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TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release; distribution unlimited

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

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1. REPORT DATE (DD-MM-YYYY) 01-09-2011		2. REPORT TYPE Annual		3. DATES COVERED (From - To) 1 SEP 2010 - 31 AUG 2011	
4. TITLE AND SUBTITLE A Randomized Effectiveness Trial of a Systems-Level Approach to Stepped Care for War-Related PTSD				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER W81XWH-09-2-0079	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Lisa Jaycox E-Mail: jaycox@rand.org				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Rand Corporation Santa Monica, CA 90401				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick, Maryland 21702-5012				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT None provided.					
15. SUBJECT TERMS No subject terms provided.					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			UU

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INTRODUCTION:

The purpose of the STEPS UP (STepped Enhancement of PTSD Services Using Primary Care) trial is to compare centralized telephonic care management with preference-based stepped PTSD and depression care to optimized usual care. We hypothesize that the STEPS UP intervention will lead to improvements in (1) PTSD and depression symptom severity (primary hypothesis); (2) anxiety and somatic symptom severity, alcohol use, mental health functioning, work functioning; (3) costs and cost-effectiveness. We further hypothesize that qualitative data will show (4) patients, their family members, and participating clinicians find that the STEPS UP intervention is an acceptable, effective, and satisfying approach to deliver and receive PTSD and depression care

STEPS UP is a six-site, two-parallel arm (N = 1,500) randomized controlled effectiveness trial with 3-month, 6-month, and 12-month follow-up comparing centralized telephonic stepped-care management to optimized usual PTSD and depression care. In addition to the existing PTSD and depression treatment options, STEPS UP will include web-based cognitive behavioral self-management, telephone cognitive-behavioral therapy, continuous nurse care management, and computer-automated care management support. Both arms can refer patients for mental health specialty care as needed, preferred and available. The study will use sites currently running RESPECT-Mil, the Initiating PI's existing military primary care-mental health services practice network, to access site health care leaders and potential study participants at the 6 study sites.

If effective, we expect that STEPS UP will increase the percentage of military personnel with unmet PTSD- and depression-related health care needs who get timely, effective, and efficient PTSD and depression care. Our real-world primary care effectiveness emphasis will prevent the Institute of Medicine's so called "15 year science to service gap." If successful, STEPS UP could roll out immediately, reinforcing and facilitating pathways to PTSD and depression recovery.

BODY:

The study is currently in the regulatory review and approval phase. As the lead IRB, WRAMC's Department of Clinical Investigation (DCI) has reviewed and approved the master protocol, consent form, and related study materials (20 appendices including data collection materials, manuals, impact statements, advertisements, and study personnel scripts). Additionally, we submitted an addendum to appoint a new WRAMC medical monitor, which was approved. After obtaining WRAMC DCI approval, the protocol was submitted to HRPO for review, and received approval after minor revisions. These revisions were submitted to the WRAMC DCI as an addendum and were approved. The protocol was also submitted to the Uniformed Service University of the Health Sciences (USUHS) for review, and was approved. The two partnering institutions, RAND and RTI, have had the protocol reviewed and approved and are pending final approval after submission of revisions requested by HRPO. Additionally, the University of Washington, and Boston VA Research Institute (BVARI) have submitted the updated protocol package to their IRBs and have received approval.

In an effort to streamline regulatory approvals at the six study sites, we are initiating Institutional Agreements (IAs) with each study site's IRB. All six site IRBs have verbally agreed to cooperate with applicable IAs; two site IAs are currently under review. The Ft. Lewis IA template has been signed and approved by both IRBs; subsequently a protocol was submitted

via IRBNet and is awaiting assignment to a Madigan IRB reviewer. Additionally, a WRAMC-signed IA template has been submitted to Ft. Bliss; it is currently awaiting review and signature by the WBAMC IRB, after which the protocol package will be submitted and reviewed. We are in the process of developing and submitting IAs and protocol packages to the other four study sites. As this is a relatively novel experience for most sites involved, there is a possibility that the IA approval process will vary across sites. Therefore, it is unclear how long the approval process will take at each study site.

During the second year of the project we have further developed and refined the STEPS-UP intervention, building on materials from our proposal. The refinements include (1) a web-based care management support tool (FIRST-STEPS); (2) a nurse-assisted web-based cognitive behavioral self management option, called DESTRESS-PC for PTSD; (3) a structured telephonic cognitive-behavioral therapy approach, called DESTRESS-T; and (4) a preference-based stepped care approach to primary care PTSD and depression treatment sequencing. A contract has been developed between the Henry M. Jackson Foundation and Ultrasis, the developer of 'Beating the Blues,' a web-based therapy for depression that will be used in the STEPS UP trial; we anticipate this contract will be finalized next quarter. Additionally, in the past year we have refined our recruitment strategy, finalized our measures, refined our final study methods, developed data collection procedures and forms, produced key materials (manuals, training materials, forms), and clarified safety procedures including inclusion criteria, consent procedures, and confidentiality protections. Agreements addressing data use and sharing and publication are nearing completion.

Study investigators continued to participate in multiple routine weekly conference calls and other communications as necessary to ensure timely completion of all tasks. At the request of Dr. Kimberly del Carmen, we developed and submitted detailed study timelines for regulatory approval and recruitment projections. The initiating institution (Henry M. Jackson Foundation) has revised their budget and SOW to reflect delays in obtaining regulatory approvals since we anticipate that the study will take approximately 6.5 years to complete. RAND and RTI will soon be revising their SOW's and requesting an extension on the project as well.

In preparation for study launch, the STEPS UP team has conducted three site visits at Forts Lewis, Bliss, and Carson to initiate intervention awareness and training for primary care and behavioral health providers, clinic nurses and clerical staff, and RESPECT-Mil personnel. We expect to complete site visits to the remaining three sites in the next quarter. We have developed job descriptions and timelines to hire intervention and study support personnel. We plan to begin hiring centralized study personnel during the next quarter. The DSMB, Stakeholder, and Scientific Advisory Groups are established, and we will convene these groups next quarter as well.

In the past year, RTI designed and launched the study web portal, including secure web-based study instrumentation. RTI is also in the process of recruiting, hiring, and training study research assistants at each study site. These RAs will assist with local study site recruitment, enrollment, and logistics.

In the past year, RAND has refined the qualitative interview protocols and emergency procedures for the qualitative portion of the study, and has contributed to the final measures so that appropriate inputs for the costs and cost-effectiveness analyses will be gathered. RAND investigators continue to be involved in planning meetings, site visits, and conference calls, while at the same time trying to conserve resources during this extended planning period.

BVARI investigators have continued to participate in weekly conference calls to discuss the overall study design as well as treatment development (e.g., web-based self-management intervention, phone-based therapy). In the past year, BVARI investigators have developed an initial full draft of the phone-based treatment protocol for PTSD, and are currently refining this protocol as necessary to include depression symptom management for participants with both PTSD and depression. BVARI has also worked with their web company (Boston Interactive) to make revisions to the self-management intervention. STEPS UP care managers have been introduced to the phone-based therapy manuals, and BVARI has provided continued feedback and support in this initial phase of care manager training.

Customization of the FIRST-STEPS web-based care management software for the STEPS UP trial is ongoing. The Providence Corporation has programmed and presented mock-ups of new/revised features to the program, and weekly conference calls were held for investigators to provide feedback. For practical purposes FIRST-STEPS is up and running in its currently approved form; ongoing modifications will not hold up initiation of the trial or threaten the fidelity of intervention or the validity of trial results.

The University of Washington investigators performed a number of ongoing activities in support of the STEPS-UP protocol development and implementation. University of Washington investigators attended four weekly telephone conferences to contribute to care manager coaching, web-based therapy development, FIRST-STEPS enhancements, and general study implementation. Dr. Zatzick, in consultation with Drs. Unützer and Katon, initiated more intensive supervision related to care management practices. Dr. Unützer continued to provide expert consultation regarding information technologies development in support of the protocol. Drs. Katon, Zatzick, and Unützer also continued to attend the University of Washington STEPS UP internal team meeting that is held approximately once each month. Furthermore, the University of Washington investigators have refined and developed training for the STEPS UP trial intervention and have developed working drafts of the care management manual. These and additional protocol activities will continue into the next quarter.

In line with the revisions to the WRAMC budget and SOW, the University of Washington team has begun to plan for a possible STEPS UP no cost extension period to extend beyond Year 5 of the grant. This includes planning for ongoing consultation to the project extending through a possible year 6 and 7 of the project. The investigative team is also working to prepare a revised no cost-extension budget that includes appropriate time allotments for Drs. Katon, Unützer, Zatzick as well as budgetary allocations for research associate support.

KEY RESEARCH ACCOMPLISHMENTS:

There are not yet any clear scientific findings resulting from this research as we are still undergoing regulatory review. Results are expected in June 2015.

REPORTABLE OUTCOMES:

In November 2010, we presented a symposium presentation at the International Society of Traumatic Stress Studies (ISTSS) annual meeting held in Montreal (see Appendix 1). In March 2011, we presented at the Armed Forces Public Health Conference in Hampton Roads, VA (see Appendix 2). Additionally, a poster was presented at the 2011 USUHS Research Week in May, 2011 (see Appendix 3).

CONCLUSION:

There are no conclusions to report at this time, as the study has not been opened to enrollment.

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APPENDICES:

Abstract for the November 2010 symposium presentation at the International Society of Traumatic Stress (Appendix 1)

Abstract for the March 2011 presentation at the Armed Forces Public Health Conference (Appendix 2)

Abstract for the May 2011 poster presentation at the 2011 USUHS Research Week (Appendix 3)

SUPPORTING DATA:

N/A

APPENDIX 1**Improving primary care for US troops with PTSD and depression in military primary care clinics: RESPECT-Mil and STEPS-UP**

Charles Engel, Lisa Jaycox, Robert Bray, Michael Freed; Brett Litz; Terri Tanielian, Doug Zatzick, Jürgen Unützer, Wayne Katon.

PTSD and depression are a serious problem for roughly 15% of U.S. military personnel returning from the conflicts in Iraq and Afghanistan. Stigma, fear of harm to career, and institutional barriers to mental health care in the military health system prevent many from seeking care. In 2007 the Army initiated RESPECT-Mil, a collaborative care approach to improving primary care recognition, treatment, and continuity of care for these conditions. RESPECT-Mil was rolled out to 15 Army sites (42 primary care clinics) and is now adding another 19 sites (53 clinics). In this presentation we will (1) describe the RESPECT-Mil model, (2) present data on program use to date, (3) outline feedback from implementers and providers, (4) discuss implementation logistics, barriers, and challenges, and (5) show how lessons to date are being used to develop and test a second generation model called “STEPS-UP”. STEPS-UP incorporates new care manager strategies for engaging and motivating patients and helping determine treatment preferences; adopts a more comprehensive stepped treatment paradigm, adding a continuum of psychosocial management options; and uses distance modalities (Web, telephone) to maximize participation. A new multisite controlled trial will evaluate STEPS-UP versus RESPECT-Mil to determine whether STEPS-UP benefits will outweigh its unintended effects.

APPENDIX 2

PART I: Re-Engineering Healthcare Integration Programs (REHIP): Blending Embedded Behavioral Health Providers (BHPs) and Care Managers (CM) in TriService Primary Care (PC) Clinics. PART II: Stepped Enhancement of PTSD Services Using Primary Care (STEPS UP

COL Charles C. Engel, MD, MPH, MC, USA; Michael C. Freed, PhD, EMT-B; Lisa Jaycox, PhD; Robert M. Bray, PhD; Douglas Zatzick, MD; Brett Litz, PhD, MA; Jürgen Unützer, MD, MPH; Wayne Katon, MD; Terri Tanielian, MA; Donald Brambilla, PhD; Christine Eibner, PhD; Phoebe Kuesters, MPH; Laura Novak, BA; Julie Cooper, MPH; Eileen Delaney, PhD; Kristine Rae Olmsted, MSPH; Jennifer Weil, PhD; Kristie L. Gore, PhD

ABSTRACT: PART I: REHIP blends two integrated-collaborative primary care (PC) approaches (embedded behavioral health providers and care managers), achieving an evidence-based synergy that surpasses either approach alone. Combining the two “team medicine” models will lead to improved detection, rapid specialist access, continuous accountable patient monitoring, timely, as needed treatment changes for patients not responding to treatment, and useful PC provider management advice and treatment assistance for the widest range of PH issues. PART II: STEPS UP (Stepped Enhancement to PTSD Services Using Primary Care) will enhance RESPECT-Mil in two important ways: 1) the implementation of efficacious distance and in-person psychosocial therapies for PTSD and depression and 2) the option for centralized care management. In this randomized multisite trial, we hypothesize that STEPS UP is a cost-effective solution that will lead to greater symptom reduction and more improvement in quality of life than optimized usual care, which includes RESPECT-Mil.

APPENDIX 3

Stepped Enhancement of PTSD Services Using Primary Care (STEPS UP): Design and Methods of a DoD Funded Randomized Effectiveness Trial

COL Charles C. Engel, MD, MPH, MC, USA (1,2); Michael C. Freed, PhD, EMT-B (1,2); Lisa Jaycox, PhD (3); Robert M. Bray, PhD (4); Douglas Zatzick, MD (5); Brett Litz, PhD, MA (6,7); Jürgen Unützer, MD, MPH (8); Wayne Katon, MD (8); Terri Tanielian, MA (3); Donald Brambilla, PhD (9); Christine Eibner, PhD (3); Phoebe Kuesters, MPH (2); Laura Novak, BA (2); Julie Cooper, MPH (8); Eileen Delaney, PhD (6); Kristine Rae Olmsted, MSPH (4); Jennifer Weil, PhD (2); Kristie L. Gore, PhD (1,2)

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Background: Approximately 1/6th of returning servicemembers from the wars in Iraq and Afghanistan report clinically significant symptoms of PTSD and/or depression. Many are referred for specialty mental healthcare, but less than half actually follow through with the referral. The collaborative care model, a systems-level intervention which combines regular screening, on-site care management, and psychiatric consultation, all within primary care, is effective for treating and managing depression and other mental health problems in the civilian sector. This model is also becoming the standard of care in the Army for PTSD and depression, through a program called RESPECT-Mil. STEPS UP enhances RESPECT-Mil in two important ways: 1) efficacious in-person, telephone-, and web-based psychosocial therapies for PTSD and depression and 2) telephone and on-site care management. Patients will be offered STEPS UP interventions based on their preference and symptom severity. **Methods:** 1500 active duty servicemembers at 6 Army posts (18 primary care clinics) will be randomized to STEPS UP or usual care (which may include RESPECT-Mil) and followed for 12-months. Costs of health services will be assessed, and a subset of patients and providers will be interviewed to assess perceptions of care quality, satisfaction, and acceptability. **Hypotheses:** Participants randomized to STEPS will report lower depression and PTSD symptoms. STEPS UP will be an acceptable and cost-effective strategy, relative to usual care. **Conclusions:** If effective, STEPS UP will improve the 1) availability and diversity of treatments 2) technological infrastructure to manage patients and provide ongoing supervision and coaching to providers.