Orthopaedic Section of the APTA Grant Program Annual Progress Report Form

Date: 6/8/17

Name of Investigators: Ann M. Lucado, Joseph M. Day, Tim L. Uhl

Name of Grant: The effect of scapular muscle strengthening on Functional Recovery in LE

Award Period: 6/4/15 to _6/4/17___ (Initial award date – date on contract as start date)

Current Year of Award completed (circle one): 1st, 2nd, no-cost extension year (3rd)

Progress reports are due no later than 1 year plus 10 days after the initial award date. Failure to submit a timely progress report may result in the termination of your award.

- 1. Summary of accomplishments in the past year: We initiated data collection and have recruited 15 total participants at the South Alabama and Mercer University sites. We presented preliminary results at the Philadelphia Hand Symposium in March 2017. Data collection is ongoing.
- 2. Provide a one-paragraph summary of results or abstract suitable for posting on the Orthopaedic Section website.

Background: Strength impairments in the scapular stabilizers have been found in individuals with lateral epicondylalgia (LE). Purpose: To compare the effectiveness of local therapy treatment to local therapy treatment plus a scapular muscle strengthening (SMS) program in patients with symptoms of LE. Design: Repeated measures with comparison group. Methods: 15 individuals with isolated LE who met the criteria and consent were randomized to the local or local +SMS group at 2 data collection sites. All participants received identical education in activity modification and instruction on the use of a non-articulating forearm orthosis, home use of ice, and a therapeutic exercise program of wrist extensor stretching. Both groups received the local treatment protocol for all subsequent visits including an aerobic warm up for 10 minutes, exercise progression, manual therapy, and thermal modalities as needed. The only difference between the groups is that the local + SMS group received additional treatment to include scapular muscle strengthening exercises. Functional outcomes and strength measures were assessed at baseline, discharge, and 6-months. Global rating of change (GROC) was assessed at all follow up assessments.

Results: Participants include 7 males, 8 females that were randomized to either the local strengthening group (6) or to the proximal strengthening group (9); 12 are right hand dominant and the dominant hand was affected in 13 of the participants. Preliminary data show significant within group improvements in pain in both local and proximal exercise groups and in function for the proximal exercise group.

- 3. Attach a list of your publications published or accepted during the past year, or currently being written. Send reprints when available. List presentations made and abstracts accepted for presentation based on this work. Indicate with an asterisk (*) those publications supported by Orthopaedic Section funding. No publications in process currently. Preliminary results were presented at the Philadelphia Hand Symposium in March 2017.
- 4. Provide a budget, using the original approved budget. Indicate total funds spent to date per major categories. If there was > 25% deviation (greater or less spent) of use of funds for any of the budget category, please BRIEFLY indicate the rationale. See attached budget.

5. Objectives for the next year: Recruit and obtain data from 15 additional subjects.

Your Signature Date

Return to:

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