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Musculoskeletal system conditions are the leading cause of hospitalization and disability for the U.S. Armed Forces. The Department of Defense pays over \$1.5 billion per year to disabled service members, and musculoskeletal conditions account for 40-50% of this amount. This study investigates the effectiveness of an interdisciplinary functional restoration approach to the treatment of Active Duty military from all 4 branches suffering from chronic musculoskeletal pain (CMP). The primary aims of this Functional and Occupational Rehabilitation Treatment Program (FORT) include restoring physical function, retaining soldiers on active duty, and increasing the participants' abilities to effectively manage their pain. These outcomes, as well as socioeconomic variables, are evaluated immediately following treatment, and at 6, 12, and 18 months follow-up.

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Table of Contents

| | |
|------------------------------------|---|
| Cover | 1 |
| SF 298..... | 2 |
| Introduction..... | 4 |
| Body | 4 |
| Key Research Accomplishments | 7 |
| Reportable Outcomes | 7 |
| Conclusions | 8 |
| References | 8 |
| Appendices | 8 |

INTRODUCTION

Musculoskeletal system conditions are the leading cause of hospitalization and disability for the U.S. Armed Forces. The Department of Defense pays over \$1.5 billion per year to disabled service members, and musculoskeletal conditions account for 40-50% of this amount. The medical discharge of one active duty U.S. military member in their twenties has been estimated to cost the government approximately \$250,000 in lifetime disability costs, excluding health-care costs. Despite continuous advances in military medicine, the rates of disability cases within the U.S. military have been increasing at an alarming rate, and nearly doubled between 1985 and 1994. Without changes in the current approach to the treatment of musculoskeletal conditions, these trends of increasing disability rates and tremendous associated costs will very likely continue. Fortunately, numerous studies with civilian populations have demonstrated the efficacy of an interdisciplinary chronic pain rehabilitation program (ICPRP) at facilitating return-to-work in workers' compensation patients with occupational musculoskeletal disorders and work disability. Return-to-work rates with this population administered ICPRP often approach 80-85% at one year, compared to no-treatment or standard care comparison groups that demonstrate only a roughly 40% return-to-work. The present research program compares the ICPRP to a standard anesthesiology treatment comparison group. The major hypothesis is that the ICPRP will significantly increase the likelihood of remaining on active duty and qualified for worldwide duty for military personnel suffering from musculoskeletal disorders, and positively impact other socioeconomic outcomes such as health-care utilization. This is a pre-to post-treatment evaluation design, with evaluations conducted immediately before and after treatment, as well as at 6-, 12-, and 18-month follow-up periods in order to determine differential outcomes on variables such as return to full duty status, work retention, and additional health-care utilization. The specific aims of the study are to evaluate the efficacy of ICPRP in reducing patient-reported pain symptoms, unnecessary health-care utilization, health-care costs, and number of military members on medical profile, disability, or separated from active duty. Additional aims include improving functioning, increasing the number of military members remaining fit for duty and worldwide qualified, and increasing military members' ability to pass their physical fitness test for their respective military service. In summary, this research project addresses the clear need for clinical research to develop evidence-based assessment and treatment approaches to decrease the enormous cost associated with chronic musculoskeletal conditions within the U.S. Armed Forces.

BODY

In this second year of our grant project, we have accomplished all of the goals originally delineated in our **STATEMENT OF WORK** included in our initial application. It should be noted that, because of the Iraqi war during the first part of 2003, there was a major deployment of personnel from Wilford Hall Medical Center. This interfered somewhat with the early implementation of all aspects of initial activities of YEAR 01, and continuing deployments also impacted some aspects of YEAR 02. Nevertheless, all tasks have been successfully completed. These are delineated below.

Begin Participant Recruitment

Began participant recruitment in 2004 upon final approval from the IRB's at Wilford Hall Medical Center, Ft. Detrick, and the University of Texas Southwestern Medical Center/the University of Texas at Arlington. Participants are actively recruited in a manner commensurate

with the approved protocol from all four branches of the military throughout the world. To date, we have recruited 27 participants with the following characteristics:

| Branch | | Rank | | Gender | |
|-------------|----|------------|----|----------|----|
| # Air Force | 19 | # Officer | 5 | # Male | 18 |
| # Army | 8 | # Enlisted | 22 | # Female | 9 |
| # Navy | 0 | | | | |
| # Marines | 0 | | | | |

Screen Participants through Study RN and Anesthesiology Pain Clinics at BAMC and WHMC

A system was put in place for screening patients referred to the interdisciplinary chronic pain rehabilitation program (referred to hereafter as FORT). First, all patients referred to the study are initially evaluated by the referring provider to determine whether or not the patient meets the inclusion/exclusion criteria. Next, the patients are referred to the FORT Nurse, Karen LeRoy, who screens them for availability for participation and answers any questions the patients have regarding the study. If both the referring provider and Ms. LeRoy agree that the patient is appropriate for participation in the study, the patient is consented and referred to the Anesthesiology pain clinic at either Wilford Hall Medical Center (WHMC) or Brooke Army Medical Center (BAMC) for further screening by an Anesthesiologist. Once this screening is complete, the patients are asked to complete initial physical and psychosocial assessments. After completion of the psychosocial evaluation, the results are reviewed by a Psychologist in the Department of Clinical Health Psychology to confirm that the patient is appropriate for the FORT treatment and needs no additional or alternative services.

Randomly Assign Participants to Groups

Random assignment for eligible participants is implemented using an URN randomization design in which participants randomized to receive the FORT treatment are each yoked in time with a "Treatment as Usual" participant. This is done to control for the spurious effects of time on rehabilitation and other outcomes. Furthermore, randomization is accomplished controlling for possible covariates including gender and the site of injury.

Implement FORT Treatment

Individuals randomized to the FORT condition participated in the interdisciplinary FORT treatment program at Wilford Hall Medical Center including the following components of treatment:

1. Anesthesiology Pain Care – through the Anesthesiology Pain Clinics at either WHMC or BAMC. This often includes medication management and therapeutic injections if indicated.
2. FORT Group – through the Department of Clinical Health Psychology (CHP) at WHMC. Participants take part in the 12-session class run by the study coordinator, CHP Staff Psychologist, or CHP Post-doctoral Fellow. The classes include 90-minute sessions occurring four days a week for three weeks (total of 12).
3. Individual Psychological Treatment – through CHP at WHMC. Individual treatment includes individual appointments with either a CHP Fellow or Staff Psychologist and focuses on treatment goal development and individual psychosocial issues contributing to

chronic pain syndrome not discussed in the class. Each patient receives at least three individual sessions.

4. Biofeedback Treatment – through CHP at WHMC. CHP Fellows and Interns provide each patient with at least three sessions of Biofeedback treatment, focusing on stress management, relaxation, decrease of muscular bracing, and overcoming autonomic arousal associated with stress and pain.
5. Physical/Occupational Therapy Treatment – through WHMC. All participants undergo 12 sessions of intensive physical rehabilitation with the study Physical Therapist, Mysti Clifton, over the course of the three-week program, resulting in four days of physical therapy each week for three weeks. They also have access to Occupational Therapy services through the OT department at WHMC. All physical therapy exercises are tailored to the individual patient based on initial assessments.

Implement Data Collection

A data collection and management system has been implemented for all patient study data. Notes generated for all aspects of the FORT treatment are kept in a research file, which is located in a locked drawer inside a locked office, and within the secure department of Clinical Health Psychology at WHMC. Each patient has his or her own research file. All assessment materials and notes are kept in the research charts with relevant copies going to the patients' medical records when appropriate and necessary. Also included in the research charts are goal and physical therapy flow sheets, sleep and pain diaries, relapse prevention and discharge plans, and notes from interdisciplinary staffings. All psychological measures are scored under the supervision of the study coordinator or a CHP Staff Psychologist.

Data Entry/Coding

All study data stored in the research charts are coded onto a standard data coding sheet to ensure maximum reliability when entering the data into the study database. All coding sheets are completed by either the Research Assistant, Study Nurse, or Project Coordinator, and 10% of all completed coding sheets are redone by another coder to facilitate interrater reliability checks. All individuals involved in coding are trained in a standardized method of coding the data onto the structured sheet, and variables for which any coder is uncertain of coding (or variables for which multiple codings of the same data are discrepant) are discussed among all three coders until a standard procedure is agreed upon.

Data Management

All study data are entered into a password-protected and encrypted Microsoft Access 2000 database. This database was developed in conjunction with biostatisticians and data management experts at the University of Texas Southwestern Medical Center, and is maintained in a locked office in the secure Department of Clinical Health Psychology at Wilford Hall Medical Center. Access to the study data is limited only to Project PI's and AI's as well as officials from the IRB's as needed. Data entry into the database is done through the use of an Access Form, which restricts the range of variables that can be entered into the database to only those that are suitable for each variable based on the definitions of the coding sheet. This helps prevent mistakes in data entry from the coding sheet into the database, improving the integrity of the data.

Ongoing Recruitment

Recruitment has gone well so far, and is ongoing as we continue to strive to reach our approved goal of 90 participants. Our program has been in place and open to recruitment for just under a year now, and we anticipate that we will be successful in achieving our recruitment goal. Efforts have been made to educate treatment providers in the Air Force and the Army about the program through interactions with providers and occasional opportunities to speak at meetings. We have already received referrals from Hawaii, Japan, and Guam, as well as many from CONUS.

Interdisciplinary Staffings

Interdisciplinary staffings are conducted on a weekly basis during the FORT programs to insure that the treatment stays true to the intentions of the protocol. An Anesthesiologist presides over the meeting and serves as the primary treatment director. Other attendees include: Psychologists from WHMC and BAMC, the study RN, the study Physical Therapist, Occupational Therapist, Project Coordinator, and Individual therapy and biofeedback providers. This is a forum in which treatment progress is discussed, concerns brought to light for the consideration of the full treatment team, and treatment decisions are made with the input of the entire treatment team.

Monitoring Any New Information Available Regarding the Major Goals of this Research Project

We have, and will continue to review, all recent literature concerning our study hypotheses. Our recent review of the literature has indicated that there still remains a paucity of studies evaluating the ICPRP as a treatment for chronic pain in a military population. Specifically, a literature review using MEDLINE, and PsychINFO has revealed no available published reports or analyzed control trial studies of ICPRP as a treatment for chronic pain in the military. Reviews of recent published studies continue to support the cost-and treatment-effectiveness of ICPRP as a treatment for civilians with both chronic and acute musculoskeletal pain.

KEY RESEARCH ACCOMPLISHMENTS

- Recruitment of 27 participants.
- Implementation of FORT treatment program.
- Implementation of data coding and maintenance to ensure high reliability.
- Ongoing recruitment through multiple channels per the approved protocol.

REPORTABLE OUTCOMES

Preliminary Student's t-tests were conducted between the Control and FORT patient groups to determine any significant between-groups differences in Pre-Anesthesiology testing. This was done as a rudimentary check to examine the balance between the two groups. The results show no significant differences, indicating that the randomization is working well to keep the two groups similar. Some basic descriptive data are included in the data summary table in Appendix C to show the outcomes Pre- and Post-FORT interval, for both groups. When reviewing the table, it should be kept in mind that our study design includes an interval to assess Anesthesiology treatment alone (treatment as usual) for both controls and FORT patients, as well as a FORT interval during which we can compare those who do and do not receive the study

treatment over the same span of time. All results are reported here in terms of % change from pre- to post- for the three-week interval comprising FORT treatment for each given variable. A review of the attached table reveals significant overall gains for the patients who participated in the FORT treatment compared to those who just received the Anesthesiology care, including:

- increased strength and aerobic capacity
- decreases in depression (BDI), reported disability (MVAS), and pain intensity
- increased levels of physical activity (MPI) and increased reported physical and mental health (SF-36)

These preliminary results are beginning to support our general hypothesis that interdisciplinary programs such as FORT will lead to both short- and long-term improvements in chronic musculoskeletal pain.

CONCLUSIONS

To date, recruitment has been going well and we anticipate that it will continue to improve over time. We estimate that we will have our full recruitment sample in six to eight months allowing for sufficient time for follow-ups and ongoing data collection commensurate with our protocol. The treatment program has been running smoothly and all participants to date have expressed a high level of satisfaction with the treatment. Data collection has gone well and few problems have been encountered in the coding and maintenance of the study data.

REFERENCES

No new references included in this report.

APPENDICES

APPENDIX A: Summary of Outcome Measures in our Database

APPENDIX B: Most Recently Approved ICD

APPENDIX A

SUMMARY OF OUTCOME MEASURES IN OUR DATABASE

ICPRP Data Management System

Variable Coding Sheet

**** Note: Any missing data (not asked, skipped by pt, unavailable, ambiguous, more than one non-numerical answer circled, etc..) = N/A**

| | | |
|----|---------------------------------------|--|
| 1 | Last Name | |
| 2 | First Name | |
| 3 | FMP/SSN | 3a. ____ / 3b. ____ -- ____ -- ____ |
| 4 | Group | 3b. Patient Group: ICPRP = 1 Control = 2 CODE: _____ |
| 5 | Follow-up Projected | Projected Follow-up date for PRE-I / POST-1 / 6MO / 12MO / 18MO ____ / ____ / ____ MM DD YY |
| 6 | Follow-up Actual | Follow-up date for PRE-I / POST-I / 6MO / 12MO / 18MO ____ / ____ / ____ MM DD YY |
| 7 | Date of First Appointments | 4a. Date First Seen By Anesth ____ / ____ / ____ MM DD YY |
| | | 4b. Date Finished Anesth Tx ____ / ____ / ____ MM DD YY |
| 8 | Date of Injury - LOD | 5a. Date pain began ____ / ____ / ____ MM DD YY |
| | | 5b. Date Of ICPRP Intake ____ / ____ / ____ MM DD YY |
| 9 | Age in years | ____ N/A=-9 Date of Birth: ____ / ____ / ____ MM DD YY |
| 10 | Service of Patient (or sponsor) | US Army = 1 US Air Force =2 US Navy = 3 US Marine =4 US Coast Guard =5 N/A=-9 CODE: _____ |
| 12 | Patient's beneficiary classification: | List of Values: Active Duty.....1 Dependent of Active Duty.....2 Guard/Reserve.....3 Dependent of Guard/Reserve.....4 Retiree.....5 Dependent of Retiree.....6 Other.....7 Unknown8 N/A.....9 |
| 13 | Gender | Male.....1 Female.....2 N/A.....9 |

| | | |
|----|--------------------------------|---|
| 22 | Highest Degree Received | No degree = 01 G.E.D. = 02 High School = 03 High School + Some College/Tech School = 04 Associates = 05 Bachelors = 06 Graduate = 07 N/A = -9 |
| 23 | Referral Source (clinic) | Pain = 01 Neurology = 06 Hemat/Onc=11 Sleep = 02 Neuropsych = 07 Cardiology=12 Dental = 03 Ment Health = 08 Rheum =13 Prim Care=04 Internal Med = 09 Other =14 Pulmonary=05 Orthopedics = 10 N/A = -9 CODE: _____ |
| 24 | Other clinic | IF Above is OTHER, specify clinic: |
| 25 | Current Injury | Current pain due to injury where? Lumbar = 01 Multiple Spinal = 05 Thoracic = 02 Upper Extremity = 06 Cervical = 03 Lower Extremity = 07 Other = 08 |
| 26 | Patient Described | How patient describes site of injury: |
| 27 | Previous Injury | Previous injury/pain resulting in inability to work? YES = 01 NO = 02 N/A = -9 If YES, where? Lumbar = 01 Multiple Spinal = 05 Thoracic = 02 Upper Extremity = 06 Cervical = 03 Lower Extremity = 07 Other = 08 CODE: _____ |
| 28 | New Injury | Sustained new injury/pain resulting in inability to work? YES = 01 NO = 02 N/A = -9 If YES, new injury to same site? YES = 01 NO = 02 N/A = -9 If NOT SAME SITE – Site of new injury: Lumbar = 01 Multiple Spinal = 05 Thoracic = 02 Upper Extremity = 06 Cervical = 03 Lower Extremity = 07 Other = 08 CODE: _____ |
| 29 | Patient Described Previous Inj | How patient describes site of previous injury: _____ |
| 30 | Drug Allergies | Are you allergic to any medications or food? YES = 01 NO = 02 N/A = -9 CODE: _____ |
| 31 | Health Care Visits | Total # of healthcare visits since pain began: _____ Total # of healthcare visits due to current injury/pain: _____ |

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|------------------------------|--|-----------------------|------|----|--------------|----|----------------|----|-----------------------|----|-----------------------|--|--|----|--------------------|----|---------|----|--------------|----|---------------|----|-------------------------|----|-------|
| 32 | Type – Health Care Visits | <p>Type of Visit(s) related to your pain:</p> <table border="0"> <tr> <td>00</td> <td>None</td> <td>06</td> <td>Psychologist</td> </tr> <tr> <td>01</td> <td>Medical Doctor</td> <td>07</td> <td>Licensed Professional</td> </tr> <tr> <td>02</td> <td>Orthopedist Counselor</td> <td></td> <td></td> </tr> <tr> <td>03</td> <td>Physical Therapist</td> <td>08</td> <td>Massage</td> </tr> <tr> <td>04</td> <td>Chiropractor</td> <td>09</td> <td>Acupuncturist</td> </tr> <tr> <td>05</td> <td>Psychiatrist Specialist</td> <td>10</td> <td>Other</td> </tr> </table> <p>CODE-1: _____ CODE-2: _____ CODE-3: _____</p> | 00 | None | 06 | Psychologist | 01 | Medical Doctor | 07 | Licensed Professional | 02 | Orthopedist Counselor | | | 03 | Physical Therapist | 08 | Massage | 04 | Chiropractor | 09 | Acupuncturist | 05 | Psychiatrist Specialist | 10 | Other |
| 00 | None | 06 | Psychologist | | | | | | | | | | | | | | | | | | | | | | | |
| 01 | Medical Doctor | 07 | Licensed Professional | | | | | | | | | | | | | | | | | | | | | | | |
| 02 | Orthopedist Counselor | | | | | | | | | | | | | | | | | | | | | | | | | |
| 03 | Physical Therapist | 08 | Massage | | | | | | | | | | | | | | | | | | | | | | | |
| 04 | Chiropractor | 09 | Acupuncturist | | | | | | | | | | | | | | | | | | | | | | | |
| 05 | Psychiatrist Specialist | 10 | Other | | | | | | | | | | | | | | | | | | | | | | | |
| 33 | Hospitalization | <p>Were you hospitalized since pain began? YES = 01 NO = 02 N/A = -9 CODE: _____</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 34 | Hospitalization # | <p>If YES, how many times hospitalized? # = _____ # days in hospital = _____</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | Pain Hospitalization # | <p>How many times hospitalized due to current injury/pain? # = _____ # days in hospital = _____</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 36 | Previous Passive Treatments? | <p>Undergone any previous surgical/medical procedures for your pain since pain began? YES = 01 NO = 02 N/A = -9</p> <p>If YES, how many procedures?</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | Procedure 1 | <p>If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | Procedure 2 | <p>If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | Procedure 3 | <p>If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s)</p> | | | | | | | | | | | | | | | | | | | | | | | | |

| | | |
|----|-----------------------|---|
| | | 05 = TENS unit 06 = Other _____ -9 = N/A CODE: |
| 40 | Other Health Problems | Any other problems with your health not indicated above? YES = 01 NO = 02 N/A = -9 CODE: |
| 41 | Sleep | 17a. Average self-reported hours of sleep a night _____ N/A = -9 <u>Symptoms checked as occurring 3 or more days a week:</u> 17b. Difficulty falling asleep.....1 17c. Difficulty staying asleep.....2 17d. Waking up earlier than planned.....3 17e. Restless legs.....4 17f. Excessive snoring.....5 17g. Taking sleep medication.....6 17h. Stop breathing briefly.....7 17i. Nightmares.....8 17j Excessive daytime sleepiness.....9 17k. Not feeling rested when you wake-up.....10 |
| 42 | Sleep Efficiency | 17.2 $\frac{\text{(Time Spent Asleep)}}{\text{(Time Spent in Bed)}} * 100 = \%$ |
| 43 | Sexuality | Satisfaction from 0-10 with 10 = very satisfied: N/A = -9 Code 11 if the marked "I prefer not to answer." CODE: |
| 44 | Alcohol Use | 19a. Trouble with alcohol in the past? Yes=1 No=2 = -9 N/A 19b. Current Use: Yes =1 No =2 N/A = -9 <u>If Yes:</u> 19c. Average number of drinks per week: _____ 19d. Have you ever felt you should cut down on your drinking? Yes=1 No=2 19e. Have people annoyed you by criticizing your drinking? Yes=1 No=2 19f. Have you ever felt bad or guilty about your drinking? Yes=1 No=2 19g. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (e.g. eye opener)? Yes=1 No=2 19h. CAGE score (0-4)_____ |
| 45 | Current (past | 20a. Not current tobacco user = 01 |

| | | |
|----|--|--|
| | 30 days) Tobacco Use Status | <p>Prior tobacco user = 02 Current tobacco user (any daily use) = 03 N/A = -9</p> <p>20b. <u>If yes to current tobacco use:</u> Type of tobacco Cigarettes = 01 Pipe/Cigar = 02 Smokeless = 03</p> <p>20c. Duration of Tobacco Use in Years: _____</p> |
| 46 | Current Caffeine Use | <p>21a. Yes =01 No =02 N/A = -9</p> <p>21b. <u>If Yes:</u> Average number of drinks per week: _____</p> |
| 47 | BMI | <p>22-1a. Height (inches) _____</p> <p>22-1b. Weight (pounds) _____</p> |
| 48 | Diet | <p>22-2. Currently on a diet trying to lose wt? Yes = 01 No = 02 N/A = -9</p> |
| 49 | Diet – 2 | <p>Do you eat too much/too little? YES = 1 NO = 2 N/A = -9</p> |
| 50 | Exercise on Regular Basis | <p>Yes = 1 No = 2 N/A = -9</p> |
| 51 | History of Mental Health Treatment (any tx the pt indicated as MH including Chaplain, etc...) | <p>Yes = 1 No = 2 N/A = -9</p> |
| 52 | History of Physical, Sexual, or Emotional abuse | <p>Yes = 1 No = 2 N/A = -9</p> |
| 53 | Satisfaction with Social Support from Family & Friends | <p>Very Unsatisfied.....1 Unsatisfied.....2 Satisfied.....3 Very Satisfied.....4 N/A.....9</p> |
| 54 | Hours Worked | <p>How many hours a week, on average, do you work? _____</p> |
| 55 | Job History | <p>26a. Disability/Workers Comp: Yes = 1 No = 2 N/A = -9</p> <p>26b. <u>Work Status:</u> Full-time outside the home.....1 Full-time in the home.....2 Part-time.....3</p> |

| | | |
|----|---------------------|--|
| | | Retired.....4 N/A.....-9 <u>26c. Job Title:</u> What is your current job title? _____ <u>26c. If Working, Satisfaction with Current Occupation:</u> Very Unsatisfied.....1 Unsatisfied.....2 Satisfied.....3 Very Satisfied.....4 N/A.....-9 |
| 56 | Return to Work | <u>Present Vocational Status:</u> 01 RTW, Full Time, Same Job Type 02 RTW, Full Time, New Job Type 03 RTW, Light/Part Duty, Same Job Type 04 RTW, Light/Part Duty, New Job Type 05 RTW, But Not Pres Work BC of New Injury 06 RTW, But Not Pres Work BC Original Injury 07 Self-Employed 08 Vocational Training or School/Retraining 09 Never Returned to Work Because of Injury 10 Denies Work BC of Employment Factors Exc 11 Denies Work, But Engag in Incom Prod Act 12 Denies Work, Participates Non-Income Prod Activities 13 Was Not Working Before Injury |
| 57 | RTW Date | <u>Date pt returned to work:</u> ____ / ____ / ____ MM DD YY |
| 58 | Quality of Life | Satisfaction with Quality of Life: Very Unsatisfied.....1 Unsatisfied.....2 Satisfied.....3 Very Satisfied.....4 N/A.....-9 |
| 59 | Spirituality | 28a. Importance from 0-10 with 10 = very important: ____ N/A=-9 28b. Current difficulties affecting spirituality: Yes = 1 No= 2 |
| 60 | Legal Issues | Current litigation pending concerning pt's condition: Yes = 1 No= 2 N/A=-9 |
| 61 | Disciplinary Action | Any history of disciplinary action (e.g., LOC, LOR, LOA)? YES = 01 NO = 02 N/A = -9 |
| 62 | Goals | Top Three Goals from Goal sheet (1-51) 1: _____ |

| | | |
|----|--|--|
| | | 2: ____ 3: ____ N/A=-9 |
| 63 | Primary Axis I Diagnosis | 296.2 MD, sing ep = 01 316 Psych fac/Med Cond= 06 296.3 MD, recurrent = 02 V71.09 No diagnosis = 07 307.xx Pain Disorder = 03 799.9 Deferred = 08 307.42 Prim Insomnia = 04 Other Diagnosis = 09 309.xx Adjustment DO= 05 PTSD = 10 GAD = 11 Panic Dis = 12 N/A=-9 CODE: ____ |
| 64 | Other diagnosis | IF above is OTHER, specify diagnosis: |
| 65 | Secondary Axis I Diagnosis if appropriate | 296.2 MD, sing ep = 01 316 Psych fac/Med Cond= 06 296.3 MD, recurrent = 02 V71.09 No diagnosis = 07 307.xx Pain Disorder = 03 799.9 Deferred = 08 307.42 Prim Insomnia = 04 Other Diagnosis = 09 309.xx Adjustment DO= 05 N/A=-9 CODE: ____ |
| 66 | Other diagnosis | IF above is OTHER, specify diagnosis: |
| 67 | Primary Axis III (Choose ONE most directly related to referral) | Headache=01 Fibromyalgia = 08 Myofac. Pain = 15 RSD/CRPS=02 HTN= 09 Other = 16 IBS = 03 Other chron pain=10 N/A=-9 TMD = 04 Cardiac = 11 COPD = 05 Cancer = 12 Arthritis = 06 Obesity = 13 Chron Back= 07 Insomnia = 14 CODE: |
| 68 | Other Axis III | IF above is OTHER, specify diagnosis: |
| 69 | Secondary Axis III | Headache=01 Fibromyalgia = 08 Myofac. Pain = 15 RSD/CRPS=02 HTN= 09 Other = 16 IBS = 03 Other chron pain=10 N/A=-9 TMD = 04 Cardiac = 11 COPD = 05 Cancer = 12 Arthritis = 06 Obesity = 13 Chron Back= 07 Insomnia = 14 CODE: ____ |
| 70 | Other Axis III | IF above is OTHER, specify diagnosis: |
| 71 | Site Treated | WHMC = 01 BAMC = 02 CODE: ____ |

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JOB REQUIREMENTS EVALUATION

| | | |
|----|---------------------|--|
| 72 | Standing | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 73 | Walking | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 74 | Sitting | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 75 | Squatting | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 76 | Kneeling | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 77 | Stooping/Bending | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 78 | Crawling | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 79 | Driving | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 80 | Repetitive Handwork | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 81 | Reaching | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 82 | Lifting | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 83 | Carrying | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 84 | Pushing/Pulling | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |
| 85 | Climbing | Indicate the amount of time spent at your job doing this activity: NONE = 01 OCCASIONAL = 02 FREQUENT = 03 CONSTANT = 04 CODE: _____ |

PSYCHOSOCIAL TEST DATA

Reminder: Any missing data (unavailable, ambiguous, more than answer circled, etc.) = N/A

| | | | | | |
|----|--------------|-------|---------|-------------|--------------------------|
| 86 | BDI – Front | _____ | 10 2 | MPIPS | _____ . _____ |
| 87 | BDI - Back | _____ | 10 3 | MPII | _____ . _____ |
| 88 | BDI - Total | _____ | 10 4 | MPILC | _____ . _____ |
| 89 | BDI – Item 9 | _____ | 10 5 | MPIAD | _____ . _____ |
| 90 | SF36 – PF | _____ | 10 6 | MPIS | _____ . _____ |
| 91 | SF36 – RP | _____ | 10 7 | MPIPR | _____ . _____ |
| 92 | SF36 – BP | _____ | 10 8 | MPISR | _____ . _____ |
| 93 | SF36 – GH | _____ | 10 9 | MPIDR | _____ . _____ |
| 94 | SF36 – VT | _____ | 11 0 | MPIHC | _____ . _____ |
| 95 | SF36 – SF | _____ | 11 1 | MPIOW | _____ . _____ |
| 96 | SF36 – RE | _____ | 11 2 | MPIAAH | _____ . _____ |
| 97 | SF36 – MH | _____ | 11 3 | MPISA | _____ . _____ |
| 98 | SF36 – PCS | _____ | 11 4 | MPIGA | _____ . _____ |
| 99 | SF36 – MCS | _____ | 11 5 | MPI Profile | Dysfunctional..... .1 |

| | | | | | |
|---------|-----------------|-------|---------|-----|--|
| 10 0 | SF36 – PCS % | _____ | | | Interpers/Distr..... .2 Adaptive Cop.....3 Anomolous..... ...4 Hybrid..... 5 Unanalyzable..... .6 |
| 10 1 | SF36 – MCS % | _____ | 11 6 | PCI | High: _____ Low: _____ AVG: _____ |

Reminder: Any missing data (unavailable, ambiguous, more than answer circled, etc.) = N/A

| | | | | | |
|---------|---------|-------|---------|---------|---------------|
| 11 7 | SF36q1 | _____ | 13 3 | SF36q17 | _____ . _____ |
| 11 8 | SF36q2 | _____ | 13 4 | SF36q18 | _____ . _____ |
| 11 9 | SF36q3 | _____ | 13 5 | SF36q19 | _____ . _____ |
| 12 0 | SF36q4 | _____ | 13 6 | SF36q20 | _____ . _____ |
| 12 1 | SF36q5 | _____ | 13 7 | SF36q21 | _____ . _____ |
| 12 2 | SF36q6 | _____ | 13 8 | SF36q22 | _____ . _____ |
| 12 3 | SF36q7 | _____ | 13 9 | SF36q23 | _____ . _____ |
| 12 4 | SF36q8 | _____ | 14 0 | SF36q24 | _____ . _____ |
| 12 5 | SF36q9 | _____ | 14 1 | SF36q25 | _____ . _____ |
| 12 | SF36q10 | _____ | 14 | SF36q26 | _____ . _____ |

| | | | | | | |
|---------|---------|-------|--|---------|---------|---------------|
| 6 | | _____ | | 2 | | _____ . _____ |
| 12 7 | SF36q11 | _____ | | 14 3 | SF36q27 | _____ . _____ |
| 12 8 | SF36q12 | _____ | | 14 4 | SF36q28 | _____ . _____ |
| 12 9 | SF36q13 | _____ | | 14 5 | SF36q29 | _____ . _____ |
| 13 0 | SF36q14 | _____ | | 14 6 | SF36q30 | _____ . _____ |
| 13 1 | SF36q15 | _____ | | 14 7 | SF36q31 | _____ . _____ |
| 13 2 | SF36q16 | _____ | | 14 8 | SF36q32 | _____ . _____ |

| | | | | | |
|---------|---------|---|---------|---------|---------------|
| 14 9 | SF36q33 | _____ | 16 4 | THQgc | _____ . _____ |
| 15 0 | SF36q34 | _____ | 16 5 | FABQpa | _____ . _____ |
| 15 1 | SF36q35 | _____ | 16 6 | FABQw | _____ . _____ |
| 15 2 | SF36q36 | _____ | 16 7 | | _____ . _____ |
| 15 3 | MVAS | _____ | 16 8 | PainVAS | _____ . _____ |
| 15 4 | MVAScat | 0 = None (MVAS = 0) 1 = Mild (1-40) 2 = Moderate (41-70) 3 = Severe (71-100) 4 = Very Severe (101-130) 5 = Extreme (131-150) -9 = no MVAS score | 16 9 | POMStot | _____ . _____ |
| | | | 17 0 | POMSanx | _____ . _____ |
| 15 5 | THQwp | _____ | 17 1 | POMSdep | _____ . _____ |
| 15 6 | THQmed | _____ | 17 2 | POMSang | _____ . _____ |
| 15 7 | THQpsy | _____ | 17 3 | POMSvg | _____ . _____ |
| 15 8 | THQpt | _____ | 17 4 | POMSfat | _____ . _____ |
| 15 9 | THQdr | _____ | 17 5 | POMScon | _____ . _____ |
| 16 0 | THQip | _____ | 17 6 | | _____ . _____ |

| | | | | | |
|---------|---------|-------|--|---------|-------------------------|
| | | | | | |
| 16 1 | THQdiag | _____ | | 17 7 | _____ . _____ |
| 16 2 | THQwat | _____ | | 17 8 | ORQtot _____ . _____ |
| 16 3 | THQpe | _____ | | 17 9 | ORQdep _____ . _____ |

| | | | |
|---------|---------|-------|--|
| 18 0 | ORQpi | _____ | |
| 18 1 | ORQdwr | _____ | |
| 18 2 | ORQpwh | _____ | |
| 18 3 | ORQssw | _____ | |
| 18 4 | ORQwsl | _____ | |
| 18 5 | ORQwks | _____ | |
| 18 6 | ORQfss | _____ | |
| 18 7 | ORQppwr | _____ | |
| 18 8 | PCLM | _____ | |
| 18 9 | OSW | _____ | |
| 19 0 | ISI | _____ | |
| 19 1 | CEQ | _____ | |

DSM-IV AXIS I DIAGNOSIS

| | | |
|-----------------|----------------|---|
| <p>19 2</p> | <p>AxisId1</p> | <p>1 = Major Dep – Single Episode (296.2) 2 = Major Dep – Recurrent (296.3) 3 = Pain Disorder (307.xx) 4 = Primary Insomnia (307.42) 5 = Adjustment Disorder (309.xx) 6 = Psych Fac to Med Cond (316) 7 = Gen Anx Dis (300.02) 8 = PTSD (309.81) 9 = Panic Disorder (300.2x) 10 = Deferred (799.9) 11 = No Diagnosis (V71.09) 12 = Other Diagnosis -9 = N/A</p> |
| <p>19 3</p> | <p>AxisId2</p> | <p>1 = Major Dep – Single Episode (296.2) 2 = Major Dep – Recurrent (296.3) 3 = Pain Disorder (307.xx) 4 = Primary Insomnia (307.42) 5 = Adjustment Disorder (309.xx) 6 = Psych Fac to Med Cond (316) 7 = Gen Anx Dis (300.02) 8 = PTSD (309.81) 9 = Panic Disorder (300.2x) 10 = Deferred (799.9) 11 = No Diagnosis (V71.09) 12 = Other Diagnosis -9 = N/A</p> |
| <p>19 4</p> | <p>AxisId3</p> | <p>1 = Major Dep – Single Episode (296.2) 2 = Major Dep – Recurrent (296.3) 3 = Pain Disorder (307.xx) 4 = Primary Insomnia (307.42) 5 = Adjustment Disorder (309.xx) 6 = Psych Fac to Med Cond (316) 7 = Gen Anx Dis (300.02) 8 = PTSD (309.81) 9 = Panic Disorder (300.2x) 10 = Deferred (799.9) 11 = No Diagnosis (V71.09) 12 = Other Diagnosis -9 = N/A</p> |

FCE DATA

| | | | |
|---------|-----------------|---|--|
| 19 5 | Tflex | _____ | |
| 19 6 | Text | _____ | |
| 19 7 | PILEwt-waist | _____ | |
| 19 8 | PILEhr-waist | _____ | |
| 19 9 | PILEwt-shoulder | _____ | |
| 20 0 | PILEhr-shoulder | _____ | |
| 20 1 | Aerovo2 | _____ | |
| 20 2 | Aerotime | _____ | |
| 20 3 | Aerohr | _____ | |
| 20 4 | Aeroefft | _____ | |
| 20 5 | GripstrL | _____ | |
| 20 6 | GripstrR | _____ | |
| 20 7 | DomHand | <i>Circle one:</i> Left Right | |

Past Treatment Received

Reminder: Any missing data (unavailable, ambiguous, etc.) = N/A

| | | |
|---------|---|--|
| 20 8 | Individual | No.....0 Yes.....1 Intake Only2 Number of Sessions: _____ |
| 20 9 | Biofeedback | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 0 | Interdisciplinary Chronic Pain Management Program or Interdisciplinary Chronic Pain Rehabilitation Program Pain Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 1 | 4-session Pain Group or similar | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 2 | TMD Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 3 | COPD (Pulmonary Rehab Group) | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 4 | LEARN | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 5 | Behavioral Cardiac Rehab Program | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 6 | Tobacco Cessation Program | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 7 | Relaxation Group | No.....0 Yes.....1 |

| | | |
|---------|------------------------------|---|
| | | Number of Sessions: _____ |
| 21 8 | Insomnia Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 21 9 | Previous Passive Treatments? | Undergone any previous surgical/medical procedures for your pain since pain began? YES = 01 NO = 02 N/A = -9 If YES, how many procedures? |
| 22 0 | Procedure 1 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |
| 22 1 | Procedure 2 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |
| 22 2 | Procedure 3 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |

Post-FORT Treatment(s) Received

Reminder: Any missing data (unavailable, ambiguous, etc.) = N/A

| | | |
|---------|--|--|
| 22 3 | Individual | No.....0 Yes.....1 Intake Only2 Number of Sessions: _____ |
| 22 4 | Biofeedback | No.....0 Yes.....1 Number of Sessions: _____ |
| 22 5 | Interdisciplinary Chronic Pain Management Program <i>or</i> Interdisciplinary Chronic Pain Rehabilitation Program Pain Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 22 6 | 4-session Pain Group or similar | No.....0 Yes.....1 Number of Sessions: _____ |
| 22 7 | TMD Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 22 8 | COPD (Pulmonary Rehab Group) | No.....0 Yes.....1 Number of Sessions: _____ |
| 22 9 | LEARN | No.....0 Yes.....1 Number of Sessions: _____ |
| 23 0 | Behavioral Cardiac Rehab Program | No.....0 Yes.....1 Number of Sessions: _____ |
| 23 1 | Tobacco Cessation Program | No.....0 Yes.....1 Number of Sessions: _____ |
| 23 2 | Relaxation Group | No.....0 Yes.....1 |

| | | |
|---------|---------------------|---|
| | | Number of Sessions: _____ |
| 23 3 | Insomnia Group | No.....0 Yes.....1 Number of Sessions: _____ |
| 23 4 | Passive Treatments? | Undergone any previous surgical/medical procedures for your pain since completing the FORT program? YES = 01 NO = 02 N/A = -9 If YES, how many procedures? |
| 23 5 | Procedure 1 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |
| 23 6 | Procedure 2 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |
| 23 7 | Procedure 3 | If 16-6 is YES, which procedure(s)? 01 = fusion 02 = morphine pump 03 = spinal cord stimulator 04 = injection(s) 05 = TENS unit 06 = Other _____ -9 = N/A CODE: _____ |

APPENDIX B
MOST RECENTLY APPROVED ICD

A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

**BROOKE ARMY MEDICAL CENTER/WILFORD HALL MEDICAL CENTER
INFORMED CONSENT DOCUMENT
(ICD Template Version 4. Feb 02)**

A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

PRINCIPAL INVESTIGATOR – Lt Col Alan L. Peterson

If you choose not to participate in this research study, your decision will not affect your eligibility for care or any other benefits to which you are entitled.

DESCRIPTION/PURPOSE OF RESEARCH

You are being asked to consider participation in this research study. The purpose of this study is to evaluate the effectiveness of two different treatments designed to decrease chronic pain, increase functioning, and retain military members on active duty.

This study is being conducted at Wilford Hall Medical Center in San Antonio, Texas and Brooke Army Medical Center, San Antonio, Texas. The study will enroll approximately 90 active duty military personnel with musculoskeletal pain over a period of 18 months. The overall duration of the study will be about 4 years, but the time requirement for individual participants will be about four weeks with follow-up evaluations occurring at 6 months, 12 months, and 18 months.

The two approaches to pain management that will be evaluated in this study are as follows:

Group A, Standard Anesthesia Pain Clinic Medical Care: Participants in this group will be thoroughly evaluated by physicians trained in medical pain management techniques. Appropriate medical recommendations will be made and may include any of the following: pain medications, antidepressant medications, and nerve block and steroid injections. This treatment will include about 6 patient visits over a three-week period.

Group B, Standard Anesthesia Pain Clinic Medical Care AND Interdisciplinary Chronic Pain Rehabilitation Program: This group will receive all of the treatment as described in

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

Group A above, as well as an interdisciplinary functional restoration treatment program, which consists of three major components. Each participant will be evaluated and treated by physical therapy, occupational therapy, and clinical health psychology in coordination with a supervising nurse-physician team. This group will include 3 weeks of full-time treatment including supervised physical exercise and learning pain management skills.

RANDOMIZATION OF STUDY PARTICIPANTS: As a participant, you will be randomly assigned to one of these two groups. Randomization is a process much like flipping a coin and means you will have the same chance of being assigned to either of these two groups.

PROCEDURES: As a participant, you will undergo the following procedures:

Meeting One: The first meeting with Clinical Health Psychology service will involve a full assessment of your pain condition. You will then receive an overview of the study, complete the informed consent document, and be asked to complete several questionnaires about your functioning in many areas (estimated time 1 1/2 hours).

During the first session you will also be randomly assigned to one of the two groups. If you are assigned to Group A or B, you will be treated at the Anesthesia Pain Clinic at Wilford Hall or Brooke Army Medical Center as directed by your physicians. Should it be necessary for you to have a standard anesthesia pain clinic treatment requiring additional informed consent, a separate consent form will be completed at the time of the procedure. If you are selected for Group B, you will also be scheduled for inclusion in the Interdisciplinary Chronic Pain Rehabilitation Program. This three-week program will be offered at Wilford Hall Medical Center once each month.

Phone Contacts and Mailings: Participants in both Groups A and B will be contacted for follow-up information 3 weeks after the initiation of treatment and then at the 6 month, 12 month and 18 month point. Each of these follow-up contacts will involve gathering the same information on functioning as previously assessed. I understand that if I am no longer on active duty in the U.S. military at the time of one of my follow-up assessments, I will be contacted at my civilian address to request completion of the outcome questionnaires.

Should it be necessary for you to have a procedure requiring additional informed consent, a separate consent form will be completed at the time of the procedure.

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RISKS OR DISCOMFORTS:

There is minimal psychological and/or physical risk from the early interventions to be used in this study. In past research, none of the subjects had any problems. You could experience stress from participating in this kind of research. Knowing that researchers have personal information about you may trouble you. There is a possibility that your low back pain may worsen if you are assigned to the early intervention; however, this is not anticipated.

For those in Group A and B, the risks and discomforts of participating are the same as those that would be expected when under the care of the Anesthesia Pain Clinic for any other patient. An additional informed consent for a standard anesthesia pain clinic treatment may be obtained at the time of treatment. These treatments include the use of medications and injections, and the potential adverse effects include infection, bleeding, nerve damage, allergic reactions and either no change or a worsening of your pain.

For those in Group B, there are some risks, which involve engaging in a functional restoration program although these are expected to be minimized since you will be following the recommendations of an interdisciplinary staff of healthcare providers (e.g., physician, nurse, psychologist, physical therapist, and occupational therapist). It is also possible that your pain could become somewhat worse during the course of treatment. There may also be unforeseen risks associated with this study. A previously unknown problem could result from your participation in this research. It is not possible to estimate the chances of such problems or how serious problems could be. Consequently, we ask that you inform the study doctor or any of the Investigators listed on this form of any problems that arise during this study, and also inform your physician. Finally, if suicidality is ever indicated, your commander will be notified and appropriate action will be taken.

BENEFITS:

While there is no guarantee you will benefit from participating in this study, it is intended to reduce your pain, increase your functioning, and retain your active duty status. The treatments are believed to be beneficial, and how well they work is the focus on this study. The investigators have designed this study to learn if there is a difference and how they can better treat active duty members who often times are concerned about their ability to remain in the military until they decide to retire.

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

There will also be a scientific benefit if this study can tell us which treatment for musculoskeletal pain is better.

PAYMENT (COMPENSATION):

You will not receive any compensation (payment) for participating in this study.

ALTERNATIVES TO PARTICIPATION: Alternatives may be available to you, including other pain management programs or individual consultations with Physical Therapy, Occupational Therapy, Mental Health, or Clinical Health Psychology available through your medical treatment facility. Other alternatives would be to seek follow-up care with your primary care manager or to participate in treatment at the Anesthesia Pain Clinic but to decline participation in the data collection or to decline any treatment at all.

CONFIDENTIALITY OF RECORDS OF STUDY PARTICIPATION:

Records of your participation in this study may only be disclosed in accordance with federal law, including the Federal Privacy Act, 5 U.S.C. 552a, and its implementing regulations. DD Form 2005, Privacy Act Statement- Military Health Records, contains the Privacy Act Statement for the records. By signing this consent document, you give your permission for information gained from your participation in this study to be published in medical literature, discussed for educational purposes, and used generally to further medical science. You will not be personally identified; all information will be presented as anonymous data.

Your records may be reviewed by the U.S. Food & Drug Administration (FDA), other government agencies, the BAMC/WHMC Institutional Review Boards, and by research staff. Complete confidentiality cannot be promised, particularly for military personnel, because information regarding your health may be required to be reported to appropriate medical or command authorities.

ENTITLEMENT TO CARE:

In the event of injury resulting from this study, the extent of medical care provided is limited and will be within the scope authorized for Department of Defense (DoD) health care beneficiaries.

Your entitlement to medical and dental care and/or compensation in the event of injury is governed by federal laws and regulations, and if you have questions about your rights as a research subject or

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

if you believe you have received a research-related injury, you may contact the Wilford Hall Clinical Research Squadron Commander, (210) 292-7069 or Wilford Hall Medical Center Risk Manager, 210-292-6004.

Brooke Army Medical Center Protocol Coordinators, 210-916-2598 or BAMC Judge Advocate, 210-916-2031.

Preparation in this study does not alter your ongoing medical benefits as a military beneficiary, and you will continue to receive any needed medical treatment should you experience illness or injury as a result of this study. In the event of injury resulting from the investigational procedures, the extent of medical care provided is limited and will be within the scope authorized for DoD health care beneficiaries.

BLOOD & TISSUE SAMPLES: “No blood or tissue samples will be taken as part of this study.”

STATEMENT OF GOOD FAITH: The investigator cannot guarantee or promise that you will receive benefits from this study; however, the investigator will keep you informed of any serious complications, which may result from your participation in this study.

VOLUNTARY PARTICIPATION:

The decision to participate in this study is completely voluntary on your part. No one has coerced or intimidated you into participating in this project. You are participating because you want to. Lt Col (Dr) Alan Peterson, (Wilford Hall Medical Center, DSN 554-5968, Commercial (210) 292-5968), Dr. Robert Gatchel, (University of Texas Southwest Medical Center, Dallas, (214) 648-5277), or one of their associates has adequately answered any and all questions you have about this study, your participation, and the procedures involved. Dr. Peterson, Dr. Gatchel, or a member of the Clinical Health Psychology staff at Wilford Hall Medical Center ((210) 292-5968) will be available to answer any questions concerning procedures throughout this study. If significant new findings develop during the course of this study that may relate to your decision to continue participation, you will be informed.

You may withdraw this consent at any time and discontinue further participation in this study without affecting your eligibility for care or any other benefits to which you are entitled. Should you choose to

withdraw, you must inform one of the investigators. Your condition will continue to be treated in accordance with acceptable standards of medical treatment.

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

The investigator of this study may terminate your participation in this study at any time if he/she feels this to be in your best interest. Your consent to participate in this study is given on a voluntary basis. All oral and written information and discussions about this study have been in English, a language in which you are fluent.

CONTACT INFORMATION:

Principal Investigator (PI)

The principal investigator or a member of Clinical Health Psychology staff will be available to answer any questions concerning procedures throughout this study.

Principal Investigator: Lt Col Alan L. Peterson

Phone: (210) 292-5968

Institutional Review Board (IRB)

The WHMC Institutional Review Board (IRB), the hospital committee responsible for safeguarding your rights as a research subject, has assigned a member of the IRB, who is not part of the study team, to serve as an outside monitor for this study (this person is the Medical Monitor). If you have any questions about your rights as a research subject or any other concerns that cannot be addressed by the PI, you can contact the medical monitor, Joseph Schmelz, PhD, RN at (210) 292-5687. Or mail to: 59th Clinical Research Squadron/MSRP, 1255 Wilford Hall Loop, Lackland Air Force Base, Texas 78236.

In addition, if you have any comments, questions, concerns or complaints, you may also contact the Chairperson of the IRB, at (210) 292-7558. Or mail to: 59th Medical Wing/CM, 2200 Bergquist Drive, Lackland Air Force Base, Texas 78236.

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

A copy of this form has been given to you.

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A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population

VOLUNTEER'S SIGNATURE VOLUNTEER'S SSN DATE

VOLUNTEER'S PRINTED NAME FMP SPONSOR'S SSN DOB

VOLUNTEER'S ADDRESS (street, city, state, zip)

ADVISING INVESTIGATOR'S SIGNATURE DATE (PHONE NUMBER)
(can only be signed by an investigator whose name is listed in the protocol)

PRINTED NAME OF ADVISING INVESTIGATOR

WITNESS' SIGNATURE DATE
(Must witness ALL signatures)

PRINTED NAME OF WITNESS

TITLE OF STUDY: A Randomized Trial of Musculoskeletal Pain Treatment in a Military Population
Protocol #:
Date Protocol Approved by WHMC/BAMC IRB:
Date(s) ICD Changes Approved by WHMC/BAMC IRB:

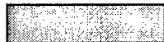
Subject's Stamp Plate
PRIVACY ACT OF 1974 APPLIES
DD FORM 2005 FILED IN MILITARY HEALTH RECORDS

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APPENDIX C
DATA SUMMARY TABLE

TABLE 1

| FUNCTIONAL CAPACITY VARIABLES. | | Lifting Floor-Waist | Lifting Waist-Eye | Aerobic Capacity (Max VO2) |
|--------------------------------|----------------|----------------------------|--------------------------|----------------------------|
| FORT Interval | <i>Control</i> | 3.9% increase | 6.1% increase | 2.8% increase |
| | <i>FORT</i> | 38.7% increase | 47.8% increase | 16.1% increase |
| PSYCHOSOCIAL VARIABLES. | | BDI | MVAS | Pain Intensity |
| FORT Interval | <i>Control</i> | 12.2% decrease | 4.7% decrease | 21% decrease |
| | <i>FORT</i> | 17.2% decrease | 26.3% decrease | 30.9% decrease |
| QUALITY OF LIFE VARIABLES. | | MPI General Activity Level | SF-36 Physical Composite | Sf-36 Mental Composite |
| FORT Interval | <i>Control</i> | N/A | 0.9% increase | 0.3% decrease |
| | <i>FORT</i> | N/A | 29.0% increase | 4.1% increase |



indicates an undesirable outcome

February 11, 2004

U.S. Army Medical Research and Materiel Command (MCMR-RMI-S)
504 Scott Street
Fort Detrick, MD 21702-5012

RE: DAMD17-03-1-0055

Dear Research Command:

In accordance with your letter of December 18, 2003, we are enclosing the original and two copies of the first Annual Report for the referenced award.

As requested, the PI's current contact information is on the letterhead.

If we may be of further assistance to you, please advise.

Sincerely yours,

Robert J. Gatchel, Ph.D.
Principal Investigator

Perrie M. Adams, Ph.D.
Associate Dean for Research

RJG:cag

ANNUAL REPORT REVIEW

USAMRMC FY02 PEER REVIEWED MEDICAL RESEARCH PROGRAM

Grant/Contract/MIPR No.: DAMD17-03-1-0055

Principal Investigator: Robert J. Gatchel, Ph.D.

Institution: The University of Texas Southwestern Medical
Center
Dallas, Texas 75235-9044

Report Title: A Randomized Trial of Musculoskeletal Pain
Treatment in a Military Population

Report Type: Annual (First)

Award Mechanism: Peer Reviewed

Date of Report: February 2004

Reporting Period: 15 January 2003 – 15 January 2004

SUMMARY REVIEW: Musculoskeletal system conditions are the leading cause of hospitalization and disability for the U.S. Armed Forces. Numerous studies have shown the efficacy of an interdisciplinary chronic pain rehabilitation program (ICPRP) at facilitating return-to-work in workers' compensation patients with occupational musculoskeletal disorders and work disability. The major hypothesis of this project is that the ICPRP will significantly increase the likelihood of remaining on active duty and qualified for worldwide duty for military personnel suffering from musculoskeletal disorders. During the first year of funding, the Principal Investigator (PI) hired all of the necessary personnel for this study including a study coordinator, a physical therapist, the project assistant, and a biostatistician. All of the individuals involved in this study completed the required human subjects research training. The PI also developed, tested, revised, and finalized the provider and patient manuals. All of the protocols and guidelines have been finalized. The PI received approval from the local Institutional Review Board, and is awaiting approval from the Human Subjects Research Review Board.

FORMAT/EDITORIAL ISSUES: This first annual report conforms to the USAMRMC reporting requirements.

CONTRACTUAL ISSUES: The appended Statement of Work was separated into tasks by the different investigators involved in this project. All of the tasks for year 1 appear to have been completed. The PI noted that he is awaiting approval from the Human Subjects Research Review Board.

TECHNICAL ISSUES: None.

SPECIFIC DISCREPANCIES AND RECOMMENDATIONS: This reviewer recommends accepting this first annual report as written.

KEY RESEARCH ACCOMPLISHMENTS: The PI has indicated unlimited distribution for the following key research accomplishments:

- Recruited and trained all required project team members.
- Tested, revised, and finalized all treatment protocols for this project.
- Developed the final assessment-outcome measures database that is being used in this project.
- Began subject recruitment.

REPORTABLE OUTCOMES: None.

REVISED REPORT RECOMMENDED: YES _____ NO ✓ _____

REVISED SOW RECOMMENDED: YES _____ NO ✓ _____