Magnetic Resonance Imaging: Generating a New Pulse in the Physical Therapy Profession

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In 2003, the Board of Directors of the American Physical Therapy Association (APTA) published a position statement (BOD-P03-03-12-28) promoting the goal that all physical therapists hold the privileges of autonomous practice. In 2006, the House of Delegates of the APTA moved forward on the same topic with their position statement (HOD P06-06-18-12), reaffirming the concept from the BOD that "Autonomous physical therapist practice is characterized by independent, self-determined professional judgment and action." The statement further defined the 4 expected privileges of the autonomous physical therapist practitioner by the year 2020:

1. Direct and unrestricted access: the physical therapist has the professional capability and ability to provide to all individuals the physical therapy services they choose without legal, regulatory, or payer restrictions.

2. Professional ability to refer to other healthcare providers: the physical therapist has the professional capability and ability to refer to others in the healthcare system for identified or possible medical needs beyond the scope of physical therapist practice.

3. Professional ability to refer to other professionals: the physical therapist has the professional capability and ability to refer to other professionals for identified patient/client needs beyond the scope of physical therapist practice.

4. Professional ability to refer for diagnostic tests: the physical therapist has the professional capability and ability to refer for diagnostic tests that would clarify the patient/client situation and enhance the provision of physical therapy services.

Professional Ability to Refer for Diagnostic Tests

While each of the 4 privileges offer an exciting, and mostly measurable, glimpse into autonomous practice, the ability to refer for diagnostic tests is particularly relevant to the topic of this special issue on magnetic resonance imaging (MRI). As a doctoring profession, one could argue that the ability to refer a patient for MRI (and other imaging applications) must be available to the direct-access physical therapist. Though the prescription for and use of MRI has not typically been considered within the scope of physical therapist practice, as others have detailed,3,7,8,18,21-28 this may be the perfect time to challenge the obstacles precluding the obtaining of such diagnostic privileges and to specifically provide perspective on why and how such a specialized privilege could positively impact the provision of physical therapy services and patient outcomes.3,21 Physical therapists can play a crucial primary-care role through participation in models based on diagnostic and patient management algorithms3,7,8,18,21 to (1) reduce practice variation,3 and (2) help to ensure that patients understand both the necessity for appropriate imaging and appreciate the potential negative consequences of unnecessary imaging.17,20 An expected obligation of such autonomy, however, is accountability. Is our entire profession adequately prepared to accept the role of, or the responsibilities associated with, referral for imaging privileges?

READINESS: WHAT DOES THE EVIDENCE SAY?

Physical therapists undergo extensive didactic and clinical preparation; they possess excellent diagnostic skills, and are well versed in current best diagnostic and treatment-based evidence.3 Physical therapists are well suited to become key members of an interdisciplinary healthcare team that makes early decisions towards retarding or preventing the development of long-term physical impairments second-
ary to injury and/or disease processes. A system that places physical therapists as first-line providers for patients with painful neuromusculoskeletal conditions may help to realize such an outcome.

Health systems in which physical therapists are specifically empowered to function as first-line providers include the US Military, Kaiser Permanente Northern California, the Department of Veterans Affairs Salt Lake City Health Care Systems,23 and The University of Wisconsin Hospital and Clinics.2 It must be emphasized that the physical therapists in these settings have undergone extensive advanced training in evaluating, diagnosing, and treating patients' conditions in a direct-access setting, and in ordering imaging to aid in diagnosis when necessary. These examples provide evidence that an advanced training program can effectively establish the primary care scope of the physical therapist. But just as importantly, we must add that the data emerging from these model centers may not yet be generalizable to our national or worldwide physical therapist communities.

Another example of physical therapists functioning under expanded primary care privileges is the 2004 pilot project from the Virginia Mason Medical Center in Seattle, WA.29 In an attempt to reduce specialty care costs (e.g., ordering of imaging) for patients with low back pain, changes in the clinical decision pathway were proposed and included implementation of an evidenced-based protocol with physical therapists up front. After 1 year, the model yielded favorable results. The number of ordered MRI exams and total cost per episode of care were both reduced. Furthermore, the initiation of direct-access physical therapy resulted in fewer patients transiting to the chronic pain center. While further research is required before definitive conclusions can be drawn, this example provides strong foundation for welcoming physical therapists who are well versed in the implementation of appropriate imaging guidelines, as front-line providers.

TOWARDS A NEW NORMATIVE MODEL FOR PHYSICAL THERAPIST PRACTICE

 Incorporation of didactic content on diagnostic imaging (e.g., radiography, computed tomography, ultrasound, MRI) has become the educational norm for entry-level and transition Doctor of Physical Therapy degree students. Additionally, there are a number of professional development opportunities offered through advanced clinical practice courses by the APTA. Clinicians and researchers in our field have published and continue to publish seminal and oftentimes multidisciplinary works related to imaging.2,6,8,12-16,21,22,24-28. Our journals continue to publish more imaging-related studies/cases, and our professional conferences encourage and accept poster and platform submissions that feature imaging. Finally, the recent development of the Special Interest Group on Imaging within the Orthopedic Section of the APTA is another important contribution to developing practice competencies, reducing practice variability, fostering imaging curriculum in physical therapist education, and promoting the role of the physical therapist, as a primary care team member, in judicious referral for imaging procedures. These all represent a great start for informing the entire physical therapist community and other stakeholders (medical practitioners, administrators, insurers, legislators, and the public) regarding the evolving important role of imaging within the scope of physical therapy practice. However, to realize the maximum potential and success of such a model, collegial collaboration with others inside and outside the physical therapy profession is imperative. This collaborative approach is consistent with the definition of professional autonomy, not deviant from it.

An important personal context for this special issue is my belief that such interdisciplinary professional collaboration, at least with respect to MRI, can be further cultivated by physical therapists who seek formal or informal opportunity to gain an improved working knowledge of (1) the complexities of MRI,29 (2) the issues related to patient and operator safety when working in an MRI environment,30 (3) determining the best sequences for identifying pathology,11,29,30 (4) emerging evidence that highlights advanced imaging applications,5-5 (5) continued vigilance regarding overutilization of MRI services,17 and, finally, (6) a history of physical therapy and imaging.8

This special issue contains a collection of manuscripts, authored by multidisciplinary teams, that address each of the aforementioned topics. As such, it is highly relevant for all clinicians involved in managing patients with neuromusculoskeletal disorders, because MRI may play a significant role in helping to make more informed clinical decisions. More importantly, we hope that the information presented here will inspire readers to seek and embrace opportunities for fostering and maintaining collegial collaborations inside and outside the professional boundaries of physical therapy.

POUNDING HOME THE TRUTH

In closing, as an old legal adage states: If you have the truth on your side, pound the truth. If you have the facts on your side, pound the facts. And if you have neither, pound the table. For today’s (and tomorrow’s) physical therapist, it is important to realize the responsibility that comes with the complex challenges of referral for imaging and other diagnostic privileges. As such, let’s work in an interdisciplinary environment towards discovering new facts that reveal new truths regarding physical therapists as front-line providers. Our field has and will continue to overcome professional challenges, but we must not be guilty of pounding the table. Let’s gather the facts and stick to the truth.

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