

**Academy of Orthopaedic Physical Therapy (AOPT) of the APTA  
Grant Program  
Annual Progress Report Form**

**Date:** 25 March 2022

**Name of the investigators:** Co-PI: Lori Michener, PhD, PT, ATC, FAPTA; Division of Biokinesiology and Physical Therapy; University of Southern California; Co-PI: Chuck Thigpen, PhD, PT, ATC; ATI Physical Therapy, Greenville, SC.

**Name of Grant:** Shoulder Pain: Effects of Adherence to Practice Guidelines and Dose of Physical Therapy on Outcomes of Care. SPEADO Project

**Award Period:** 1 May 2017 – 30 April 2019; no cost extension until April 30 2022.

**Current year of award:** Year 5 – no cost extension

**1) Summary of accomplishments in the past year:**

Established goals as per our timeline in the grant proposal, and the status of each goal:

<b>Goal</b>	<b>Status</b>
1- IRB approval at all sites involved in the SPEADO project – USC and ATI clinics	Completed
2- Routine data collection via EMR at USC and ATI clinics	Completed
3- Recruitment of clinics other than USC and ATI clinic sites for participation	Completed
4- REDCap data collection template	Completed
5- Data collection training and collection at all sites	Completed
6- Data abstraction and refinement to create working data set from EMR	Completed
7- Data refinement to create working data set from all sites	Completed
8- Analysis for all AIMS	Continuing as per timeline. See below for more details

Since inception, we have achieved goals 1- 7. We completed step 8 over this past year, in spite of significant delays due to COVID. We are now working on the final goal (#8: Analysis and writing) is currently underway. As described in last year’s progress report: The Shoulder National Database Module developed by the Academy of Orthopaedic Physical Therapy (AOPT) is the framework for defining the treatment delivered and outcomes of care data elements. This module allows for the systematic definition of the diagnosis, treatment delivered to determine adherence to CPGs, and outcomes of care. For the ATI clinics, we have extracted data from their EMR records for all necessary data elements. For EMR data extraction at USC and other non-ATI clinics, our original plan was to contract with the APTA PT Outcomes Registry (Registry) for data extraction. However, the Registry is no longer a feasible option to get this completed on time. We pivoted, and collected data via paper and pencil for all sites except ATI clinics that we have recruited to participate. We have completed data collection all sites for this project.

Projection for April 2022 – March 2023: Complete all data analysis for all aims, and submit paper for publication. Present findings at CSM 2023 in San Diego, CA (pending acceptance of the submitted abstract).

**2) Provide a one paragraph summary of results or abstract suitable for posting on the AOPT website:**

Shoulder pain is a common musculoskeletal condition. There is a tremendous amount of evidence critically summarized in the form of Clinical Practice Guidelines (CPGs). The CPGs are intended to guide clinicians in the treatment of patients with musculoskeletal shoulder pain. There are CPGs for adhesive capsulitis and rotator cuff disease, one of which is has been developed by a team appointed by the Orthopaedic Section of the APTA. There is a lack of research on the effects of adherence to these CPGs, and their relationship to outcomes and dose of care in patients with shoulder pain. The project goals are to convert clinical data into meaningful data elements that

used to characterize the outcomes of care and dose of physical therapy, and adherence to CPGs. Specifically we will 1- characterize the effects of adherence to CPGs on patient-rated outcomes of care for patients undergoing physical therapy for shoulder pain, and 2- determine if dose of care (visits) is effected by adherence to CPGs, and related to outcomes of care for patients receiving physical therapy for shoulder pain. In our first year we have extracted data from the EMR records for all necessary data elements at 1 of our sites (ATI), and have recruited n=41 patients via paper and pencil data collection at other sites (USC and outside clinics). The Shoulder National Database Module developed by the Orthopaedic Section of the APTA is the framework for defining the treatment delivered and outcomes of care data elements. This module allows for the systematic definition of the diagnosis, treatment delivered to determine adherence to CPGs and outcomes. We are continuing work on the last goal of analysis for all aims and writing a manuscript.

**3) Publications published or accepted during the past year.**

No publications or abstracts were submitted.

**4) Budget:** No funds were spent over the last yearly budget cycle.

Expense Category	Total Budget	Budget Year 4	Actual Amount Spent Year 4	Budget Year 5	Actual Amount Spent Year 5	Budget Year 6
Personnel: PIs (LM & CT)	\$8,987	\$0	\$0	\$0	\$0	\$1,335
Personnel: Consultants USC: Stats/ RA ATI: RA	\$10,300 \$5800 \$4500	\$8,123	\$0	-\$877)	\$3,200	\$0
Programming for EMR data extraction & organization	\$8000	\$0	\$0	\$8,000	\$0	\$0
Travel	\$2500	\$1500	\$0	\$2,500	\$579	\$2,500
Other Supplies/Statistician				\$0	\$1,461	\$548
<b>Total</b>	<b>\$29,787</b>	<b>\$9,623</b>	<b>\$9,623</b>	<b>\$9,623</b>	<b>\$5,240</b>	<b>\$4,383</b>

**5) Objectives for the next year:** Our objectives are to complete the final goal, and produce results in the form of abstracts and manuscripts, and leverage these finds to apply for funding to continuing to examine the outcomes and process of care for patients with other musculoskeletal conditions treated by physical therapists.