



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

Date:

Name of Investigators: Christine M. McDonough

Name of Grant: (Initial award date – date on contract as start date)

Award Period: April 1, 2021 to March 31, 2023

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 have:

- a. identified and trained neurological physical therapists that will provide fall prevention management to older adults after upper extremity fracture in 21 UPMC Rehabilitation Institute (was Centers for Rehabilitation Services) outpatient clinics
- b. developed, and vetted training materials for surgeons and physician extenders at UPMC in collaboration with our clinical champions. The materials were provided to the surgeons at the two participating practices through the surgeon champions.
- c. We have conducted baseline analysis of fractures and PT referrals for the UPMC population over one year and found that among 6,295 upper extremity fractures (1,533 proximal humerus, 2,515 distal forearm) 12% received a prescription for physical or occupational therapy for balance or gait disturbance. Within the 12% who received therapy, the most common type was physical therapy (52.3%). The proportion who had a second fracture within one year was 11%. This is substantially higher than the rate that we had found in prior work based on Medicare data. Our next step is to analyze fall-related injuries for this cohort.
- d. We developed and tested a best-practice alert that identifies patients age 65 and older attending a clinic visit for a new upper extremity fracture. The alert fired successfully, and provides a prefilled prescription for physical therapy to the surgeon at the point of care. In addition, once endorsed, the referral triggers a communication to the main scheduling staff with tailored information on the participating outpatient physical therapy practice and therapist for scheduling with the trained PT.
- e. We measured use of the best-practice alert based on passive instruction only.

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

- a. The team identified and trained neurological physical therapists that will provide fall prevention management to older adults after upper extremity fracture in 21 outpatient clinics. They developed, and vetted training materials for surgeons and physician extenders in collaboration with surgeon clinical champions. The materials were provided to the surgeons at the two participating practices through the surgeon champions. The team conducted a cohort study of pre-intervention status within the health system. This analysis of fractures and PT referrals for the health system population over one year found that among 6,295 upper extremity fractures (1,533 proximal humerus, 2,515 distal forearm) 12% received a prescription for physical or occupational therapy for balance or gait disturbance. Within the 12% who received therapy, the most common type was physical therapy (52.3%). The proportion who had a second fracture within one year was 11%. In preparation for the intervention, the team developed and tested a best-practice alert that identifies patients age 65 and older attending a clinic visit for a new upper extremity fracture. The alert has been successfully incorporated into the electronic medical record system, and therefore will be available throughout the entire system for future scaling of the intervention. Next steps include providing enhanced training to surgeons and physician extenders, and delivering fall management intervention in outpatient clinics to identified patients.

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.

None

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)

a. This is a combined quality improvement and research project. The main activities to that occurred to date have been the foundational work that falls under the quality improvement initiative. The initiation of the research activities has been delayed due to the pandemic and lack of research staff as a result. I have hired and trained staff with relevant skills to assist with the remaining activities and am therefore now able to execute the remaining activities in the coming months. An important advantage of the pandemic-related pause in the project was that we were able to monitor the use of the best practice alert after essentially passive training of orthopaedic surgeons and extenders in the two practices. We identified that with few exceptions they bypassed the best practice alert. This allows us an important opportunity to take advantage of the plan to interview surgeons to understand the barriers and facilitators to use of the best practice alert and referring to physical therapy, and to identify their needs for training.

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
	\$16,890.	0			
TOTAL					

5. Objectives for the next year:

In the coming year, if allowed to continue, we will complete the research activities: identify and interview patients, providers and administrators to identify barriers and facilitators to referral and uptake of exercise for secondary fall prevention. The additional quality improvement and research activities include tailoring training and materials and identify additional interventions for surgeons to enhance use of the best practice alert to refer to outpatient physical therapy for fall risk management. We will measure outcomes and analyze results for the two practices that receive the intervention. We will submit an abstract to Combined Sections meeting and will prepare the manuscript reporting on the project. We will also identify a funding mechanism for the next phase of the work, which will entail scaling the intervention across the entire health system and likely one additional health system with which we collaborate.

Christine M. McDonough

2/7/2023

Your Signature

Date

Return to:

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