effectiveness early detection, prevention, and treatment of fire fighter injuries and illnesses.

Clinicians and researchers in our group from the University of South Florida and Spine & Sport Foundation have worked with fire service agencies for several years in various aspects of fire fighter wellness-fitness programs and preventive services. We recently assessed the wellness and fitness characteristics of fire fighters through data gathered from initial fitness and medical evaluations of a recently started WFI-based program (Mayer, 2007). Baseline fitness and medical evaluations were conducted on 793 fire fighters—725 males and 68 females—of a medium-large fire-rescue department in the United States. Physical evaluations consisted of: physical examination, blood profile, chest x-ray, pulmonary function, EKG and cancer screenings. Fitness evaluations consisted of maximal exercise stress test, body composition and various muscular strength, flexibility and endurance measures.

How to Assess Outcomes in Chiropractic Clinical Care and Research

Assessing clinical outcomes is crucial for chiropractic research and the care of patients by doctors of chiropractic. Considering the demands of today's health care environment, documenting treatment outcomes has never been more important. Patient-reported outcomes (PROs) offer distinct advantages over physical tests in terms of convenience, efficiency, and cost. It is unclear, however, which PRO is the most appropriate in clinical and research settings.

A recent systematic review by Khorsan et al. (Khorsan, 2008) provided some insight about this issue. The authors' objectives were to: 1) identify patient-based outcomes used in studies on chiropractic, 2) describe a framework for the use of these measures, and 3) address the challenges associated with use of these measures. 1166 articles were uncovered, of which 626 were considered relevant. The authors concluded that the integration of outcomes in chiropractic research is consistent with national initiatives to improve health care quality through performance measurement. A variety of outcomes were used in chiropractic research; the most common were the numerical rating scale, visual analog scale, Oswestry Disability Index, Roland-Morris Disability Questionnaire, and the SF-36.

The PROs described in the paper by Khorsan et al. are good starting points when choosing appropriate outcome instruments for chiropractic clinical practice or research. Keep in mind, however, that despite the availability of hundreds of PROs, new instruments are currently being developed to improve efficiency, accuracy, and precision, especially related to the assessment of physical function and activities of daily living. Consequently, it is essential to stay well-informed of changes in outcomes assessment and related policies concerning evidence-based management.

Khorsan R, Coulter ID, Hawk C, Choate CC. Measures in chiropractic research: choosing patient-based outcome assessments. Journal of Manipulative and Physiological Therapeutics, 2008;31(5):355-75.