

## A Comprehensive Distance-Learning Program to Enhance the Spine Program at a Regional Health Network

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# A Comprehensive Distance-Learning Program to Enhance the Spine Program at a Regional Health Network

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## Purpose

To describe an internal educational program developed by a regional health network to enhance skills of physical therapists, improve clinician confidence, improve patient outcomes, and maximize physician support for the evaluation and treatment of patients with low back pain.

## Background

Patients with lumbar pain conditions comprise over 40% of the orthopedic referrals for physical therapy at Lehigh Valley Health Network (LVHN), making treatment of this population ideal for an educational program designed to enhance physical therapists' skills, improve clinician confidence and improve outcomes. Furthermore, physical therapists are asked more frequently to justify services from payers, patients, and referring providers. Optimization of treatment efficiency is needed in order to remain fiscally solvent. Patients are also becoming better-informed about conditions and treatment options. Additionally, referring physicians are seeking clinicians with specialized training to treat patients with spinal pain.

## Methods

A task force of physical therapists with advanced spine rehabilitation training was created. The task force created the conceptual basis for the educational program with consultation from referral sources and termed the program the Spine-Trained Physical Therapist (STPT) program. The task force identified the 2016 update to the treatment-based classification system as an evidence-based framework for the program.<sup>1,2</sup> This framework provides structure in choosing appropriate, effective interventions while allowing for clinician flexibility based upon personal expertise and patient values. It also describes screening patients for red flags and those in need of psychologically-informed rehab.

Select therapists were enrolled in the program and an eight-module course (Table) was developed and uploaded to a network-sanctioned, internal electronic learning platform. Midway through the program, participants attended a live laboratory course focusing on manual

therapy, directional preference interventions, and therapeutic. The electronic modules and lab course were submitted to the Pennsylvania State Board of Physical Therapy for approval for continuing education units. Therapists also completed the American Physical Therapy Association's core values self-assessment and completed shadowing hours with a spine surgeon, physiatrist, and pain-management physician. At the completion of the lab-based component of the STPT track, clinicians completed a survey of three questions related to clinical confidence and program satisfaction. The questions included: (1) rating clinical confidence on a numeric rating scale (0-10) where 0 is no confidence at all and 10 is extremely confident; (2) rating satisfaction with departmental spine education on a numeral rating scale (0-10) where 0 is extremely dissatisfied and 10 is extremely satisfied; and (3) rating overall level of satisfaction with the STPT program with the same scale as question.<sup>2</sup>

## Analysis/Results

Thirty-six physical therapists enrolled in the flagship iteration of the STPT program. All survey respondents reported increased clinical confidence with average confidence improving from 7.43 (6.76, 8.10) to 8.43 (7.76, 8.10) (Figure 1) for a percentage improvement of 13.5%. All survey respondents reported increased satisfaction with average satisfaction improving from 6.64 (5.29, 7.90) to 8.43 (7.62, 9.24) (Figure 2), a percentage improvement of 27.5%. The program is anticipated to award a total of 468 continuing education hours (an estimated value of \$11,750) within a 6 month period. Given the average physical therapist salary in the Lehigh Valley region of Pennsylvania is \$41.52/hr and the opportunity cost of a non-treating clinician is approximately \$127.50/hour, the development of a program of this magnitude can utilize up to 70 clinical hours and remain cost-saving even in the first year of implementation. Referral and outcomes data collection is ongoing and will be reported at a later date as this pilot program progresses. Additional benefits of the program included networking opportunities and identification of skilled clinicians and future leaders.

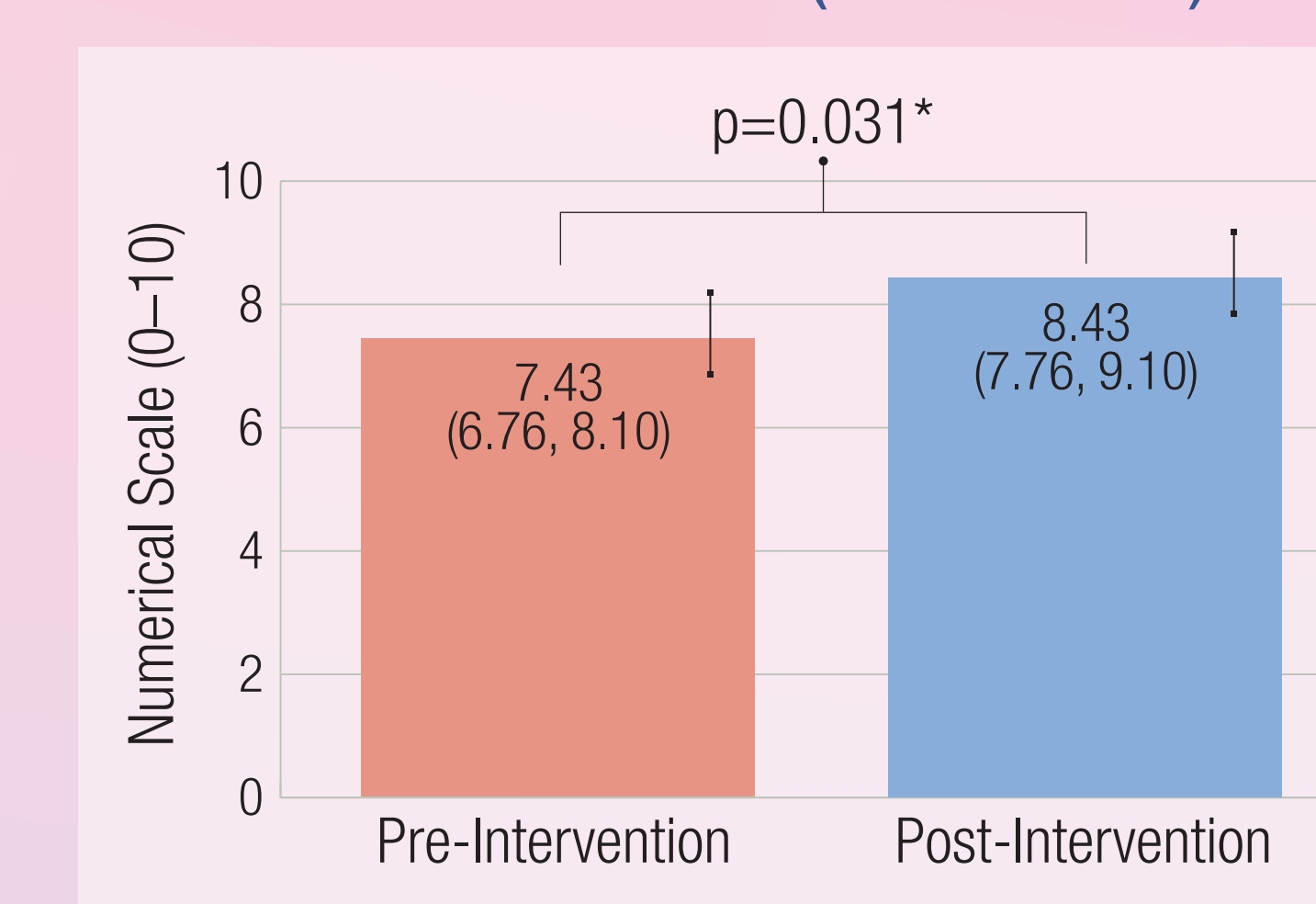
## Conclusion

An internal distance-learning spine training program for physical therapists demonstrated effectiveness in providing continuing education, improving clinician confidence, and improving clinician engagement with departmental spine rehabilitation education. In a large health network, this type of programming allows for timely and specific training delivered at low cost and establishes a model for future internal educational programs.

**Table: Electronic Learning Modules for the STPT Program**

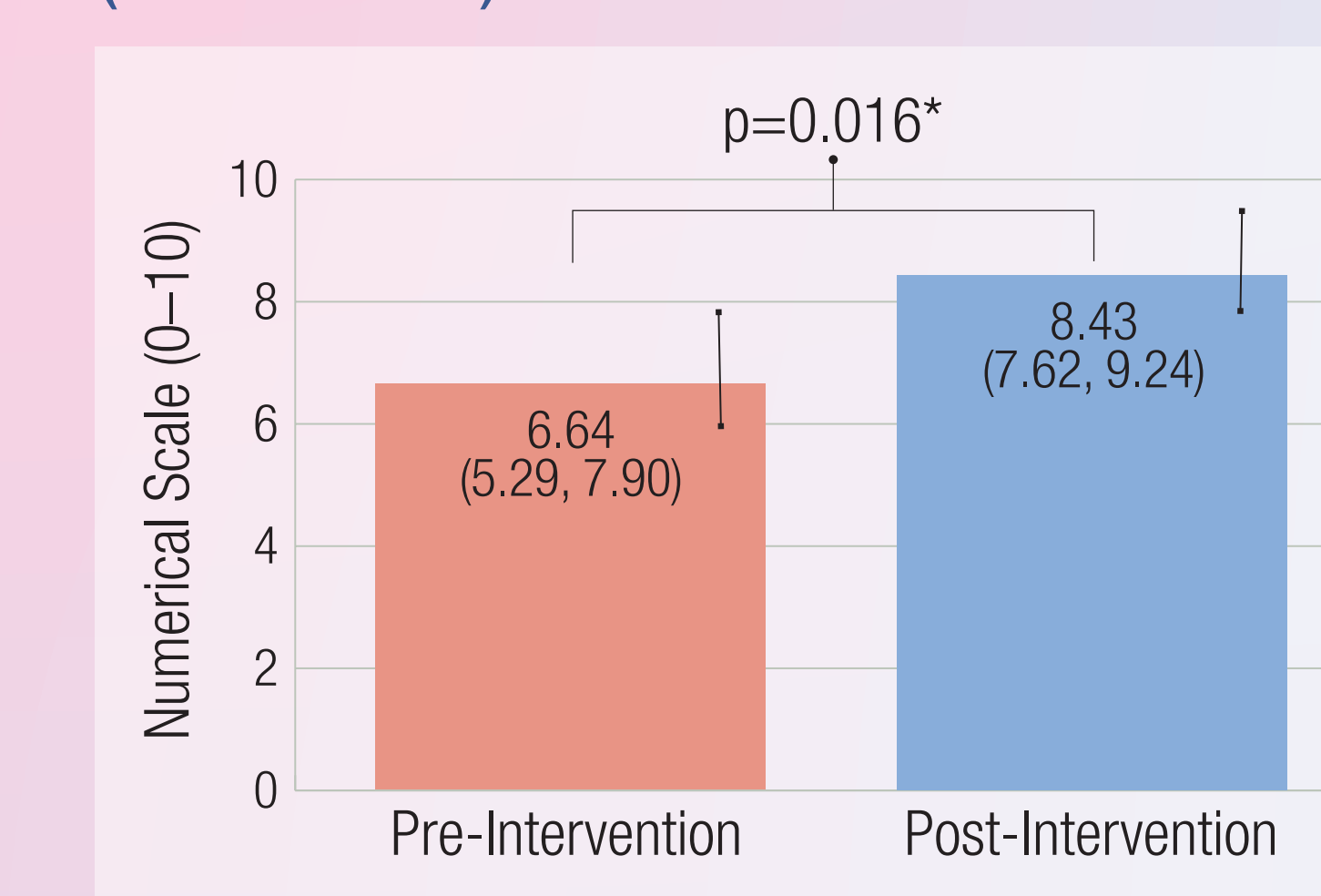
<b>Module 1:</b> Spine-Trained PT Program Overview
<b>Module 2:</b> Treatment-Based Classification Overview
<b>Module 3:</b> Medical Referral – PT Red Flag Screening
<b>Module 4:</b> Rehabilitation Management: Biopsychosocial Screen
<b>Module 5:</b> Rehabilitation Management: Symptom Modulation
<b>Module 6:</b> Rehabilitation Management: Movement Control
<b>Module 7:</b> Rehabilitation Management: Functional Optimization
<b>Module 8:</b> Self Care Management

**Clinician Confidence in Treating Patients with Low Back Pain (FIGURE 1)**



\*Statistically significant,  $p < 0.05$

**Staff Satisfaction with Spine Education (FIGURE 2)**



<sup>1</sup>Alrwayly M, Timko M, Schneider M, et al. Treatment-based classification system for low back pain: revision and update. *Phys Ther.* 2016;96:1057-1066.

<sup>2</sup>Alrwayly M, Timko M, Schneider M, et al. Treatment-based classification system for patients with low back pain: the movement control approach. *Phys Ther.* 2017;97:1147-1157

<sup>3</sup>American Physical Therapy Association. Professionalism in physical therapy: core values; self assessment. [http://www.apta.org/uploadedFiles/APTAorg/Practice\\_and\\_Patient\\_Care/Ethics/Professionalism/Professionalism\\_CoreValues\\_SelfAssessment.doc](http://www.apta.org/uploadedFiles/APTAorg/Practice_and_Patient_Care/Ethics/Professionalism/Professionalism_CoreValues_SelfAssessment.doc). 2013. Accessed September 16, 2019.

<sup>4</sup>U.S. Bureau of Labor Statistics. Occupational Employment Statistics. <https://www.bls.gov/oes/current/oes291123.htm#st>. Last Updated March 29, 2019. Accessed September 23, 2019.