According to the U.S. Bureau of Labor Statistics (2009), musculoskeletal disorders (MSDs) accounted for 29% of the injuries and illnesses requiring a median of 10 days away from work in 2008, a percentage that has not varied greatly since 2005. In 2008, MSDs required a median of 10 days away from work. Injuries to the back accounted for 20.4% (or one-fifth) of all work-related injuries and illnesses, requiring a median of 7 days away from work per incident. Injuries to the upper extremities accounted for 23% of all workplace injuries, with carpal tunnel syndrome in particular accounting for an average of 28 days away from work per incident, more than most other MSDs. Decreased productivity resulting from injury and workers’ compensation claims and costs result in lost revenue for many companies. In 2007, the National Academy of Social Insurance reported that cash benefits to injured workers and medical payments for their health care were $55.4 billion, with total costs to employers of $85 billion (Sengupta, Reno, & Burton, 2009).

This special issue emerged in response to trends in workers’ compensation reforms in the United States, which initially occurred in California in 2003 and 2004. Note that workers’ compensation systems are administered by each state and receive no direct federal financing or administration, unlike other U.S. social insurance programs (Sengupta et al., 2009). California, however, is a big state, and large shifts in its workers’ compensation benefits and employers’ costs will naturally affect the course of national trends. Major reforms in California in 2003 and 2004 attempted to limit spending by introducing evidence-based treatment guidelines, which represented the first time a workers’ compensation law identified specific clinical guidelines to inform benefits coverage.

In 2004, the Division of Workers’ Compensation in California chose the American College of Occupational and Environmental Medicine’s (2004) Practice Guidelines (2nd ed.) as the gold standard for guiding clinical decision making, requiring that physicians “choose treatments scientifically proven to cure or relieve work-related injuries and illnesses” (California Division of Workers’ Compensation, 2010, para. 1). Unfortunately, these evidence-based guidelines did not include occupational therapy services. In response to these trends, the American Occupational Therapy Association’s (AOTA’s) Representative Assembly passed a proposal in 2005 to develop evidence-based occupational therapy guidelines for clinical conditions related to workers’ compensation.

This issue of the American Journal of Occupational Therapy includes the summaries from a systematic evidence-based literature review examining the effectiveness of occupational therapy interventions for individuals with work-related injuries. The reviews were based on four focused questions derived from specific areas of practice: low back; elbow; forearm, wrist, and hand; and shoulder. The reviews include studies from the occupational therapy.
literature and related fields describing interventions that are within the scope of occupational therapy.

In this issue, Amini (2011) examines the literature related to effective occupational therapy interventions in the rehabilitation of individuals with work-related forearm, wrist, and hand injuries and illnesses. Amini provides a comprehensive overview and analysis of studies that address many of the interventions commonly used in hand rehabilitation. Findings from the review revealed that the use of activities and occupation-based assessments has reasonable yet limited evidence to support its effectiveness. However, her review does support the notion that many client factors can be positively affected through the use of several common occupational therapy–related modalities and methods.

Bohr (2011) reviewed literature related to interventions for individuals with work-related elbow injuries, particularly epicondylitis. Bohr’s review indicates that although multiple intervention approaches have been published in the literature, the evidence to support or refute these approaches is insufficient. The review highlights weak support and guidance to support the use of splinting, exercise, or physical agent modalities in the management of work-related elbow injuries.

von der Heyde (2011) provides a synthesis and analysis of the research literature on interventions for work-related shoulder conditions. Her findings indicate that the evidence to support or refute a variety of accepted intervention approaches for common shoulder conditions is limited. Overall, the evidence is lacking in the area of occupation-based interventions.

Snodgrass (2011) examined interventions in the rehabilitation of individuals with work-related low back injuries and illnesses. The research has supported the need for occupational therapists to consider multiple strategies to address clients’ needs. Specifically, interventions for individuals with low back injuries and illnesses should incorporate a biopsychosocial, client-centered approach that includes actively involving the client in the rehabilitation process at the beginning of the intervention process and addressing the client’s psychosocial needs in addition to his or her physical impairments.

Occupational therapy is a profession that has always been strongly grounded in work as a central occupation, but the evidence to support practice in this area is weak. Although this special issue demonstrates that a body of evidence exists to inform and support occupational therapy practice, the evidence in several areas is still limited or inconclusive. I should note that evidence-based literature reviews are works in progress, and this issue is an indication of what was available at the time of the project. When the evidence is lacking, it becomes especially important for occupational therapy practitioners to rely on information gathered from the client and the evaluation to develop occupation-based and client-centered intervention plans.

During this process, information from several sources, including the best available evidence as represented with this evidence-based literature review, is used to inform and support the intervention plan and process (Kaskutas & Snodgrass, 2009). Maintaining careful and ongoing documentation records of the intervention’s outcomes provides important information that guides the intervention process, including implementation, ongoing review, and reevaluation. Using a combination of evidence-based and client-centered interventions represents current best practice.

In reviewing the articles from this systematic, evidence-based review of the literature, several themes and issues become apparent. Occupational therapy practitioners and occupational therapy programs should incorporate a multidisciplinary approach focusing on the client’s individual needs (physical, psychological, social), performance contexts, and activity demands. The review also revealed that a coordinated, case management approach to treatment of clients with work-related injuries will achieve the best outcomes.

The literature review revealed two main issues: (1) The evidence to inform and support occupational therapy approaches with this population is emerging and needs to be further developed and disseminated, and (2) the fragmented U.S. workers’ compensation system lacks a coordinated, multidisciplinary case management approach to dealing with work-related injuries (Schonstein, Kenny, Keating, & Koes, 2003).

I raise the call for future research in the broad area of work and industry. Specifically, I recommend the following strategies to build occupational therapy’s evidence base:

- Occupational therapy practitioners need to use standardized outcome measures and tools to document and report the outcomes of interventions provided.
- More well-designed studies (i.e., randomized controlled trials, nonrandomized cohort studies, outcome analysis) are needed, particularly addressing the effectiveness of occupation-based interventions. This research can be carried out either by occupational therapy practitioners experienced with research design and methodology or in collaboration with other experienced researchers and other disciplines (e.g., ergonomists, physical therapists, physicians).
- Similar to the preceding recommendation, outcomes-based studies and randomized controlled trials are needed to examine the effectiveness of occupational therapy interventions as part of multidisciplinary and interdisciplinary approaches.

The review also suggests the need to develop a national data management system for work-related injuries that collects, analyzes, and interprets program outcomes to inform future research, policy, and practice (American Public Health Association, 2009; Schonstein et al., 2003). Currently, the lack of federal mandates for data collection and analysis results in a great deal of variability in the data that states have available to assess the performance of their workers’ compensation programs. Creating a national workers’ compensation data management system would lay the groundwork for future research about the causes, consequences, and costs of and contributors to work-related injuries and the quality and effectiveness of interventions across health care disciplines (Sengupta et al., 2009). Moving forward, the American Public Health Association (2009) recommends the following universal
coverage strategies to reform the current workers’ compensation system:
• A paradigm shift from the current focus on restoration (i.e., medical, surgical, and rehabilitative approaches) to a sharper focus on primary and secondary prevention strategies to reduce both the incidence and the severity (prevalence) of work-related injuries and illnesses by providing incentives to employers and health care providers;
• An emphasis on nonsurgical, early, and aggressive rehabilitation efforts to minimize days away from work and facilitate return to work at maximum capacity and productivity;
• Use of functional capacity evaluations as a standardized, objective assessment of an injured worker’s ability to perform essential functions of the job and to facilitate vocational exploration;
• Mandatory root cause investigation (medical causation) requirements, conducted by qualified health and occupational safety professionals (e.g., occupational therapists, physical therapists) for work-related injuries and illnesses;
• Universal reporting systems for all occupational injuries and illnesses; and
• Provision of incentives for and assistance with job training and ergonomic modifications.

The articles in this issue offer a comprehensive, systematic review of the evidence to gain a better understanding of occupational therapy interventions for the treatment of individuals with work-related injuries, illnesses, or both. The evidence provides different methods of intervention, but occupational therapy practitioners should make the ultimate judgment regarding the appropriateness of a given procedure in light of each client’s specific circumstances and needs (Kaskutas & Snodgrass, 2009). ▲

References

American Journal of Occupational Therapy
Call for Papers
Special Issue on Autism

The American Journal of Occupational Therapy announces a call for papers for a special issue on occupational therapy and autism. The journal seeks research papers examining
• Intervention effectiveness,
• Instrument development and testing, and
• Clinical classification and subtyping (literature reviews will not be reviewed).

The objectives of this special issue are to generate empirical research supporting occupational therapy’s role in the treatment of autism for use by consumers, insurers, and other health care professionals.

To indicate interest, please email an abstract of your proposed submission to Dr. Roseann Schaaf, special issue guest editor, at roseann.schaaf@jefferson.edu, by January 15, 2011.

Abstracts should be no more than 200 words and contain the headings Objectives, Methods, Results, and Conclusion. Papers matching the goals of this special issue will be invited for formal submission.

The deadline for paper submission is July 30, 2011. Authors invited for formal submission will receive an e-mail message with formatting specifications and author guidelines.