Risk Determination for Patients With Direct Access to Physical Therapy in Military Health Care Facilities

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Study Design: Nonexperimental, retrospective, descriptive design.
Objectives: This study was designed to ascertain whether direct access to physical therapy placed military health care beneficiaries at risk for adverse events related to their management.
Background: Military health care beneficiaries have the option at most US military hospitals and clinics to first enter the health care system through physical therapy by direct access, without referral from another privileged health care provider. This level of autonomous practice incurs broad responsibilities and raises concern regarding the delivery of safe, competent, and appropriate patient care administered by physical therapists (PTs) when patients are not first examined and then referred by a physician or other privileged health care provider. While military PTs practice autonomously in a variety of health care settings, they do not work independently within any facility. Military PTs and physicians rely on one another for sharing and collaboration of information regarding patient care and clinical research as warranted. Additionally, military PTs are indirectly supervised by physicians.
Methods and Measures: To reduce provider bias, a retrospective analysis was performed at 25 military health care sites (6 Army, 11 Navy, and 8 Air Force) on patients seen in physical therapy from October 1999 through January 2003. During this 40-month period, 95 PTs (88 military and 7 civilian) were credentialed to provide care throughout the various medical sites. Descriptive statistics were analyzed for total workload, number of new patients seen with and without referral, documented patient adverse events reported to each facility's Risk Management Office, and any disciplinary or legal action against a physical therapist.
Results: During the 40-month observation period, 472 013 patient visits were recorded. Of these, 112 653 (23.9%) were new patients, with 50 799 (45.1%) of the new patients seen through direct access without physician referral. Throughout the 40-month data collection period, there were no reported adverse events resulting from the PTs' diagnoses or management, regardless of how patients accessed physical therapy services. Additionally, none of the PTs had their credentials or state licenses modified or revoked for disciplinary action. There also had been no litigation cases filed against the US Government involving PTs during the same period.
Conclusions: The findings from this preliminary study clearly demonstrate that patients seen in military health care facilities are at minimal risk for gross negligent care when evaluated and managed by PTs, with or without physician referral. The significance of these findings with respect to direct access is important for not only our beneficiaries but also our profession and the facilities in which we practice. *J Orthop Sports Phys Ther 2005;35:674-678.*

Key Words: *adverse effect, adverse event, liability, primary care*

Direct access to physical therapy is available in some but not all US Military Health Care Facilities (HCFs).[1,6,7,14,17] The option for military health care beneficiaries, principally for active duty soldiers, to access physical therapy without physician referral has existed in the US Army since the end of the Vietnam War.[7-9] No longer unique to just the US Army, several Navy and Air Force HCFs have also offered patients direct access for well over the last 2 decades. This role stems from the primary mission of military physical therapists (PTs) to function as physician extenders and, as such, be credentialed with clinical privileges to examine patients with and without physician referral, order diagnostic imaging studies, perform electromyographic and/or nerve conduction studies, order laboratory tests, and prescribe some types of medications.[2,7] The importance of this responsibility to autonomously

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manage patients with nonsurgical musculoskeletal injuries, with or without physician referral, has historically enabled military orthopaedic surgeons, family medicine physicians, and emergency care physicians to focus their practice on more complicated medical, trauma, or surgical cases. The strength of the close working relationship between military PTs and physicians has anecdotally produced more efficient and effective services for beneficiaries by reducing the need for multiple visits to obtain a referral to physical therapy and initiating rehabilitation closer to the time of injury or onset of symptoms.[2,7] Early access to physical therapy has been reported to have far-reaching benefits of reduced medical costs, improved patient satisfaction, enhanced recovery time, reduced sick leave, prevention of chronic problems, and reduction of the total amount of physical therapy needed.[11,12,15] Although the effectiveness of early, direct access physical therapy intervention has been noted, clinical risks related to this practice have not been reported.

With the increasing need for military PTs to practice autonomously in an effort to optimize physician utilization and expedite care to patients with musculoskeletal injuries, the purpose of this study was to ascertain whether direct access to physical therapy placed military health care beneficiaries at risk for adverse events related to their management. This level of autonomous practice incurs broad responsibilities and raises concern regarding the delivery of safe, competent, and appropriate patient care administered by PTs when patients are not first examined and then referred by a physician or other privileged health care provider. In this study, we sought to identify if any of the military PTs practicing in the 25 military HCFs where direct access to physical therapy is available had been identified and reported by their clinic chief or director to their respective Risk Management Office or Credentials Office for incompetent or negligent care of patients managed through direct access without physician referral. In addition, we sought to determine if any PTs had their clinical privileges or state licensure suspended or revoked or whether they had been involved in litigation for incompetent or negligent care of patients managed through direct access.

METHODS

Subjects

A retrospective analysis, covering a period of time from October 1999 through January 2003, was performed at 25 US Military HCFs (6 Army, 11 Navy, and 8 Air Force) offering direct access to physical therapy services. During this 40-month period, 95 PTs (88 military and 7 civilian) with an average (±SD) of 7.4 ± 9.7 years (range, 1-18 years) of experience were credentialed by their respective local HCF with privileges to provide care throughout the various medical sites. Fourteen of 95 PTs held a doctorate degree (PhD or DSc) for their highest education level, 79 had a master's degree, and 2 had a bachelor's degree. Of the 95 PTs, 36 obtained board certification through the American Board of Physical Therapy Specialties in the following areas: 21 in orthopaedic physical therapy, 14 in sports physical therapy, and 1 in clinical electrophysiologic physical therapy. All but 11 of the PTs in this study (84/95 [88%]) attended the 2-week postgraduate specialty training in the COL Douglas Kersey Neuromusculoskeletal Evaluation Course conducted at Fort Sam Houston, Texas. While this training on how to perform a clinical examination on patients with musculoskeletal injuries is not necessarily unique, it does provide advanced clinical and laboratory education in evidence-based diagnosis and management of patients with musculoskeletal injuries, including advanced topics on differential diagnosis, radiology, and pharmacology.

Procedures

Military health care requires all providers to be credentialed by a credentials committee with privileges to practice in respective HCFs. To obtain privileges, all providers must graduate from an accredited institution and be licensed to practice. Additionally, PTs had to have completed postgraduate training through the COL Douglas Kersey Neuromusculoskeletal Evaluation Course or comparable continuing education to obtain supplemental privileges to order laboratory and diagnostic imaging studies, electromyographic and/or nerve conduction studies, and to prescribe medications. Licensure is typically obtained in the state where providers are first assigned to a military installation. Besides physicians, other health care providers typically referring patients to physical therapy include dentists, physician assistants, and clinical nurse practitioners.

Directors at 168 military physical therapy clinics were contacted by electronic mail to survey which sites had policies enabling beneficiaries direct access to physical therapy services. At the time of this survey, directors from only 25 clinics offered direct access. Directors not offering the service cited several reasons for their decision, the primary ones being command policy or personal preference. Those able to participate in the study were asked to access their files and provide data regarding total number of patient visits and new patient visits during the inclusion period. Specifically, we wanted to know how many of the new patients accessed their services without referral from a physician or another privileged health care provider.

Directors were also asked to provide the number of documented adverse events reported to their respective Risk Management Office or Credentials Office.

Specifically, directors were to report any documented adverse events in any way associated with a PT management of patients, regardless if patients entered their service through direct access or by referral. Adverse events were defined as an undesirable result of the PT evaluation, diagnosis, or prescribed intervention resulting in any short-term or permanent morbidity unexpected for patients with a like clinical presentation. Specific diagnoses made by PTs practicing direct access were also requested.

Additionally, directors were asked to provide the number of PTs on their staff who had their privileges modified or revoked for disciplinary action by their respective HCF's credentials committee. This request included addressing the number of PTs who also had their state license modified or revoked for disciplinary action, or were involved in litigation cases filed against the US Government that resulted from management of patients seen with and without referral from a physician or another health care provider.

Data Analysis

Descriptive statistics reported by the directors from the 25 clinics were summarized and analyzed for (1) total patient workload, (2) number of new patients seen with and without referral, (3) incompetent or negligent care of patients managed through direct access, (4) clinical privileges suspended or revoked as a result of incompetent or negligent care for patients managed through direct access, (5) state licensure suspended or revoked as a result of incompetent or negligent care for patients managed through direct access, and (6) involvement in litigation for incompetent or negligent care of patients managed through direct access. Clinic directors were instructed to obtain data from their clinic files, the Risk Management Office, or the Credentials Office.

RESULTS

During the 40-month observation period, 472 013 patient visits were recorded. Of these, 112 653 (23.9%) were new patients, with 50 799 (45.1%) of the new patients seen through direct access without physician referral. Throughout the 40-month data collection period, there were no documented adverse effects resulting from the PT diagnoses or management as a result of patient direct access or referral for physical therapy services. Additionally, none of the PTs had their credentials or state license modified or revoked for disciplinary action. There also were no litigation cases filed against the PTs during the same time period. Beyond the common musculoskeletal injuries encountered by PTs (eg, retropatellar pain syndrome, ankle sprains, shoulder impingement, low back pain, etc), less frequently encountered injuries and conditions were also diagnosed by PTs in these direct access practice settings (Table).

TABLE. Sample of diagnoses made by military physical therapists in direct access practice.

Diagnoses
Charcot-Marie tooth disease
Fractures: fibula, phalangeal, scaphoid, radius, orbital
Ewing sarcoma
Stress fractures: femur, sacral, pelvic, tibia, metatarsals
Pelvic cyst/mass
Posterior cruciate ligament sprain
Anterior cruciate ligament sprain
Posterior lateral corner sprain
Osteochondritis dissecans
Exertional rhabdomyolysis
Compartment syndrome
Nerve injuries: long thoracic, suprascapular, lumbar, and cervical radiculopathy
Athlete pubalgia
Ankylosing spondylitis
Spondylolisthesis
Cellulitis
Tarsal coalition
Lumbar spinal stenosis
Glenohumeral joint instability
Medial patellar femoral ligament sprain secondary to lateral patella dislocation
Costochondritis
Sternoclavicular sprain
Scapholunate instability

DISCUSSION

The findings from this descriptive study support our premise that patients seen in US Military HCFs are at minimal risk for adverse events when evaluated and managed by PTs. Of notable interest, these findings were the same regardless whether patients obtained physical therapy services through direct access or by referral. These findings are important for not only our beneficiaries, but also our profession and the facilities in which we practice, further supporting previous publications addressing patient direct access to physical therapy.[1-3,6,7,14,17]

The US Department of Defense recognizes the need for military PTs to serve in a direct access role for musculoskeletal disorders, allowing them to evaluate, diagnose, prescribe, and administer interventions for military personnel and their families, with and without referral from a physician or other privileged health care provider.[2,3,7,14] The efficacy with which military PTs have functioned as physician extenders over the last 38 years has allowed them to be credentialed with clinical privileges, enabling greater latitude to make autonomous practice decisions for patients with musculoskeletal conditions. While all

military PTs have physician supervisors, the level of autonomous practice, principally to order diagnostic imaging studies and prescribe medications, makes direct access policies easier to implement.[2,7] A recent study by Moore et al[14] also demonstrated excellent clinical diagnostic accuracy by military PTs, as confirmed by magnetic resonance imaging studies for musculoskeletal injuries. These findings were noted irrespective of whether patients were seen through direct access.

Military PTs do not practice independently but work very closely with orthopaedic surgeons, family medicine physicians, and emergency care physicians.[7,14] By functioning in a primary care role to manage musculoskeletal injuries, military PTs are able to work more efficiently and effectively, reducing excessive patient visits, initiating rehabilitation closer to the time of injury or onset of symptoms, and ensuring that serious injuries are expedited to orthopaedic surgeons.[2,7] This close working relationship between the PTs and all credentialed providers enables the PTs to autonomously manage nonsurgical musculoskeletal injuries, providing the orthopaedic surgeons, family medicine physicians, and emergency care physicians the opportunity to manage patients with more complex surgical and medical problems. This level of practice is now being optimized in Iraq and Afghanistan by military PTs for Operation Iraqi Freedom and Operation Enduring Freedom. Military PTs are serving in combat support and theater hospitals, Brigade Combat Teams, with Ranger and Special Forces units, and aboard aircraft carriers, providing direct access for US and coalition forces with musculoskeletal injuries, enabling orthopaedic surgeons to spend critical time in operating rooms addressing more serious war wounds.

Clinical Relevance

The findings from this study further support the basic premise that PTs are not only capable of making good clinical judgments regarding the diagnosis and management of patients with musculoskeletal injuries, but that these decisions can be made without physician referral.[1-6,14,16] Like most PTs practicing in military clinics, the majority of PTs in this study had undergone postgraduate specialty training in the 2-week COL Kersey Neuromusculoskeletal Evaluation Course conducted by the US Army-Baylor University Doctoral Program in Physical Therapy. Although our study design does not allow us to draw conclusions regarding the impact of this training program on PT performance, it is conceivable that this advanced clinical training elevated the level of clinical care provided by the therapists included in our study.

Limitations

A retrospective study can be a design limitation. However, we believe it added credibility to this study by providing available data already documented and archived within the respective HCF by each Risk Management Office or Credentials Office. This, however, also produces a dilemma in that we relied on the integrity of directors to report the number of adverse events documented and reported to their respective Risk Management Office or Credentials Office, whether clinical privileges or state licenses were suspended or revoked, or if any PTs were involved in litigation for incompetent or negligent care of patients managed through direct access. Because this information is self-reported by each director, verification is not possible.

Another limitation with respect to reporting of military PTs involved in litigation resulting from their care is that, unlike civilian practice, military health care providers are shielded from direct litigation. Active duty military personnel may not sue or seek litigation against military medical facilities or personnel. However, family members may seek litigation for their respective service members in case of wrongful death due to inappropriate medical care. Additionally, family members of active duty military and retired military and their families may seek litigation for medical malpractice against military health care facilities or personnel.

Future Research

The findings from this study should be addressed prospectively across a broader spectrum of health care providers, both in military and civilian practice, to include a cost analysis for direct access physical therapy performed in settings outside of a tertiary clinic. Additionally, patient outcomes with respect to adverse events that are far less serious in nature and typically not reported to the Risk Management Office or Credentials Office could be assessed.

CONCLUSION

The findings from this descriptive study clearly demonstrate that patients seen in military health care facilities are at minimal risk for gross negligent care when evaluated and managed by PTs, with and without physician referral. The significance of these findings are further exemplified by the fact that the military PTs in this study were also responsible for requesting diagnostic imaging studies and prescribing medications. Direct access without physician referral enables beneficiaries the option to be managed earlier, effectively, and safely after a musculoskeletal injury or onset of pain.

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