



Academy of Orthopaedic Physical Therapy, APTA, Inc. Grant Program Annual Progress Report Form

Date: 6/8/
6/9/2023

Name of Investigators: Emily Kahnert, DPT, CCTT

Name of Grant: Telerehabilitation Effectiveness for Individuals with Temporomandibular Disorders (TMD): A Non-Inferiority Study

(Initial award date – date on contract as start date)

Award Period: 6/1/2022 to 5/31/2024

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:

- Worked with the dentists and residents in our clinic to get patient referrals and averaging 3-4 patient screens per week
- Successfully recruited and enrolled 106 participants, which is 60% of the 178 needed participants (89 in each group) for adequate statistical power of the participants needed for my clinical trial
- In the telerehabilitation group, 67 (75%) participants have completed Aim 1 and 48 (54%) participants have completed Aim 2
- In the in-person group, 36 (40%) participants have completed Aim 1 and 29 (33%) have completed Aim 2.
- I have taken an early look at the data and presented a seminar discussing preliminary results in February 2023.
- I was awarded a Doctoral Dissertation Fellowship Award from the University of Minnesota, which will provide salary support to protect time for data analysis and writing to ensure timely completion of my research and dissertation from 9/1/2023-8/31/2024

2. Provide a one-paragraph summary of results or abstract suitable for posting on the Academy website.

Temporomandibular joint disorders (TMD) are the second most common cause of musculoskeletal pain and disability, but access to care is limited. Specialized physical therapy (PT) delivered via telerehabilitation could help, but whether and to what extent PTs may successfully use it for this population remains unknown. This clinical trial compares telerehabilitation to in-person PT for individuals with TMD. We are testing our hypothesis that telerehabilitation outcomes are similar to those of in-person PT with an open-label non-inferiority preference trial involving 178 participants, comparing diagnostic agreement and functional outcomes between groups. Preliminary results on the first 25% of participants reveal high diagnostic agreement with an in-person reference diagnosis in both groups so far, and underpowered evidence of telerehabilitation non-inferiority with a greater average quality-of-life scale score improvement in that group. Final study results will inform clinical care and support future TMD research.

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 Academy of Orthopaedic Physical Therapy funding.

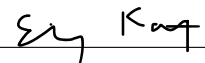
I have had no publications published or accepted during the past year as I have been spending my time on recruiting, enrolling, and treating clinical trial participants. Publications are a priority for the upcoming year as I near the end of my dissertation work.

4. Provide a budget, using the original approved budget. Indicate total funds spent to date per major categories. If there was $\geq 25\%$ deviation (greater or less spent) of use of funds for any of the budget category, please BRIEFLY indicate the rationale. (See example below)

| EXPENSE CATEGORY | Budgeted Amount for Year 1 | Actual Amount Spent in Year 1 | Amount Remaining in Year 1 budget | Budgeted for Year 2 | Projected Expenditure in Year 2 |
|--|----------------------------|--|---|---------------------|--|
| Consultant Services - Blinded Evaluator | \$4,280 | \$1,321 | \$2,959: Study assistant has not worked as many hours as projected | \$4,280 | \$7,239: Assistant will spend more hours on data collection with the end of the project |
| Materials and Supplies - Subject Reimbursement | \$10,700 | [\$7,050*]: Encumbrance on Clincards \$650: Actual reimbursement for participants \$198 – Postage and envelopes for mailing cards *Reimbursement is incrementally provided after questionnaire completion at 3timepoints spread across 9-12 months and is allocated but not fully paid yet. | [\$2,802 remaining beyond the encumbered amount]: An additional grant was used for the first 47 participants, so there was leftover money initially budgeted for the Clincards. \$9,852 remaining when considering the encumbered amount as money budgeted and allocated but not yet spent | \$10,700 | \$20,552: <ul style="list-style-type: none"> Year 1 encumbered amounts will be disbursed during year 2 when participants reach their benchmarks. Additional funds may also be required to allocate more Clincards if attrition requires recruitment >206 participants. |
| Materials and Supplies | \$0 | \$0 | \$0 | | |
| TOTAL | \$14,980 | [\$9,219 with encumbered amount] \$2,169 actual expenses | [\$5,761, considering the encumbered amount as expenses]: Study assistant work and participant reimbursement was less than anticipated in year 1 \$12,811 remaining when including the encumbered amount that has not yet been paid to participants | \$14,980 | \$27,791 – there will be more study assistant work and more reimbursement required in the second year of the project |

5. Objectives for the next year:

- Complete enrollment of ≥ 206 participants to account for potential attrition and ensure that 178 participants will complete both study aims
- Create time expectations for blinded evaluator (study assistant) to complete work for timely data collection to occur
- Complete data collection for both study aims
- Write dissertation
- Successfully defend dissertation



 Your Signature

6/9/2022

 Date

Return to:

Tara Fredrickson, Assistant Executive Director
Academy of Orthopaedic Physical Therapy, APTA, Inc.
2920 East Avenue South, Suite 200
La Crosse, WI 54601-7202
tfred@orthopt.org