

# Orthopaedic Section of the APTA Grant Program Annual Progress Report Form

Date: 3-19-18

Name of Investigators: Daniel Safford, PT, DPT, MAT, CSCS (PI), Philip McClure PT, PhD, Kshamata Shah, PT, PhD

Name of Grant: Reliability, Validity and Responsiveness of the Functional Arm and Shoulder Test (FAST) in Patients with Shoulder Problems

Award Period: 3/22/17 to 4/30/19 (Initial award date – date on contract as start date)

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

**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:

- Initiated data collection in patients
- Optimum Physical Therapy Associates, PA, has collected majority of data thus far
- Penn Medicine/Good Shepherd Penn Partners, PA, IRB has been cleared
  - Weightman Hall site has begun data collection
  - University City site is set to begin data collection
- The United States Air Force IRB has been cleared for data collection with plans to begin data collection at Peterson AFB, CO, in April 2018
- Training and data collection materials were developed for data collection purposes
- Various groups of clinicians were trained for data collection at above sites
- Arcadia University Graduate Assistant trained to begin data compilation and analysis

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

Data collection for the Timed Functional Arm and Shoulder Test (TFAST) in patients with shoulder problems has commenced with 26 participants enrolled in the study with 9 data sets completed. Partial data sets have been collected on 25 participants; 20 have completed reliability testing and are still undergoing care while 5 individuals have withdrawn from the study, and 1 individual did not participate in testing after providing consent for the study. All data thus far has been collected at 2 clinical sites by 4 different clinicians. Two other clinical sites, including a United States Air Force clinic, are prepared to begin data collection having successfully navigated the intricacies of their respective internal review boards and provided necessary training to over 15 clinicians committed to participating. Notably, there have been no adverse events in all testing.

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.

1. Shah KM, McClure PM, Safford DW. "Clinically Meaningful Outcome Measures in Patients With Shoulder Problems" with Authors' Response. *J Orthop Sports Phys Ther.* 2017;47(9):693–695. doi:10.2519/jospt.2017.0205
2. Safford DW, Shah KM. Severe Neuropathic Glenohumeral Joint Resorption in an Older Woman Status Post Total Knee Arthroplasty: An Imaging Case Report. Poster presentation February 2018. Combined Sections Meeting, American Physical Therapy Association, New Orleans, LA.
3. Greenberg EM, Lawrence JTR, Fernandez-Fernandez A, Shah KM, McKenna C, Rowan ML, Kim J, McClure P. Physical and Functional Differences in Youth Baseball Players With and Without Throwing Related Pain. *Orthop J Sports Med.* 2017;5:11, 2325967117737731
4. Hollis S, McClure P. Intramuscular Electrical Stimulation for Muscle Activation of the Tibialis Anterior After Surgical Repair: A Case Report. *J Orthop Sports Phys Ther.* 2017;47:965-969.
5. Shah KM; Casey A; Hoerst J; Johnson D; Kelly S; Smith N; McClure PW. Acute and long-term changes in acromiohumeral distance following a fatigue protocol and a six-week exercise program. Poster presentation

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.

		<b>Yr 1 Budget</b>	<b>Yr 1 Actual</b>	<b>Yr 1 Remainder</b>	<b>Yr 2 Budget</b>	<b>Yr 2 Projected</b>	<b>TOTAL</b>
<b>Salaries</b>	Safford @ \$35/hr for 75 hours YR1 and 77 hours YR2	2625	2717.25	-92.25	2695	2602.75	<b>5320</b>
	In-kind effort Dr. Philip McClure	0	0	0	0	0	0
	In-kind effort Dr. Kshamata Shah	0	0	0	0	0	0
<b>University Benefit Fees</b>	Required Fringe Benefit – 27.40% of Salaries	719	744.53	-25.53	739	713.15	<b>1458</b>
<b>Research materials &amp; supplies</b>	Gallon jugs of fluid	100	8 <sup>1</sup>	92	100	192	<b>200</b>
	Research supplies	200	37.15 <sup>2</sup>	162.85	200	362.85	<b>400</b>
	Advertisements for recruitment	200	0 <sup>3</sup>	200	200	400	<b>400</b>
<b>Stipends</b>	Participant reimbursement  - Participants with Upper Quarter Problems	1800	3000 <sup>4</sup>	-1200	1800	600	<b>3600</b>


	<p>Test 1 (Baseline evaluation testing): \$20</p> <p>Test 2 (Follow Up Visit testing &lt;1 week): \$10</p> <p>Test 3 (Discontinuation of care testing): \$10</p> <p><b>TOTAL = \$3600</b> (90 participants x \$40)</p>						
<b>Consultant Services</b>	<p>- Participating Clinicians:</p> <p>Test 1&amp;2 (Baseline &amp; Follow Up testing): \$30</p> <p>Test 3 (Discontinuation of care testing): \$20</p> <p><b>TOTAL = \$4500</b> (90 participants x \$50)</p>	2250	550 <sup>5</sup>	1700	2250	3950	<b>4500</b>
	<p>- Participating Clinical Sites:</p> <p>Test 1&amp;2 (Baseline &amp; Follow Up testing): \$20</p>	1350	410 <sup>6</sup>	940	1350	2290	<b>2700</b>

	Test 3 (Discontinuation of care testing): \$10  TOTAL = <b>\$2700</b> (90 participants x \$30)						
	Statistician (10 hrs x \$100) split 3hrs year 1 and 7 hours year 2	300	0 <sup>7</sup>	300	700	1000	<b>1000</b>
	Research Assistant @ \$14.29/hour for 105 hour/year	1501	0 <sup>8</sup>	1501	1501	3002	<b>3002</b>
<b>TOTAL (direct costs)</b>		11045	7466.93	3578.07	11535	15112.75	<b>22579.68</b>

1. Fewer gallon jugs of fluid were needed to supply to sites collecting data than expected.
2. Although some research supplies were needed for set up, less were required than expected at lower cost than expected.
3. Advertisements for recruitment have thus far not been required. Recruitment has been sufficient via consenting clinicians and their patients.
4. Greater than 25% of stipend funds were used to obtain gift cards as patient participant reimbursement. Only approximately \$1000.00 of those gift cards have been disbursed as appropriate for participation in data collection, the rest have simply been purchased and provided to clinicians to be on hand for upcoming data collection.
5. Less than half of expected total participants have been enrolled at this point, and not all of those have completed data collection. As such, disbursement to clinicians is lower than expected.
6. Less than half of expected total participants have been enrolled at this point, and not all of those have completed data collection. As such, disbursement to clinical sites is lower than expected.
7. A statistician's services will likely be needed in the next 1-3 months in preparation for likely submission to CSM 2019 regarding preliminary results. However, the use of these funds did not fall within year 1 of the budget.
8. A graduate research assistant has been added to the research team and initial training has been completed, however hours paid will fall outside of the year 1 budget and expectation for work is higher in the next year.

5. Objectives for the next year:

- Complete data collection on at least 90 participants
- Compile and analyze data
- Submit abstract for CSM 2019 regarding preliminary results
- Submit abstract for CSM 2020 regarding final results
- Prepare manuscript for publication of findings
- Submit for publication

  
Your Signature

PT, DPT, MAJ, CSCS

4-2-18  
Date

**Return to:**

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