

Chiropractic Musculoskeletal Competence: Is Being "Best" Good Enough?

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While chiropractic doctors address a wide range of health concerns and disorders in their clinical practices, the profession as a whole and our formal training obviously emphasize musculoskeletal diagnosis and treatment. This is appropriate, given that musculoskeletal disorders are a major burden to individual patients and the health care system as a whole.¹ Since several of the drug interventions generally employed by allopaths appear to accelerate joint destruction²⁻⁴ and result in more than 100,000 hospitalizations and well over 16,000 deaths per year,⁵⁻⁷ and since some surgical procedures for musculoskeletal pain are not more effective than placebo or conservative treatment,⁸⁻¹⁰ the chiropractic profession's contribution to public health by the provision of safe and effective nonpharmacologic and nonsurgical management of musculoskeletal pain is important. With these and other considerations in mind, the assessment of competence and comparative competence among front-line health care professionals is a worthy area of investigation.



The standardized musculoskeletal competency examination was initially developed and published by Freedman and Bernstein in their landmark study published in *Journal of Bone and Joint Surgery* in October 1998.¹¹ The test has been validated by a nationwide survey of hospital residency chairs in orthopedics and internal medicine. The test consists of 25 open-ended, short-answer questions that survey general orthopedic diagnoses and management on topics such as acute compartment syndrome, septic arthritis, scaphoid fracture and lateral epicondylitis. A minimum score of 70%-73% is required for passing.

Just like the original study by Freedman and Bernstein, all follow-up confirmation studies assessing medical "allopathic" competence by this validated and standardized examination have shown that medical school preparation in musculoskeletal medicine is inadequate and that the vast majority of medical graduates are incompetent in basic musculoskeletal diagnosis and management.¹²⁻¹⁶ Generally, these articles have demonstrated that only 20%-30% of medical graduates are competent in basic musculoskeletal knowledge. Stated differently, 70%-80% of medical graduates are incompetent in basic musculoskeletal knowledge, as assessed by this peer-reviewed and well-researched competency examination. These results are consistent and reproducible from different study populations and are thus probably generalizable to the medical profession as a whole.

Until recently, the question remained: "How well would chiropractic seniors and clinicians perform on this same test of musculoskeletal competence?" That question was

partially answered in January 2007 by Humphreys, et al.,¹⁷ who administered the standardized musculoskeletal competency examination to 123 chiropractic seniors and 10 experienced clinicians. In contrast to the 20%-30% success rate achieved by medical students and doctors, the overall chiropractic success rate (51%-64%) was double or triple that seen among allopathic and osteopathic graduates. The chiropractic group showed a 64% success rate using a minimal passing score of 70%, and a 51% success rate using a minimal score of 73%. The 10 chiropractic clinicians demonstrated a 100% success rate. Thus, the performance of this small group of chiropractic doctors far outshone the results seen among 85 medical doctors working as first-year hospital residents in surgery, medicine and orthopedics; these medical doctors had only a 30% success rate.¹¹

While additional data from other chiropractic colleges and from larger groups of chiropractic clinicians is necessary before firm and generalized conclusions can be drawn, these results suggest that chiropractic training in musculoskeletal medicine as evaluated by a “medical” standardized and validated competency examination is clearly more thorough and more effective in ensuring minimal competence among chiropractic graduates than are the comparable educational programs utilized in allopathic medical schools. The well-documented and consistently high rate of incompetence in musculoskeletal medicine among medical graduates and clinicians is a cause for concern and has implications for state and national public health policies, as well as insurance reimbursement schedules. Likewise and conversely, the consistent demonstration of chiropractic superiority in this field should foster enhanced utilization of and access to chiropractic clinical services.

However, while these latest findings suggest chiropractic superiority in musculoskeletal competence, the findings also suggest we in the chiropractic profession still have a lot of room for improvement within our own educational programs. The standardized musculoskeletal competency examination assesses only fundamental, basic, minimal competence. It is a very weak “standard,” and the chiropractic profession should set its sights for the attainment of mastery and excellence, not the achievement of minimal competence. To foster the achievement of this goal and high educational standards in general, I publicized a list of more than 50 competencies and 100 questions¹⁸ that are reflective of modern integrative chiropractic orthopedics¹⁹ and that surpass the elementary competence reflected by the standardized musculoskeletal competency examination.²⁰

Given that the drug-surgical treatments employed by allopaths cause an estimated 180,000-225,000 iatrogenic deaths per year in America (range: 493-616 iatrogenic medical deaths per day), result in millions of injuries, and cost more than \$136 billion per year in drug-induced adverse effects,²¹⁻²² the chiropractic profession should not be satisfied with succeeding at the goal of parity with the medical profession. Chiropractic clinical standards must never be lower than allopathic standards. We are capable of far better than that, and our patients deserve the best we can give them.

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