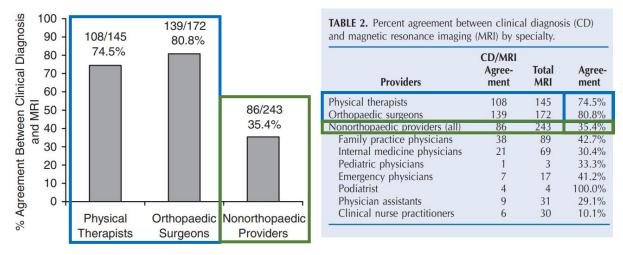
Doctors of physical therapy (DPT) are equally as qualified, in the fields of biomechanics and neuromusculoskeletal injury analysis, as other court approved experts. Research shows that Orthopedic board-certified, Doctors physical therapy (DPT) perform as well as orthopedic surgeons in clinical diagnostic accuracy and analysis of neuromusculoskeletal injuries and conditions. These same physical therapists outperform their non-orthopedic medical physicians in the assessment, diagnosis, treatment, and management of these same injuries and conditions. These facts prove the board-certified DPT is a highly educated and superiorly trained biomechanical and injury analysis expert in the areas of personal injuries including, but not limited to, motor vehicle accidents.

## Level of education

The American Physical Therapy Association (APTA) notes that "Physical therapy education has changed dramatically over the decades. When the profession began, physical therapists (PT) earned a bachelor's degree in another closely related field and then obtained a certificate in physical therapy. As time went on ... education programs adopted the postbaccalaureate degree, primarily the master's degree, as the highest entry-level degree in the field. In 1996, Creighton University, launched the first professional doctor of physical therapy program in the nation. The healthcare industry and academia's "adoption of the DPT recognized that the complexity of patient needs required a greater understanding of how to treat an individual..., so in January 2016 the Commission on Accreditation in Physical Therapy Education (CAPTE) made the DPT the required degree for all accredited entry-level physical therapist education programs" (1). As of January 2020, there are a total of 254 CAPTE-accredited institutions within the United States offering DPT programs (2) with US Army-Baylor University listed as the 6th ranked program in the nation. Today, uniformed military physical therapists have full clinical autonomy with the ability to diagnose, treat, manage, and order a full-spectrum of tests and images. An Army physical therapist is credentialed and privileged to order x-rays, MRIs, CT scans, Ultrasound imaging, various laboratory studies, and prescribe certain medications related to the treatment of musculoskeletal conditions. With advanced training, common in military medicine and physical therapy, Army physical therapists can also perform diagnostic ultrasound studies, electromyographic studies, manipulate the spine and joints, perform therapeutic dry needling treatments, auricular acupuncture treatments, and perform comprehensive neuromusculoskeletal evaluations. These treatments are the same types of treatments and procedures performed by medical physicians (MD), osteopathic physicians (DO), and chiropractic physicians (DC). As further described below, today's physical therapists are educated to perform diagnostic evaluations, medical examinations, and neuromusculoskeletal testing and treatments which place them at or above the level of training of other doctoratelevel clinicians.

# **Diagnostic accuracy**

A study by Moore et al **(Image 1)** clearly shows that clinical diagnostic accuracy by doctoratetrained physical therapists (PTs) and Orthopedic Surgeons (OSs) on patients with musculoskeletal conditions and injuries was significantly greater than for non-orthopedic providers (NOPs), with no statistical difference found between the scores of PTs and OSs (4). Furthermore, this study was conducted across multiple military medical facilities and included both physical therapists and orthopedic surgeons in the authorship (4) to limit professional bias. This ground-breaking research was one of the earliest articles to show that the DPT education, to include orthopedic board certifications, was directly associated clinical diagnostic accuracy equivalent to those of well-established orthopedic surgeons and superior to other nonorthopedic physicians.





Moore et al continue by stating that, "US Army physical therapists have been credentialed with privileges to practice in orthopedic primary care roles since the Vietnam War era and are frequently the first privileged providers to diagnose and manage patients with musculoskeletal complaints or orthopedic trauma" (4). This fact is a key indicator to the overall quality of the DPT training and the DPT's ability to diagnose, treat, manage, and provide critical primary orthopedic care. Research conducted by Childs et al (5,6) shows a comparison between orthopedic surgeons, differing levels of physical therapy trained providers, and differing medically (MD/DO) trained providers. Childs et al shows that orthopedic surgeons and doctorate-trained physical therapists from US Army-Baylor University have superior clinical and diagnostic capabilities as compared to non-orthopedic physicians and as it relates to neuromusculoskeletal injuries and associated medical conditions (5,6).

#### **Direct access**

The terms primary care refers to the initial evaluation and treatment of a medical condition or injury. In the primary care setting, a clinical provider will likely be the first clinician to examine the patient and provide initial care and treatments. Direct access refers to a patient's ability to see a provider, in this case a physical therapist, without requiring a referral from a primary care

provider. While these terms may seem steeped in semantics, this verbiage is critical to establishing a physical therapist's clinical expertise and therefore the quality of education and professional autonomy. Today's DPT currently perform neuromusculoskeletal evaluations and diagnostic testing in primary care and direct access setting and perform commensurate to other primary care/direct access providers. A myriad of research shows the value of patients with neuromusculoskeletal injuries and conditions, including those involved with motor vehicle collisions, seeing patients as direct access/primary care providers. It has been shown that faster recovery times, improved injury diagnostics, and lower healthcare costs are obtained when patients see physical therapists in these direct access/primary care settings (8,9,10,11).

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