1-8,9}

The economic burden of both MSDs and WMSDs is substantial. Liberty Mutual Insurance reported in their safety index for 2021 that 19.1 billion dollars were spent on workplace musculoskeletal injuries. ^{1-3,5,7} This number continues to grow each year without any sign of slowing down. ⁴ A logical step for

employers to address these concerns is to contract for on-site services with a healthcare professional who specializes in injury prevention, workplace wellness, and treatment of personal MSDs and WMSDs. 1,10-12 Physical therapists are well-positioned to help companies reduce the direct, in-direct, and total costs of WMSDs. Examples of effective direct-to-employer services include injury prevention education, office ergonomics training, job site assessments, return-to-work programs, and hands-on manual interventions, if applicable. On-site interventions including ergonomic education, training, and exercise, have been shown to be cost effective, with employees spending significantly less money on health care costs when seeking treatment and advice on-site compared with offsite treatments. 11,12

The purpose of this case study is to describe the effect a physical therapist can have on reducing WMSDs and associated costs of these injuries. A secondary purpose is to highlight this setting of practice for students and practicing physical therapists with an interest in occupational health and direct contracting that is outside the traditional insurance model to bill for services. *Total Worker Health** programs are gaining in popularity as a new value proposition for employers. *Total Worker Health** is defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness-prevention efforts to advance worker well-being.

EMPLOYEE CASE

The employee was a 64-year-old male construction worker who was triaged at the worksite by a physical therapist 3-4 hours after incurring a right ankle injury while performing construction duties at a manufacturing plant. The employee was carrying a 5-gallon drum and stepped in a hole while walking outside. The physical therapist was contracted by the manufacturer to provide on-site prevention and injury services to reduce injuries, increase productivity, and reduce overall costs of injuries throughout the year. As a foundation for injury and disability prevention, the physical therapist had conducted functional job analyses to communicate transitional work duties for job positions that could be immediately assigned to promote stay-at-work after a work-related injury. Cryotherapy was provided to the worker as a first aid measure and the worker was assigned suitable duties that could be performed while sitting that were acceptable to the worker. The employee was referred for consultation by the physical therapist that included a musculoskeletal examination of: (1) range of motion, (2) manual muscle testing, (3) special tests, (4) deep tendon reflexes, (5) lower quarter screen, and (6) application of the Ottawa Ankle and Foot Rule. The physical therapist concluded that the employee was appropriately accommodated with suitable duties and could stay-at-work with follow-up by the physical therapist to provide re-assurance, education, first aid modalities, and work activity progress without need for referred to external medical providers.

The physical therapist worked closely with the manufacturer to improve its outcomes for prevention of work-related injuries that are required to be recorded. Under this program, first aid may be administered and diagnostic exams may be performed without requiring the injury to be classified as an OSHA recoverable. The initial first aid response by the Environmental Health & Safety manager was to administer cryotherapy with elevation of the ankle to reduce swelling and improve short-term and long-term outcomes; improve range of motion, improve gait, pain reduction,

and avoid loss time at work. Seated work was assigned that was acceptable to the worker that was described under expected duties in the job description. The employee was examined by the onsite physical therapist 3-4 hours later. This musculoskeletal exam consisted of lower quarter screening, deep tendon reflex testing of the patella (L3-4) and Achilles reflexes (S1-2), knee and ankle manual muscle testing, ankle range of motion, anterior drawer test and talar tilt, and a review of the employee's specific job description. Exam findings included a mild antalgic gait, minimal swelling, good strength (4/5) in his right foot in all 4 motions, normal reflexes, and minimal range of motion loss. These findings did not meet the Ottawa Ankle and Foot Rule, resulting in no need to send the employee to an external medical provider for a radiograph. Findings were consistent with a grade 1 right lateral ankle sprain (ICD code: S93.401A). An official ICD diagnostic code was not necessary to bill for services by the on-site physical therapist, because the contract for physical therapy coverage did not require billing or authorization by an insurance plan.

The employee was diagnosed with the following participation barriers: (1) decreased standing tolerance (D4154: Maintaining a standing position), (2) climbing up steps (D451: Going up and down stairs), (3) Squatting (D4151: Maintaining a squatting position), and (4) antalgic gait (D4502: Walking on different surfaces). Due to this incident not being classified as an OSHA recordable injury and no requirement for external care, there was no workers' compensation claim filed. The employee was able to be managed entirely at work during their functional recovery and able to stay at work for medical treatment beyond first aid. He was also able to perform progressive duties within his job description that was overseen by his supervisor.

The management of work-related injuries in-house is a crucial step towards the overall health of the employees. This employee was managed in house by reviewing his job description, performing a job site safety analysis to determine the cause of the injury, and reviewing the findings with the employee after the initial physical therapy screen. This will help re-educate the employee on steps they can use moving forward to avoid this encounter. The outcome in this case study resulted in no OSHA recordable injury. This will result in the employers' workers compensation premium staying the same, no increase in total costs, and productivity remaining high due to the worker being able to stay at work. 9-11

CLINICAL RELEVANCE

The main goal for on-site physical therapy assessments should include keeping the worker working, if able, and identifying areas within the job description to prevent future injuries. Keeping workers working in a safe environment with advice, education, and modalities drastically reduces OSHA recordable injuries. This will save the company money by reducing direct, in-direct, and total costs of these musculoskeletal injuries.¹⁻⁴ It will also reduce worker's compensation premiums from rising and increase productivity, employee wellness, and decrease absenteeism among workers. In 2019, OSHA wrote a letter to the American Physical Therapy Association concluding that physical therapists may provide examinations and some types of treatment such as soft tissue manual therapies and hot or cold therapies that is described under the OSHA's first aid rule without requiring the employer to report an OSHA-recordable injury or illness. This decision and ruling should enlighten all licensed physical therapists who are interested in working with workers in an on-site setting that they

can keep workers working, save companies significant money on avoiding workers compensation claims and OSHA recordable injuries, and serve a population that encounters many MSDs yearly.¹⁻⁶

During the screen, the employee was ruled out for a fracture using the Ottawa Ankle and Foot Rule, and it was determined by the on-site physical therapists and the environmental health and safety director that the employee would be able to perform transitional duty tasks and stay at work until feeling well enough to go back to the full range of expected job duties. The employee was seen 2 times per week for 4 weeks by the on-site physical therapists to ensure he was progressing with his agility, range of motion, swelling, pain, and was able to perform more work-related job tasks throughout the day. Following up with the employee regularly allowed for the same return to 100% normal job function by this specific employee, while avoiding unnecessary outside medical treatment that is extremely costly for both the employee and the employer.

CONCLUSION

The rising costs of MSDs in the industrial workplace continues to be a problem for both employees and the employers, due to absentee workers and rising costs associated with these overexertion injuries. 1,8-10 The results of this case study indicate that physical therapists can play a crucial role in reducing workplace injuries and reducing the associated high costs that accompany overexertion injuries in the industrial workplace. This case study provides a framework for future studies for physical therapists operating in an injury prevention consulting role in the industrial workplace setting. As the physical therapy profession continues to progress in its implementation of evidence-based practice, opportunities for physical therapists outside the traditional model of delivery for physical therapy are becoming more prevalent. Physical therapists are in an enhanced position to serve as trailblazers in direct-to-employer services such as on-site triage opportunities for manufacturers and other companies that reduce musculoskeletal injuries, reduce overall costs, and increase productivity.

REFERENCES

- Prall J, Ross, M. The management of work-related musculoskeletal injuries in an occupational health setting: the role of the physical therapist. *J Exerc Rehabil*. 2019;15(2):193-199. doi:10.12965/jer.1836636.318
- U.S. Bureau of Labor Statistics. Occupational injuries and illnesses resulting in musculoskeletal disorders (MSDs). Accessed November 22, 2022. https://www.bls.gov/iif/ factsheets/msds.htm
- Department of Labor. Ergonomics Overview |
 Occupational Safety and Health Administration. Accessed
 November 28, 2022. https://www.osha.gov/ergonomics
- Welch A, Healy G, Straker L, et al. Process evaluation of a workplace-based health promotion and exercise clusterrandomised trial to increase productivity and reduce neck pain in office workers: a RE-AIM approach. *BMC Public Health*. 2020;20(1):180. doi:10.1186/s12889-020-8208-9
- United States Department of Labor. OSHA's Safety Pays Program. Accessed November 22, 2022. https://www.osha. gov/safetypays/
- 6. Munoz-Poblete C, Bascour-Sandoval C, Inostroza-Quiroz

- J, Solano-Lopez R, Soto-Rodriguez F. Effectiveness of workplace-based muscle resistance training exercise program in preventing musculoskeletal dysfunction of the upper limbs in manufacturing workers. *J Occup Rehabil*. 2019;29(4):810-821. doi:10.1007/s10926-019-09840-7
- 7. Liberty Mutual Insurance. 2021 Liberty Mutual Insurance Workplace Safety Index Helps Companies Better Protect Employees and Control Costs as the Economy Continues to Reopen. Accessed November 22, 2022. https://www.libertymutualgroup.com/about-lm/news/articles/2021-liberty-mutual-insurance-workplace-safety-index-helps-companies-better-protect-employees-and-control-costs-economy-continues-reopen
- 8. U.S. Bureau of Labor Statistics. Occupational injuries and illnesses resulting in musculoskeletal disorders (MSDs). https://www.bls.gov/iif/factsheets/msds.htm
- Tsang SMH, So BCL, Lau RWL, Dai J, Szeto GPY. Comparing the effectiveness of integrating ergonomics and motor control to conventional treatment for pain and functional recovery of work-related neck-shoulder pain: A randomized trial. *Eur J Pain*. 2019;23(6):1141-1152. doi:10.1002/ejp.1381
- 10. Figl-Hertlein A, Horsak B, Schony W, Stamm T. A physiotherapy-directed occupational health programme for Austrian school teachers: a cluster randomised pilot study. *Physiotherapy*. 2014;100(1):20-26. doi:10.1016/j. physio.2013.03.003
- Cecil R, Ross M. Effective worksite strategies and interventions to increase physical activity in sedentary workforce populations: the role of the physical therapists. Orthopaedic Physical Therapy Practice. 2018;29(1):56-62.
- Skamagki G, King A, Duncan M, Wåhlin C. A systematic review on workplace interventions to manage chronic musculoskeletal conditions. *Physiother Res Int*. 2018;23(4):e1738. doi:10.1002/pri.1738
- 13. Padula RS, Oliveira AB, Carregaro RL, Sato TO. Physical therapy in occupational health and ergonomics: Practical applications and innovative research approaches. *Braz J Phys Ther.* 2016;20(5):490-492. doi:10.1590/bjpt-rbf.2014.0193
- American Physical Therapy Association. OSHA responds to APTA by affirming the PT's role in first aid. Published June 5, 2019. Accessed November 20, 2022. https://www.apta. org/news/2019/06/05/osha-responds-to-apta-by-affirming-the-pts-role-in-first-aid

On behalf of the Occupational Health Special Interest Group (OHSIG), AOPT

OCCUPATIONAL HEALTH PRACTITIONER CERTIFICATE

Program Description

The Occupational Health Practitioner (OHP) Certificate of Achievement is awarded to Physical Therapists (PTs) and Occupational Therapists (OTs) who complete a comprehensive series of 3 evidence-based courses that culminates with submission of an OHP portfolio and program reflection of Occupational Health Services. Recipients of the OHP Certificate of Achievement, who are active as members or individual partners, are also featured in the Academy's distinguished OHP website registry.

The OHP Certificate Program is coordinated by the Occupational Health Special Interest Group (OHSIG) of the Academy of Orthopaedic Physical Therapy, APTA. Its purpose is to empower members to optimize movement, musculoskeletal health, and work participation from hire to retire. This certificate program incorporates best practice recommendations from Clinical Guidance to Optimize Work Participation After Injury or Illness: The Role of Physical Therapists and other OHSIG Current Concepts resources that include the OHSIG Collective Glossary of Occupational Health Terms (now available as free download).

Step 1: Bridging the Gap Between the Workplace and Clinic

ISC 32.4 is a 3-monograph independent study course. It covers best practice examples and regulations that support job accommodation and Total Worker Health®, with emphasis on workplace wellness, functional job analyses, functional employment exams, and entry point care. Total Worker Health® is defined as policies, programs, and practices that integrate protection from work-related safety and health hazards with promotion of injury and illness-prevention efforts to advance worker well-being. Each monograph concludes with applied case examples for prevention and management of musculoskeletal injuries, including the use of transitional work or simulated work tasks to promote stay-at-work or return to work after injury or illness.





Step 2: Advanced Therapy Programs in Occupational Health

ISC 32.5 is a 3-monograph independent study course that covers best practice examples and regulations for comprehensive programs for ergonomics, work rehabilitation, and functional capacity evaluation. Each monograph concludes with 3 or 4 applied case scenarios for advanced occupational health programs to prevent needless work disability, expedite functional recovery

Step 3: Facilitating Therapy Services for Total Worker Health®

This interactive course is the final step to achieve the Occupational Health Practitioner (OHP) certificate of competency. Participants are assigned a mentor to support the development of competencies that integrate best practices for

therapy services to meet the Total Worker Health® needs of employers. PTs and OTs submit an OHP portfolio and program reflection that is peer-reviewed to verify competency with evidenced-based content.

Pricing

Level	AOPT Member or Partner*	Non-Member
Step 1 Course (15 CEUs)	\$145**	\$245**
Step 2 Course (15 CEUs)	\$145**	\$245**
Step 3 Course (8 CEUs)	\$495	\$645
OHP Registry Listing	Complimentary	N/A
TOTAL INVESTMENT	\$785	\$1135

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