

## SUPPORTING STATEMENT – PART B

### B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

#### Provider Beliefs Regarding the Deadlift and their Effect on Patient Management – 0720-PBRD

##### 1. Description of the Activity

Civilian, military, and contractor physical therapists, occupational therapists, physician assistants, physicians (i.e., medical doctors or doctors of osteopathy), nurse practitioners, certified athletic trainers, and strength and conditioning coaches within the Department of Defense are considered eligible participants for this study. This package is for approval of the contractor provider personnel.

Eligible participants will be recruited through email solicitation to a blocked randomized sample of installations (large versus small). Large installations will include bases with Army Medical Centers, division size units, or basic training environments. Small installations will include bases with Army Community Hospitals, Army Health Clinics, or without division size units or basic training environments. To assess for representativeness, maximal recruitment will be performed at the United States Military Academy, West Point and Fort Drum, New York due to their proximity to the sponsoring organization.

Expected response rates based on the available literature vary between 9-38%. The sample size for powering this study was estimated using a 25% response rate.

##### 2. Procedures for the Collection of Information

Available data from the Army Personnel Proponent Directorate for the Army Medical Specialist Corps, Army Nurse Corps, Army Medical Corps, Army Civilian Corps, and Defense Health Agency were retrieved. Calculations of the interested specialties was performed. An estimation of 500 contractors was made to account for the number of contractor personnel across all the desired specialties for the study. A power analysis using G\*Power was performed to power the study at 80% for a moderate effect size ( $d = 0.50$ ), similar to those observed in the literature for the Back-PAQ and PABS-PT outcome measures (Mutsaers et al., 2012). The current estimate for sample size is sufficiently powered (80%) for a 95% confidence interval at the projected response rate (25%) to observe a moderate effect size for specific aim #2, which is the largest study aim.

##### 3. Maximization of Response Rates, Non-response, and Reliability

Reminder emails to the eligible pool of providers will be sent monthly to maximize response rate of the survey. The survey will remain open for a minimum of 90 days after initial deployment,

but no more than 365 days. Respondents will be required to input their email in order to serve as an internal control to remove multiple submissions by a single provider.

4. Tests of Procedures

Testing of the survey has been performed locally within the department (approximately 10 respondents) to solicit feedback on survey completeness, readability, organization, and other items that may unduly cause burden to the respondents.

5. Statistical Consultation and Information Analysis

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