

# Physical Therapists in the Patient Centered Medical Home: Improving Cost, Quality, and Access

Matthew B. Garber, PT, DSc, OCS, FAAOMPT<sup>1,2</sup>

<sup>1</sup>Adjunct Associate Professor, The George Washington University, Program in Physical Therapy, Department of Health, Human Function & Rehabilitation Sciences, Washington, DC

<sup>2</sup>Physical Therapy Consultant to the Army Surgeon General, Defense Health Headquarters, Falls Church, VA

The opinions and assertions expressed herein are those of the author and do not necessarily reflect the official policy or position of the United States Army or the Department of Defense.

## ABSTRACT

**Background and Purpose:** Musculoskeletal (MSK) conditions are the most common reason patients seek care in the Military Health System (MHS). This demand is a significant burden on the MHS, accounting for over 4 million ambulatory visits in 2018. The purpose of this paper is to describe the impact on access, cost, and quality of care by embedding physical therapists into a developing Patient Centered Medical Home (PCMH) within a community-based military hospital.

**Methods:** The hospital moved an existing full-time physical therapist from the physical therapy clinic directly to the PCMH within family medicine. Data regarding network purchased care costs, number of physical therapy consults deferred to the non-military care network, and quality metrics regarding low back pain imaging were assessed. **Findings:** One year after embedding the physical therapist, the hospital realized a 38% reduction in private sector physical therapy costs, a 35% reduction in network physical therapy deferrals, and improved low back pain imaging quality measures. Patient satisfaction metrics exceeded national standards.

**Clinical Relevance:** Embedding physical therapists in a PCMH can improve cost, quality, and access to care for patients with MSK conditions. **Conclusion:** Integrating physical therapists within a PCMH model in a military hospital improved access to care, lowered costs, and decreased use of health care resources.

**Key Words:** direct access, primary care, musculoskeletal, military health system

## BACKGROUND AND PURPOSE

Musculoskeletal (MSK) conditions are the most common reason active duty service members seek care in the Military Health System (MHS), accounting for over 4 million ambulatory visits in 2018. This is more than double the number of behavioral health visits, which is the second leading cause of ambulatory encounters in the MHS. Furthermore, 53.4% of all ambulatory visits related to duty limiting conditions for active duty service members are due to MSK related conditions.<sup>1</sup> This high volume of MSK conditions presents a considerable burden on the MHS and impacts the overall readiness of the military.

The Patient Centered Medical Home (PCMH) is a care delivery model developed to shift care from a reactive, physician-centered model of care to a proactive, patient-centered model that provides improved access and quality of care at a lower cost while enhancing the overall patient experience.<sup>2</sup>

Direct access to physical therapists without physician referral has been shown to result in fewer overall patient visits, lower costs, less imaging and medication use, and fewer additional non-physical therapy related visits, while demonstrating excellent patient satisfaction and outcomes with no evidence of harm.<sup>3-9</sup> Furthermore, physical therapists are ideally suited and trained to be primary managers of MSK conditions. The diagnostic accuracy of physical therapists has been shown to be similar to orthopedic surgeons and better than non-orthopedic or primary care providers, including nurse practitioners, physician assistants, family practitioners, and internal medicine providers.<sup>10,11</sup>

Given the strong evidence of effectiveness for early access to physical therapists for patients with MSK conditions, the director of physical therapy services at a community-based military hospital advocated to hospital administrators for the integration of physical therapists within a developing PCMH. The purpose of this paper is to describe the impact on access, cost, and quality of care by

embedding physical therapists into a developing PCMH within a community-based military hospital.

## METHODS

The director of physical therapy services at the military hospital provided the chief medical officer and chief executive officer of the facility with a thorough review of the evidence of effectiveness, impact on cost, quality, patient satisfaction, and low risk of harm when patients access physical therapy directly. After learning of the published evidence on improved cost, quality, and access as well as projected impact on enhanced patient experience, the hospital agreed to a trial of moving an existing full-time physical therapist from the physical therapy clinic directly to the PCMH within family medicine. An examination room was provided for the physical therapist adjacent to the PCMH providers and existing administrative support from the PCMH staff was used for the physical therapist. Workflow details were coordinated, which included patients with MSK complaints being provided the option to see the physical therapist rather than the primary care provider. Data regarding network purchased care costs, number of physical therapy consults deferred to the non-military care network, and quality metrics including Healthcare Effectiveness Data and Information Set (HEDIS) for low back pain imaging were assessed. The HEDIS is a widely used set of performance measures in the managed care industry, developed and maintained by the National Committee for Quality Assurance.<sup>12</sup>

## RESULTS

### Cost

The year prior to embedding a physical therapist into the PCMH, the facility spent \$2.5 million in private sector physical therapy care delivered outside of the military hospital. This amount was just below the \$2.7 million combined costs for private sector physical therapy services spent by 3 nearby

military hospitals. One year after embedding the physical therapist, the hospital realized a cost avoidance of \$944,855, equal to a 38% reduction in private sector physical therapy costs.

### Network Deferrals

The number of patients deferred to network private sector care decreased from 2,632 the year prior to embedding the physical therapist to 1,706, a reduction of 35% during the first year of implementation. The hospital continued to see reductions in network deferrals the following year, with 1,076 patients deferred, an additional 36% reduction.

### HEDIS Low Back Pain Imaging Metric

Diagnostic imaging of patients with low back pain prior to 28 days of symptoms in the absence of red flags is unlikely to provide additional patient benefit.<sup>13</sup> The HEDIS low back pain imaging metric measures the percentage of patients, without red flags, between the ages of 18 and 50 with a primary diagnosis of low back pain who did not have an imaging study, including radiograph, magnetic resonance imaging, or computed tomography, within 28 days of the diagnosis.<sup>12</sup>

At the time this program was implemented, none of the 28 Army hospitals within the MHS were above the 50th percentile for this HEDIS metric. Embedding the physical therapist in the PCMH increased the HEDIS low back pain imaging within this facility to above the 75th percentile, and this improvement was sustained for the next 2 years. One year after embedding the physical therapist in family medicine, a physical therapist was also embedded within the internal medicine PCMH. The internal medicine PCMH subsequently performed above the 90th percentile for this metric.

### Net Promoter Score

In an effort to gauge patient experience with the physical therapist in the PCMH, we calculated the Net Promoter Score (NPS). The NPS is an indicator of company growth and customer loyalty.<sup>14,15</sup> The industry average is 16%, with exceptional companies scoring 75-80%. The NPS question is, "How would you rate your overall experience today?" It is scored on a Likert scale of 0 to 10 with 0 being the worst experience, 5 being neutral, and 10 being the best experience ever. "Promoters" are considered those that score 9 or 10 while those that are "passively satisfied" score 7 or 8. "Detractors" are

considered those that score 6 or below.<sup>14,15</sup> The total NPS score is derived by subtracting the number of detractors from promoters.<sup>14,15</sup> Seventy-eight percent of patients surveyed during the first year of embedding the physical therapist in the PCMH were "promoters" and none were "detractors," resulting in an NPS of 78%.

### Patient Satisfaction

A convenience sample (n=179) of patients who accessed physical therapy through the PCMH during the first year were also surveyed using a 1-5 Likert scale (1 = not at all, 5 = absolutely), regarding their confidence in the physical therapist's knowledge, explanation by the physical therapist on their diagnosis, interest and concern shown by the physical therapist, overall satisfaction with their experience, and preference for seeing a physical therapist first for their MSK condition. All patients surveyed responded with either a 4 or 5 on the scale. Ninety-six percent of patients seen in the PCMH clinic during the first year were satisfied with their access to care while only 74% of patients were satisfied with their access to care in the main physical therapy clinic.

## DISCUSSION

Overall, patients accessing physical therapy through the PCMH were very satisfied with the care they received, as evidenced by NPS ratings similar to exceptional companies. Consistent with previous studies, we also found that early access to physical therapists resulted in cost savings, lower use of other health care resources such as diagnostic imaging, and no incidents of harm. It is important to note that these initial results were obtained without increasing staffing but rather using existing resources in a different way to meet patients' needs at the entry point of the health care system.

The initial success of the physical therapist in the family medicine PCMH led to the decision to embed another physical therapist in the internal medicine PCMH. Despite a substantial reduction in network provided physical therapy services, there was still considerably more demand for MSK services than could be met with the existing military facility physical therapy personnel on hand. The value of embedding physical therapy services in the PCMH led to additional physical therapists being hired and aligning a physical therapist to each PCMH team to manage the high volume of MSK conditions. Two of the three other military health care facilities within the market also

began to incorporate physical therapy within primary care.

An important element to the success of this model of care delivery includes fully integrating physical therapy within the primary care team rather than simply co-locating a physical therapist or physical therapy team with primary care providers. Having a primary care provider who advocates for and sees the value in integrating care, consistent with the PCMH model, is critical to successful implementation.

Depending on the setting, staffing, space allocation, and equipment are factors to consider when establishing physical therapy within a PCMH. For the hospital setting described here, the physical therapist assumed an examination room similar to other providers on the primary care team. This space was considerably smaller than that of a typical physical therapy examination room, and access to an open "gym" area was not feasible. As such, the physical therapist focused primarily on initial evaluations, acute MSK management, and home exercise programs with periodic follow-up visits. An alternative format that could be considered by the hospital is if sufficient staffing exists, a physical therapist could potentially rotate each day of the week in the PCMH as a primary mechanism to improve access to patients, with follow-up visits completed in the traditional physical therapy clinic setting.

## CONCLUSION

Physical therapists are ideally suited to serve as primary managers of clients with MSK conditions. Integrating physical therapists within a PCMH model in a military hospital improved access to care, lowered costs, and decreased use of health care resources. This is another example of how direct access and physical therapists in primary care settings can demonstrate value. Future research looking at prospective, randomized clinical trials of physical therapists working in direct access settings that assess patient-reported clinical outcomes in addition to cost, quality, and access to care metrics is warranted.

## REFERENCES

1. Ambulatory Visits, Active Component, U.S. Armed Forces, 2018. *MSMR*. 2019;26(5):9-25.
2. Jackson GL, Powers BJ, Chatterjee R, et al. The patient-centered medical home: a systematic review. *Ann Intern Med*.

- 2013;158:169-178. doi: 10.7326/0003-4819-158-3-201302050-00579.
3. Fritz JM, Brennan GP, Hunter SJ. Physical therapy or advanced imaging as first management strategy following a new consultation for low back pain in primary care: associations with future health care utilization and charges. *Health Serv Res.* 2015;50(6):1927-1940.
  4. Fritz JM, Kim M, Magel JS, Asche CV. Cost-effectiveness of primary care management with or without early physical therapy for acute low back pain: economic evaluation of a randomized clinical trial. *Spine.* 2017;42(5):285-290. doi: 10.1097/BRS.0000000000001729.
  5. Ojha HA, Snyder RS, Davenport TE. Direct access compared with referred physical therapy episodes of care: a systematic review. *Phys Ther.* 2014;94(1):14-30. doi: 10.2522/ptj.20130096. Epub 2013 Sep 12.
  6. Childs JD, Fritz JM, Wu SS, et al. Implications of early and guideline adherent physical therapy for low back pain on utilization and costs. *BMC Health Serv Res.* 2015;15:150. doi: 10.1186/s12913-015-0830-3.
  7. Frogner BK, Harwood K, Andrilla CHA, Schwartz M, Pines JM. Physical therapy as the first point of care to treat low back pain: an instrumental variables approach to estimate impact on opioid prescription, health care utilization, and costs. *Health Serv Res.* 2018;53(6):4629-4646. doi: 10.1111/1475-6773.12984. Epub 2018 May 23.
  8. Deyle GD. Direct access physical therapy and diagnostic responsibility: the risk-to-benefit ratio. *J Orthop Sports Phys Ther.* 2006;36(9):632-634. doi: 10.2519/jospt.2006.0110.
  9. Moore JH, McMillian DJ, Rosenthal MD, Weishaar MD. Risk determination for patients with direct access to physical therapy in military health care facilities. *J Orthop Sports Phys Ther.* 2005;35(10):674-678. doi: 10.2519/jospt.2005.35.10.674.
  10. Moore JH, Goss DL, Baxter RE, et al. Clinical diagnostic accuracy and magnetic resonance imaging of patients referred by physical therapists, orthopaedic surgeons, and nonorthopaedic providers. *J Orthop Sports Phys Ther.* 2005;35(2):67-71. doi: 10.2519/jospt.2005.35.2.67.
  11. Childs JD, Whitman JM, Sizer PS, Pugia ML, Flynn TW, Delitto A. A description of physical therapists' knowledge in managing musculoskeletal conditions. *BMC Musculoskelet Disord.* 2005;6:32. doi: 10.1186/1471-2474-6-32.
  12. National Committee for Quality Assurance. Use of imaging studies for low back pain (LBP). <https://www.ncqa.org/hedis/measures/use-of-imaging-studies-for-low-back-pain/>. Accessed April 2, 2020.
  13. Chou R, Fu R, Carrino JA, Deyo RA. Imaging strategies for low back pain: systematic review and meta-analysis. *Lancet.* 2009;373(9662):463-472. doi: 10.1016/S0140-6736(09)60172-0.
  14. Reichheld FF. One number you need to grow. *Harv Bus Rev.* 2003;81(12):46-54, 124.
  15. Reichheld F, Markey R. *The Ultimate Question 2.0: How Net Promoter Companies Thrive in a Customer-Driven World.* Boston, MA: Harvard Business Review Press; 2011:52.



## Self-Study Course

### #9150V OCS Orthopedic Certification Specialist Exam Preparatory Course - PACKAGE

Instructor: Eric Wilson, PT, DSc, OCS, SCS, CSCS, FAAOMPT

Dr. Eric Wilson has taught this Preparatory Course for the Orthopedic Certification Specialist exam with an 88% success rate since 2003. Package includes video lectures, practice test questions self-study plus two days live web conference with the instructor.

PRICE: \$650

Approved for 30 hours of CEU's by most State Licensing Boards

For information: [admin@motivationsceu.com](mailto:admin@motivationsceu.com)

# www.MotivationsCeu.com