Deployment Health Clinical Center

2012 and 2013 Report

DHCC
DEPLOYMENT HEALTH CLINICAL CENTER

DEFENSE CENTERS OF EXCELLENCE
For Psychological Health & Traumatic Br I Injury

It is our duty to embrace, care for and help heal those
wounded warriors returning from battle.

It is our solemn obligation to honor those
who have given the ultimate sacrifice…

and it is part of our oath
to never leave a fallen comrade behind.

Dan Bullis
Sgt. Maj. USA (Ret.)

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Our Soldiers, Sailors, Airmen, Marines, and Their Families

INTRODUCTION

Executive Summary

The DoD Deployment Health Clinical Center (DHCC), a component center of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE), expanded three-fold during the reporting period. Functions previously supported by DCoE Directorates were moved into DHCC in late 2012, the Center was more fully integrated into DCoE, and DCoE's psychological health mission was consolidated into the DHCC organization.

The **mission** of DHCC is to promote the innovation, delivery, quality, effectiveness, and measurement of psychological healthcare across the Military Health System (MHS) through population-based, system-level initiatives, research, advocacy, implementation support, and coordination.

DHCC's **vision** is to drive system change that enhances clinical and health outcomes related to psychological health and optimizes service delivery mechanisms across the DoD.

The Center is organized around the following focus areas:

- **Primary Care-Behavioral Health (PCBH) (formerly RESPECT-Mil):** Improve early identification/treatment and access to care for psychological health (PH) issues through the integration of behavioral health in primary care
- **Population Health (PopH) (formerly Resilience & Prevention):** Develop, implement, manage and coordinate programs delivered across the continuum of care as well as outside the medical context to promote resilience and to prevent psychological health problems
- **Specialty Care (SC) (formerly Psychological Health Clinical Standards of Care):** Develop and implement evidence-based treatments and clinical support tools to promote better PH specialty care and improved health outcomes
- **Health Systems Research & Analysis (HSRA):** Conduct innovative research to improve the psychological health system of care within the MHS, oversee the DHCC research portfolio—including internally and externally funded investigations, and coordinate with partnering research organizations

- **Health Systems Effectiveness (HSE):** Coordinate and provide program monitoring and evaluation services to all DHCC programs, serve as the principle liaison between DHCC and DCoE headquarters (HQ) on matters related to program effectiveness, carry out program evaluation activities, as needed, to support external clients, and oversee projects related to metrics and measurement
- **Administration & Operations (A&O):** Oversee and support all the administrative and operational needs of the other DHCC teams, serve as the principle liaison with DCoE HQ to coordinate and synchronize mission, taskings, and organizational governance matters, and provide information management, information technology, web services and communications support for all DHCC teams.

This report, covering calendar years 2012 and 2013, summarizes DHCC's accomplishments in support of this mission and vision.

INTRODUCTION

Highlights

- **DHCC welcomed U.S. Navy Captain Anthony Arita as its new director.** CAPT Arita is a clinical neuropsychologist with a broad range of experience including operational psychology, neuropsychological and psychological assessment, traumatic brain injury and the spectrum of psychological health concerns.

Navy Captain Anthony Arita, DHCC Director, July 16, 2013 - present.

- **DHCC was successfully awarded funding to conduct three Department of Veterans Affairs (VA) and Department of Defense (DoD) Joint Incentive Fund (JIF) projects.** These projects continue the work of Integrated Mental Health Strategy (IMHS) Strategic Actions 23 (Chaplains Roles), 24 (Resilience Programs), and 26 (Translation of Research Into Practice).
- **Hosted Phase 2 Psychological Health Measurement Meeting.** Supports development of the DoD Psychological Health Imperatives Dashboard and facilitates the September 2013 OASD(HA) Policy Memorandum on PH Outcomes Measurement.
- **PTSD Care Pathway – AIM Form funding.** Part of the larger IMHS Strategic Initiative to Optimize and Integrate Psychological Health within the Military Health System (MHS), the purpose of the PTSD Care Pathway Pilot is to create an MHS-wide roadmap to implement measures addressing process, outcomes, cost, patient/command satisfaction, and structured documentation to monitor the entire PTSD Care Pathway. The existing Tri-Service Work Flow Behavioral Health Alternate Input Method (AIM) Form was revised to meet the requirements of the PTSD Care Pathway treatment module.
- **Twelve clinical support tools (CSTs) developed and distributed throughout DoD/VA.** Tools address Posttraumatic Stress Disorder (PTSD), Substance Use Disorder, and Opioid Therapy for Chronic Pain. All twelve CSTs have been approved and disseminated by both the VA and Army Quality Management Office (QMO) and are available for download on the Army QMO website at https://www.qmo.amedd.army.mil/pguide.htm and the VA website at http://www.healthquality.va.gov.
- **RAND Toolkit for Improving Psychological Health and Traumatic Brain Injury Programs.** Commissioned and overseen by DCoE and DHCC, RAND developed the toolkit scheduled for release in early 2014. The toolkit consists of four tools to assist program managers of psychological health initiatives to codify, evaluate, manage, and set future directions (e.g., expand or suspend programming) of activities that they oversee. The toolkit supports MHS efforts to improve the quality of mental healthcare and psychiatric preventive services by driving adoption of more structured approaches to psychological health program management and evaluation.
- **Hosted Fifth Annual Warrior Resilience Conference - Virtual.** This conference was one of DoD's first large-scale conferences to use a virtual training platform, attracting nearly 500 participants. It represented a collaboration between the Services, DoD, VA, and the RAND Corporation.
- **RAND Studies.** DHCC provided government oversight to 11 evaluations of DoD psychological health programs carried out by a Federally Funded Research and Development Center (FFRDC) at the RAND Corporation.
- **Platinum MarCom Award.** DHCC received a 2013 Platinum MarCom award for its 2011 Annual Report from the Association of Marketing and Communication Professionals. Of 6,500 entries from the United States, Canada, and several other countries, about 19 percent won the Platinum Award, the organization's top honor.

Accomplishments — Ongoing Programs

- The behavioral health component of the Patient Centered Medical Home (PCMH-BH) (formerly RESPECT-Mil) is operating at 93 clinics at 38 Army sites, two clinics at one Navy site, and clinics at 10 Air Force bases. From program inception in 2007 through the end of 2013, these sites provided 3,923,335 primary care visits to active duty service members with 3,432,103 of those visits screened for PTSD and depression. This represents an overall 87.5% screening rate for active duty primary care visits to participating clinics since February 2007. Of screened visits, 448,092 (or 13.06%) resulted in a positive screen, and 47% of positive screens resulted in a primary care diagnosis of depression, possible PTSD, or both.
- In 2013, 952,726 visits were screened (93.6% of total visits), 114,019 visits generated positive screens, and 53,023 resulted in a behavioral health diagnosis. Program participation continues to increase with approximately 74,273 visits screened per month in 2013. Over the life of the project, more than 25,282 soldiers have been referred to and followed by PCMH-BH and more than 123,344 (nearly 31,832 in 2013) service members with previously unmet behavioral health needs were referred for care.
- Five thousand five hundred individuals subscribed to the *Deployment Health News* at the end of 2013.
- Key 2013 Real Warriors Campaign accomplishments include producing 31 multimedia products (video profiles, video and radio PSAs, podcasts), securing an interview with the Sergeant Major of the Army to demonstrate leadership support of anti-stigma efforts, and receiving 273,747 unique visitors, 331,639 visits and more than 1.2 million page views to the website, www.realwarriors.net.
- The Center's clinicians, researchers, and scientists published five articles in peer-reviewed periodicals, published one book and four book chapters, delivered 27 presentations, and exhibited six poster presentations at conferences in 2012. In 2013, they published 12 articles in peer-reviewed periodicals, published two book chapters, delivered 27 presentations, and exhibited two poster presentations.

REAL WARRIORS ★ REAL BATTLES
REAL STRENGTH

1st Sgt. Aaron Tippett:
"That's True Strength"

IN RECOGNITION OF Mental Health Month and Memorial Day, the Real Warriors Campaign encourages all service members, veterans and families to seek help for psychological health concerns. Experiencing psychological stress as a result of life transitions, deployment or other long-term separations can be common in military life. Because psychological wounds are often invisible, seeking care early is critical for successful care and positive outcomes.

1st Sgt. Aaron Tippett understands firsthand that reaching out for help is a sign of strength that benefits the service member, his/her family, unit and community. Some service members worry that seeking psychological health care or support will negatively affect their careers. However, reaching out for help did not hinder Tippett's advancement in the military and he has since been promoted to first sergeant.

"Being promoted to first sergeant was always a dream, but now it's a dream realized. And I'm so happy that I sought treatment because I know that if I hadn't … there's no way I'd be a first sergeant right now."

Tippett has been in the Army for 17 years and currently is a chief air assault instructor for the Sabalauksi Air Assault School of the 101st Airborne Division at Fort Campbell. As a result of working in route clearance sappers, Tippett experienced multiple mild traumatic brain injuries and was diagnosed with posttraumatic stress disorder. He experienced speech and sleep challenges, dizziness, equilibrium disturbances and constant headaches.

"I'm actually diagnosed with PTSD and multiple cases of mild traumatic brain injury, but I was brought up…to drive on, don't let your soldiers see that anything's wrong."

Tippett initially ignored the symptoms but realized he needed to reach for help not only for himself, but for his family. With the encouragement of his wife, Tonya, a National Guard soldier, he sought help from RESPECT-Mil, a treatment model designed by the Defense Department's Deployment Health Clinical Center (DHCC) to screen, assess and treat active-duty soldiers with depression and/or PTSD. Tippett began treatment for mild traumatic brain injury in 2005 and continues to communicate with his RESPECT-Mil care facilitator to ensure he's staying on the right track.

Photo courtesy of Dick Phillips; Tippett in Fort Campbell, Ky.

After hiding the fact that he was receiving treatment for a year and a half, Tippett is now sharing his story to encourage other warriors who may be hesitant to seek care and show that nothing should be able to set you back.

"It is a stronger thing to do to recognize and seek help than it is to hide from it and shy away from it."

To learn more about Tippett's story or to listen to other warriors share their story of reaching out for help with successful outcomes, visit the videos section of the Real Warriors Campaign website.

If you are experiencing signs of stress, or may be coping with psychological health concerns, don't wait, seek help now. The Real Warriors Campaign at www.realwarriors.net has tips and resources to help service members, veterans, and military families cope with psychological health concerns. Service members, including members of the National Guard and reserve, veterans and military families can confidentially speak with a trained resource consultant 24/7 through the Real Warriors Live Chat feature or by calling 866-966-1020.

www.realwarriors.net ★ 866-966-1020

First Sgt. Aaron Tippett sustained multiple concussions during combat deployments and was diagnosed with PTSD. He sought treatment from the RESPECT-Mil program at Fort Campbell, Ky., and now encourages others to seek help as a Real Warriors Campaign profilee.

DIRECT HEALTH SERVICE DELIVERY

For more than 17 years, DHCC provided direct, tertiary care to service members; expert referral care for complex deployment-related health concerns; and consultation services to clinicians, service members, and families. In the last two years, DHCC more deeply integrated with the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) as one of its three component centers. This process brought about DHCC's transition from providing clinical programs to the role of integrating, evaluating, and advising clinical programs treating deployment-related psychological health concerns.

Specialized Care Programs

DHCC discontinued its two tertiary care programs for deployment veterans in 2012. Employing evidence-based therapies, the three-week Specialized Care Programs Track I and Track II were delivered by a multidisciplinary staff and pioneered the use of alternative and complementary treatment modalities including yoga, acupuncture, and relaxation therapy.

The Specialized Care Program (SCP) was started in 1996 to care for individuals with idiopathic symptoms related to the 1991 Gulf War. It was established at the Gulf War Health Center at Walter Reed Army Medical Center as the third and final phase of the DoD Comprehensive Clinical Evaluation Program (CCEP) for Gulf War veterans. In 1999, the Gulf War Health Center became the Deployment Health Clinical Center (DHCC), the clinical component of three centers of excellence devoted to deployment health. In 2002, the SCP became the tertiary level of care outlined by the

Army Colonel Charles Engel, Director DHCC, speaks at the SCP Recognition Ceremony on May 17, 2012.

1991

Operation Desert Storm, known as the Gulf War, launched in response to the Iraq invasion of Kuwait. 700,000 U.S. military personnel deploy.

1992 – 1994

Many Gulf War veterans experience frustrating medically unexplained physical symptoms (MUPS). Symptoms including excessive fatigue, memory and concentration difficulties, joint pain, and chronic indigestion become known collectively as Gulf War Illness or Gulf War Syndrome.

1994

The DoD Comprehensive Clinical Evaluation Program (CCEP) program is established. The CCEP provides a thorough, systematic clinical evaluation for diagnosis of Gulf War veterans with service-related medical complaints. The CCEP reduces repetitive testing and multiple, uncoordinated specialty consultations but does not provide definitive care.

1995

It is now estimated that 100,000 service members experience MUPS related to Gulf War service. The Administration, members of Congress and military leaders advocate for these service members. The Gulf War Health Center is established at Walter Reed Army Medical Center (WRAMC).

1996

U.S. Army Major General Ronald Blanck, commanding general of WRAMC and the North Atlantic Regional Medical Command, appoints Major Charles Engel as head of the Gulf War Health Center. Major Engel, an Army psychiatrist and epidemiologist, assembles a multidisciplinary team of providers who receive training at the University of Washington in providing integrative care for medically complex syndromes. The team designs the Integrated Specialized Care Program for Medically Unexplained Physical Symptoms, a multi-modal program incorporating individual therapy, group therapy, patient education, physical therapy, art therapy, and occupational therapy.

1997

The Institute of Medicine publishes the *1997 Adequacy of the Comprehensive Clinical Evaluation Program (CCEP): A Focused Assessment,* which yields a recommendation for post-deployment evaluation and care at the primary care level.

1999

The Gulf War Health Center becomes the DoD Deployment Health Clinical Center (DHCC), the clinical component of three centers of excellence for deployment health authorized by Section 743 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999.

2002

DoD (Health Affairs) directs DHCC to assume responsibility for promoting and coordinating the use of the Post-Deployment Health Clinical Practice Guideline (PDH-CPG). The Specialized Care Program (SCP) is the tertiary level of care called for in the guideline, which begins with primary care assessment of deployment-related health concerns.

2004

The SCP Track II—adapted from the successful therapeutic milieu of the MUPS program—is created to treat Operation Iraqi Freedom/Enduring Freedom veterans with trauma spectrum symptoms and post-deployment psychological health concerns.

2005

DHCC begins to collect medical status, behavioral health status, and socio-demographic data from SCP participants to perform program evaluation. Data analysis reveals statistically significant functional improvements in program participants.

2007

Research conducted in collaboration with the Samueli Institute for Information Biology leads to the addition of acupuncture, yoga nidra (sleep yoga), and relaxation modalities to the SCP.

2009

DHCC delivers its first gender-specific session of the SCP Track II for a group of seven military women.

DHCC delivers its first one-week educational program to support spouses and significant others of military personnel with PTSD.

2011

DHCC provides outreach to coordinate efforts, synchronize, standardize care, and share information among military specialty care programs for PTSD and psychological health concerns.

2012

The Specialized Care Program is delivered for the last time. A celebration uniting staff, patients, and medical leaders is held to honor 17 years of caring.

DoD/VA Post-Deployment Health Clinical Practice Guideline (PDH-CPG). The program, renamed the Specialized Care Program (SCP) Track I, sought to improve physical conditioning and decrease symptoms through gradual physical reactivation and provided participants with cognitive behavioral therapy and psychoeducation.

The Specialized Care Program Track II adapted the successful therapeutic milieu of the Track I Program to benefit service members with PTSD and trauma spectrum symptoms. Using evidence-based treatments for PTSD including cognitive behavioral therapy and relaxation training, the program also sponsored daily exposure therapy sessions that allowed participants to explore difficult memories and dissipate powerful emotions from their combat experiences. Psychological therapy was balanced by daily physical therapy and integrative modalities such as acupuncture and yoga to help participants calm and manage their physical and mental stress reactions as well as intensive psychoeducation where participants came to understand the ways their war experience had affected them and how to constructively handle their PTSD symptoms. DHCC delivered its final four cycles of the Specialized Care Program Track II program to 28 participants from January to April 2012.

Seventeen Years of Caring

During a DoD review of direct patient care programs in 2011, it was determined that military direct health service delivery should be accomplished by military treatment facilities (MTFs) and not by any activities at the DoD-level. Since DHCC is a DoD-level activity, this decision required DHCC to discontinue delivery of the SCP. DHCC held a recognition ceremony on May 17, 2012, for current and former SCP staff members and invited former patients and their families. U.S. Army Lieutenant General (Ret.) Ronald Blanck, who served as the commander of Walter Reed National Military Center in 1995 and was instrumental in the formation of the Gulf War Health Center and the SCP, was the keynote speaker.

Of special note in this celebration was the participation of the Dancy family. Mr. Julius Dancy had attended the SCP Track I Program as a veteran of the Gulf War. His son, Marcus, attended the Track II Program after service in Operation Iraqi Freedom (OIF). Marcus's wife, Shamale, had been a participant and peer facilitator in the Spouses and Significant Others Support Group, a one-week educational program offered by DHCC to support spouses and significant others of military personnel with PTSD.

PRIMARY CARE – BEHAVIORAL HEALTH

DHCC's Primary Care-Behavioral Health (PCBH) team (formerly RESPECT-Mil) has the responsibility to facilitate implementation, collect metrics, train personnel, manage, and coordinate programs delivered in primary care settings that enhance the behavioral health of MHS beneficiaries, improve access to behavioral healthcare, and promote early identification and treatment of behavioral health problems.

Sustainment of the program originally called **R**e-**E**ngineering **S**ystems of **P**rimary **C**are **T**reatment (for Depression and PTSD) in the **Mil**itary (**RESPECT-Mil**) entered its seventh year in the reporting period, while beginning the 2012–2016 conversion of RESPECT-Mil into the behavioral health component of the **P**atient **C**entered **M**edical **H**ome (**PCMH-BH**). This transition will allow the program to move from an Army-centric focus to a full Tri-Service effort.

Patient Centered Medical Home – Behavioral Health Tri-Service Implementation

The RESPECT-Mil Implementation Team has been renamed the Primary Care-Behavioral Health Implementation Team (PCBHIT). The PCBHIT works closely with U.S. Army Medical Command (MEDCOM) behavioral health representatives to support MEDCOM and U.S. Army Office of the Surgeon General (OTSG) efforts to implement a Tri-Service "blended model" of integrated behavioral health support for the Army rollout of the PCMH. Under the Army Patient Centered Medical Home (APCMH) OPORD (MEDCOM OPORD 11-20, Annex H), the caseload and roles of care facilitators will change, and the program will expand to all adult beneficiaries.

Since the MEDCOM circular authorizing and governing the use of MEDCOM Form 774 used for screening and diagnosis expired at the end of 2012, the PCBHIT drafted its replacement, which expanded routine primary care screening to include anxiety and alcohol misuse. The clinician's (back) side of the form provides for referrals to Internal Behavioral Health Consultants (IBHCs), psychologists and social workers, who are now integrated in the primary care setting. The circular, published as MEDCOM Regulation 40-63, also prescribes the expansion

of this screening to all adult beneficiaries in primary care clinics. Full implementation is pending completion of a pilot to automate screening using the Behavioral Health Data Portal in two clinics within MEDCOM.

The PCBHIT is the primary training organization for Tri-Service Internal Behavioral Health Consultants (IBHCs) as well as program nurse care facilitators. The PCBHIT also provides data collection and program evaluation services for PCMH-BH in coordination with the DHCC Health Systems Effectiveness (HSE) team.

To support the Army's efforts to implement PCMH-BH, the PCBHIT created a Behavioral Health annex to the Army's PCMH Manual as well as a draft for a Fragmentation Order (FRAGO) to Army MEDCOM Operations Order (OPORD) 11-20 for review. In conjunction with Army PCMH-BH leaders, the PCBHIT co-authored the Army IBHC Practice Manual, a 174-page document detailing IBHC roles, responsibilities,

and administrative functions, and an Army manual detailing coding, documentation, and productivity standards for the program. The PCBHIT also developed inspection standards, adopted by Army PCMH, which meets national certification requirements.

In support of the Tri-Service PCMH effort, the PCBHIT concluded a Letter of Agreement (LOA) with the Services that delineates the specific support each Service needs from the PCBHIT for implementation of PCMH-BH in the Army, the Navy's Behavioral Health Integration Program (BHIP), and the Air Force's Behavioral Health Optimization Program (BHOP).

Program Sustainment in Existing Clinics

During the reporting period 93 clinics at 38 Army sites, two clinics at one Navy site, and clinics at 10 Air Force bases were running the program. From program inception in 2007 through the end of 2013, these sites provided 3,923,335 primary care visits to active duty service members with 3,432,103 of those visits screened for PTSD and depression. This represents an overall 87.5% screening rate for active duty primary care visits to participating clinics since February 2007. Of screened visits, 448,092 (or 13.06%) resulted in a positive screen, and 47% of positive screens resulted in a primary care diagnosis of depression, possible PTSD, or both.

In 2012, 973,610 visits were screened (92.85% of total visits), 134,062 visits generated positive screens, and 62,327 resulted in a behavioral health diagnosis. In 2013, 952,726 visits were screened (93.6% of total visits), 114,019 visits generated positive screens, and 53,023 resulted in a behavioral health diagnosis. Program participation continues to increase with approximately 74,273 visits screened per month in 2013. Over the life of the project, more than 25,282 service members have been referred to and followed by PCMH-BH, and more than 123,344 (nearly 31,832 in 2013) service members with previously unmet behavioral health needs were referred for care. To date more than 24,877 of screened visits (approximately 4,517 in the past year) involved suicidality and received mental health intervention.

Training and Mentoring

The collaborative care model that undergirds the PCMH-BH system of care relies upon the role of the nurse care facilitator, who provides care management of patient cases, keeps in contact with patients, and communicates between patient, primary care manager, and behavioral health specialist to ensure patient-centered care. This role is changing with the conversion from RESPECT-Mil to PCMH-BH, and the PCBHIT supports nurse care facilitators with training and mentoring.

In the reporting period, the PCBHIT updated its successful RESPECT-Mil care facilitator course to fit how each Service will utilize their care facilitators and to align it with IBHC training. The team conducted six formal training sessions attended by 37 care facilitators, and developed a four-hour session on the "motivational interviewing" technique for them. Additionally the team responds to 50–75 phone calls and 100 emails a month from care facilitators in the field to answer questions and provide mentoring. Care facilitator training will continue to evolve to reflect the Tri-Service nature of the program going forward.

The PCMH-BH system of care adds Internal Behavioral Health Consultants (IBHCs) to the primary clinic staff to provide real-time consultations with primary care providers and focused time-limited interventions to patients. They are specially trained psychologists or social workers who focus on helping patients develop healthy behaviors as well as change current behaviors that interfere with overall health and wellbeing. Consultations with these providers involve one to four appointments of about 30 minutes each.

The PCBHIT has worked intensively to prepare sites for, train, and provide ongoing support to the new IBHCs. The team developed and conducted a four-day Tri-Service IBHC training seminar every 6 to 8 weeks, training more than 240 Army, Navy, and Air Force IBHCs. They developed a "train-the-trainer" component, which trained and certified 12 Army IBHC regional trainers, and provided a monthly Tri-Service Sustainment Training continuing education webinar series to more than 140 IBHCs per month. Ninety-six percent of attendees reported

Training on the use of FIRST-STEPS

implementing new skills learned, and the series resulted in a 98 percent satisfaction rating.

The PCBHIT also created a series of seven video teleconferences on the initial implementation of PCMH-BH for Army Department of Behavioral Health and PCMH chiefs. They created a hiring guide and revised Army Position Description for IBHCs, and developed a resource disk for IBHCs that includes more than 100 physician training and patient education materials.

The PCBHIT works closely with existing program sites to mentor and guide them, conducting seven site visits to Army installations to evaluate IBHC program fidelity and to provide advanced IBHC training and certification. The team provides monthly regional teleconferences for Army IBHCs (for the Army Western/Pacific, Northern, Southern, and Europe Regional Medical Commands), which cover training program, policy, and resources updates, current issues/concerns of Army PCMH-BH leadership, and a question-and-answer period with IBHCs. The PCBHIT also provides a monthly teleconference for Army IBHC supervisors. On average the team provides 20 phone consultations and 150 email consultations per month to individual Army IBHCs, IBHC supervisors, and Army regional behavioral health leads.

Measurement and Oversight

The team launched its electronic case management tracking system, FIRST-STEPS (Fast Informative Risk & Safety Tracker and Stepped Treatment Entry & Planning System) in 2009 as a module of the Psychological-Behavioral Health Treatment, Evaluation and Risk Management (PBH-TERM) platform on the U.S. Army Medical Information Technology Center (USAMITC) server. The module provides a system to help ensure care facilitator adherence to the care model and offers real-time program evaluation and benchmarking. It enhances the PCBHIT's capacity to monitor program-related quality of care and provide feedback to sites so they can better manage their caseloads and programs.

Using FIRST-STEPS data, along with screening and referral data, the PCBHIT generates Periodic Performance Reports (PPRs) for participating MTFs to help site leadership and the PCBHIT assess implementation status. The data collected allows sites to review progress and facilitate timely adjustments to improve delivery of care facilitation services locally. In 2012 and 2013, the team expanded the functional capabilities of FIRST-STEPS to enhance program monitoring and evaluation.

PBH-TERM FIRST-STEPS is certified under the Defense Business Certification (DBC) process. Requirements for Defense Business System Management Committee certification were submitted for review in July 2013 and completed in October, allowing DCoE/PCBHIT to engage contractors and to utilize Research, Development, Training & Education funding for FY 2014. Enhancements to the FIRST-STEPS module on PBH-TERM have commenced to facilitate primary care screening and treatment expansion for all adult beneficiaries with behavioral health needs.

POPULATION HEALTH

The Population Health (PopH) team (formerly DCoE's Resilience and Prevention Directorate) joined DHCC in late 2012 and has the mission to develop, implement, manage and coordinate programs delivered across the continuum of care, as well as outside the medical context, to promote resilience and to prevent psychological health problems in the military.

Integrated Mental Health Strategy (IMHS) Strategic Actions

In October 2009, DoD and VA held a Joint Mental Health Summit to address mental healthcare needs of military personnel, veterans, and their families. To address the recommendations from this summit along with other recommendations, the Senior Oversight Committee—established by the DoD and VA Secretaries in May 2007 to address the care and services provided wounded, ill and injured service members—asked for the development of a joint DoD/VA mental health strategy in January 2010. The resulting Integrated Mental Health Strategy (IMHS) includes 28 Strategic Actions to promote:

- Early recognition of mental health conditions
- Delivery of effective, evidence-based treatments
- Implementation and expansion of preventive services
- Education, outreach, and partnerships with other providers, organizations, and agencies

One of the four aims of the IMHS is population health, which is to advance care through community partnerships, education, and outreach and to expand services to include families, caregivers and communities.

IMHS Strategic Action #16 — Family Resilience Programs

This Strategic Action (SA) focuses on prevention of mental health problems for service members and their families at key points in the deployment cycle as well as during other stressful periods in service members' and veterans' lives. It seeks to identify programs that can increase awareness and use of effective coping strategies for families of service members and to decrease the incidence of major depression and related conditions among this population. The team identified existing

model family resiliency programs/services in the Services, the non-government organization (NGO) community, and the VA; developed recommendations for selecting programs to be disseminated; and developed dissemination plans to improve awareness of and increase the number of military and veteran families reached by these recommended programs.

The SA #16 team co-authored a summary report that selects three family resiliency programs and provides operations and dissemination plans for them. Working collaboratively with Service representatives, the team developed effective strategies for communicating with military and veterans' families. The report is in review and is expected to be forwarded to the IMHS team by April 2014.

IMHS Strategic Action #17 — Family Members' Roles

This SA seeks out effective methods for helping family members whose service members and veterans may need assistance with mental health problems. This effort included creating and disseminating recommended

messages, strategies, resources and materials for families to help them recognize when mental health assistance is needed; ways for the family to support the service member's or veteran's wellness, readiness, resilience, and commitment to health; approaches to coach them into care; and methods to engage family members in care, when needed. The plan involved creating and posting education materials in clinical settings, educating VA and DoD providers, and identifying representatives from the VA and each of the Services to serve as members of the Health Executive Council Psychological Health/Traumatic Brain Injury Working Group Family Education and Coaching Subcommittee. The summary report is in final review and is expected to be forwarded to the IMHS team by February 2014.

IMHS Strategic Action #23 — Chaplains Roles

The goals of SA #23 are to make the role of the chaplain in the Services and VA more congruent and to find effective ways to facilitate access to mental healthcare through collaboration with community clergy and faith communities in a way that is consistent with the values and preferences of veterans. A DoD/VA-wide questionnaire to chaplains in each Department garnered an overall response rate of 61%. The results highlighted chaplain training needs as well as the presenting concerns of individuals seeing them. The SA #23 team held four joint meetings and made 33 site visits to DoD/VA medical treatment facilities and medical centers to assess chaplains' current participation in mental healthcare, with the goal of integrating chaplains more effectively in existing mental health teams.

In support of this effort, the PopH team pursued and was awarded a $2.7M Joint Incentive Fund (JIF) initiative grant. JIF 1 is entitled *Improving Patient Centered Care via Integration of Chaplains with Mental Healthcare,* and is scheduled to take place between April 2013 and September 2015. The goal of the initiative is to train both DoD and VA chaplains and mental health providers in systematic integration of care, best practices for chaplains and mental health providers, and improved assessment and charting of spiritual distress and growth. In 2013, the team finalized topics for Mental Health Integration for Chaplain Services (MHICS) training modules and began filming them. Current efforts include finalizing performance metrics to assess pre- and post-training knowledge of training participants. The JIF 1 team is coordinating with the JIF 7 effort, *Problem Solving Training in Primary Care,* to address items such as travel for DoD participants and collection and storage of data.

IMHS Strategic Action #24 — Resilience Programs

The primary goal of SA #24 is to ensure that VA programs for the promotion of psychological health and prevention of mental health problems are informed by lessons DoD has learned through the Services' resilience programs. The team defined and identified criteria for "what is a resilience program," identified DoD and VA resilience programs, and determined lessons learned from working group meetings with representatives from each Services' resilience programs and the VA. The final report described a number of resilience efforts in VA and DoD as promising practices and was approved for public release in April 2013.

Building on this effort, VA and DoD co-leads developed a proposal entitled *Implementation of Problem Solving Training (PST) in Primary Care*. This project was successfully awarded as JIF 7 ($2.1M total) and scheduled for April 2013 – April 2015. The project will train behavioral health/mental health staff (IBHCs) embedded in primary care settings in Problem Solving Training (PST). The PST program improves the capacity of both Departments to reach service members and veterans with short-term, evidence-based interventions delivered in the primary care/Patient Centered Medical Home setting. The delivery of PST in primary care may also encourage service members and veterans to be open to more intensive and focused mental health interventions, if needed. The goals for this project are:

- Train 240 DoD/VA clinicians, selected from a pool of applicants, in Problem Solving Therapy techniques over a period of two years
- Evaluate training program and patient outcomes
- Implement program sustainment through the development of a master trainer cadre.

Current efforts include recruiting for the first PST training workshop (scheduled for February 2014), development of the staff support contract, and coordination with the Services' Primary Care – Behavioral Health Integration leaders.

Resilience and Prevention Study

The PopH team successfully completed a three year Resilience and Prevention Study, which comprised eight evaluations of resilience and prevention programs in each of the Services. The team performed a retrospective analysis of Air Force Community Assessment Survey data examining engagement and its relationship to resilience among Airmen. The study also conducted an analysis of retrospective DoD-wide family violence data examining risk factors such as deployment characteristics, psychological health conditions, and demographic characteristics. The results of these program evaluations support the DoD Cost Assessment and Program Evaluation (CAPE) efforts to determine the effectiveness of psychological health and resilience programs and highlight DHCC's role as an integrator and synthesizer of complex mental health datasets.

DoD Suicide Prevention Task Force Recommendations

Section 733 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 charged DoD with forming a task force "to examine matters relating to prevention of suicide by members of the Armed Forces." In response to this mandate, the Secretary of Defense established the Task Force on the Prevention of Suicide by Members of the Armed Forces, which generated a number of Task Recommendations (TRs) related to suicide and mental health in the military. The PopH team responded to four of these TRs. TR 19 focuses on informing DoD personnel of current policies that allow for confidentiality on the SF-86 clearance form. TR 52 investigates how to make "mental fitness" commensurate with physical fitness in the military using the "Total Force Fitness" value system. TRs 16 and 18 investigate how to change perceptions, promoting good mental health and reducing stigma towards people with mental health disorders.

The PopH team worked with the RAND Corporation to complete a critical analysis of current DoD policy, comparing it with industry best practices and psychological research. The collaboration produced TR responses that provide specific pathways for promoting awareness of beneficial current policies as well as improving these policies to support the mental fitness of the fighting force.

DCoE/RAND Suicide Prevention Program Evaluation Toolkit

The PopH team coordinated RAND efforts to create a toolkit to help those responsible for suicide prevention programs evaluate their programs. While the primary intended audience for the toolkit was DoD and VA, community-based programs, and state and local mental health departments may find the toolkit useful. The project produced three products. The *Suicide Prevention Program Evaluation Toolkit* helps suicide prevention program leaders determine whether their programs produce beneficial effects so they can responsibly allocate resources. The study is completed and should be posted on the RAND website in mid-2014.

The study, *Gatekeepers in the Army and Marine Corps Suicide Prevention Program: Perspectives of Chaplains and NCOs,* identifies factors that may help chaplains and NCOs prevent suicides and helps answer questions such as: "How comfortable are NCOs, chaplains, and chaplain assistants in asking others if they are thinking about suicide?" and "What helps or hinders NCOs, chaplains, and chaplain assistants in referring someone with suicidal thoughts for help?" The study has been completed and is under review.

Responding to Military Suicides: A Resource Guide for Military Leaders was given a new title, Postvention in the Department of Defense: The Evidence, DoD Policies and Procedures, and Perspectives of Survivors (DRR-5755-OSD). This guide helps military leaders respond to military suicides in their ranks. The report summarizes current DoD and Service-specific policies and procedures for responding to military death generally and suicide specifically. The guide documents the extent to which DoD programs and policies reflect state-of-the-art suicide postvention (an intervention conducted after a suicide) practices; provides a snapshot of how installations across the Services currently respond to suicide; and develops recommendations that the DoD may consider to improve its response to suicides. The study is complete and being reviewed.

RAND Studies

The PopH team worked with RAND on four additional studies in 2013. The *Deployment Life Study: Defining and Measuring Family Readiness* evaluated aspects of family readiness to determine what behaviors and programs best buffer and protect families from negative effects associated with deployment. Starting in 2009, the study recruited more than 2700 military families, across Services and components, following them with web-based surveys every four months for four years. Baseline enrollment was completed in 2013, with all follow-ups scheduled for completion in 2015. RAND generated a March 2013 technical report which is currently under review. RAND shared findings on the prevalence of family discord, substance use (alcohol, tobacco, and drugs), and vulnerability and resource use patterns across families in the baseline study population. Data analyses and further findings will continue through briefings and summary reports in 2014 and 2015.

The first phase of the *Family Resilience in the Military* study included an analysis of existing definitions of "family resilience"—through a systematic literature review of 4000 studies—and a recommendation for a DoD-wide definition; a review of existing models of and DoD policies on family resilience; a catalog of 23 existing DoD family resilience programs; and a set of six policy recommendations for DoD to create a unified, coherent approach to family resilience across the Department. The second phase, which began in August 2013, will identify and review a set of key metrics, constructs, and related outcomes associated with family resilience, setting the stage for future evaluation of the DoD-sponsored family resilience programs cataloged in the first phase. The project will also outline short-, medium-, and long-term goals to create a DoD support infrastructure to facilitate family resilience program evaluations across all components.

Insufficient quality and duration of sleep are major contributors to chronic health conditions, mental health symptoms, risk-taking behaviors, lower job-related performance, and ability to cope with stress. While the military has invested resources in promoting positive sleep practices

among deployed and returning service members, more research is needed. *Sleep in the Military: An Evaluation of Military Programs and Policies – Sleep Resources and Tips for Line Leaders* will identify the prevalence of poor sleep quality and sleep disorders among military personnel returning from deployment and will identify practices and programs related to improving sleep quality across the DoD. In 2013 the study team identified issues related to poor sleep quality, reviewed Service-specific and DoD policies and procedures to improve sleep, identified self-reported sleep measures, and assessed sleep quality, duration and disorders among a sample of service members returning from deployment. The study will continue in 2014 with a literature review to find evidence-informed practice to improve sleep, convening a working group meeting, and providing recommendations to DoD.

The Services have been actively engaged in developing policies, programs, and campaigns designed to reduce stigma and improve service members' help seeking behavior. However, there has been no comprehensive assessment of these efforts' effectiveness and the extent to which they align with service member needs or evidence-based practices. *Stigma Reduction Efforts in the Department of Defense* addresses this by reviewing and assessing stigma reduction strategies both across the Services and DoD as a whole, to identify programmatic strengths as well as gaps that should be addressed. A report has been generated and is under review.

Real Warriors Campaign

The Real Warriors Campaign is a multimedia public health awareness campaign designed to encourage service members and veterans coping with invisible wounds to reach out for appropriate care or support. The campaign was created in response to the 2007 DoD Mental Health Task Force recommendation to develop and execute a public awareness campaign to dispel the stigma it identified as a barrier to seeking psychological healthcare and to encourage service members to seek appropriate care. Key 2013 campaign accomplishments include:

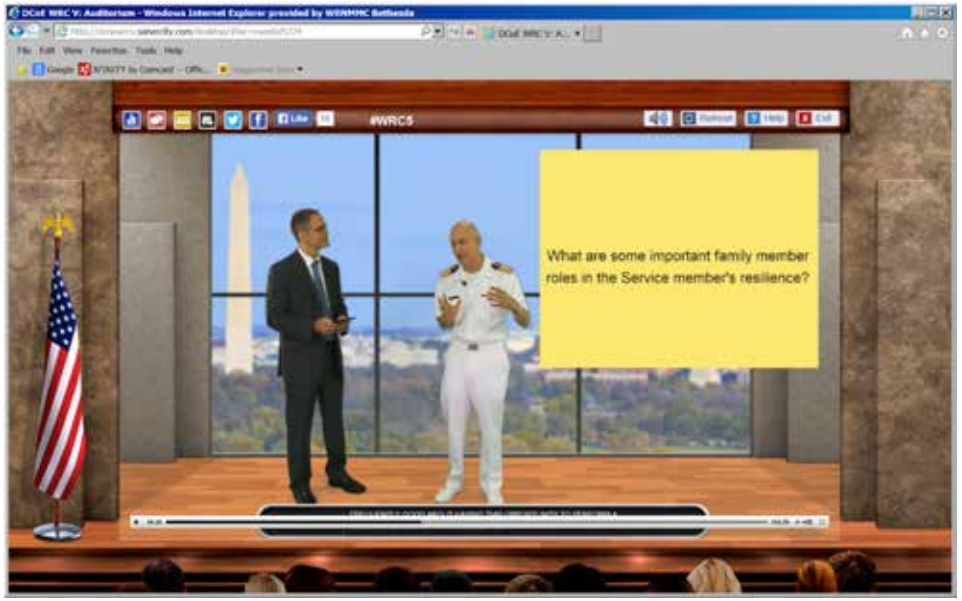
- Produced 31 multimedia products (video profiles, video and radio public service announcements (PSAs), podcasts), articles, and print products (mini-brochures, event materials, mailing cards).
- Secured an interview with the Sergeant Major of the Army to demonstrate leadership support of anti-stigma efforts.
- Received 273,747 unique visitors, 331,639 visits and more than 1.2 million page views to the website, www.realwarriors.net/.
- Interacted directly with 1,673 individuals and distributed 23,658 materials at 15 events.
- Engaged 51,519 Facebook fans and 23,658 Twitter followers through the campaign's social media channels, averaging 927 interactions daily.
- Produced an article to dispel erroneous perceptions about psychological health issues and the impact on security clearances.

Campaign video and radio PSAs aired more than 18,000 times to Armed Forces Radio and Television Service (AFRTS) potential audiences of more than 2 million service members in 177 countries each week, including Afghanistan and Iraq.

Fifth Annual Warrior Resilience Conference – Virtual

The fifth annual Warrior Resilience Conference, delivered August 12–16, 2013, was one of DoD's first large-scale conferences to use a virtual training platform. The virtual platform enabled participants to attend live and on-demand sessions from their own desks or mobile devices. Nearly 500 attendees participated with 300 of them earning Continuing Education (CE) credits. The conference, representing a collaboration between the Services, including the National Guard and reserve components, DoD, VA, RAND Corporation, and the Human Performance Resource Center, featured 31 sessions and 56 speakers. Presentations focused on prevention and treatment of combat and operational stress injuries, optimizing performance, and enhancing physical and psychological resilience.

The conference realized an estimated cost savings of $400K over the traditional face-to-face format while still providing interactive presentations, networking and information exchanges, an exhibit hall, resource downloads, and facilitated chat sessions. The experience provided valuable lessons learned for DoD on the challenges and opportunities for delivering conference content on this novel platform.



U.S. Navy Capt. Richard Stoltz, DCoE Director, and Dr. Mark Bates, head of the DHCC Population Health team, answer questions during the August Warrior Resilience Conference – Virtual, one of the first large-scale DoD conferences to use a virtual training platform.

Quarterly Service Resilience Chiefs Meeting

Since 2011, DCoE/DHCC has hosted the Quarterly Service Resilience Chiefs Meeting to promote and enhance individual and family resilience efforts across the Services. Meeting locations include the U.S. Navy San Diego Combat Operational Stress Control Conference and the Quantico U.S. Marine Corps Base. The Service Chiefs shared information and lessons learned about their individual and family resilience programs, contributed to annual Warrior Resilience Conferences, and participated in working groups including Integrated Mental Health Strategy 23 (Chaplain Roles) and 24 (Resilience) and DoD Suicide Task Force Recommendations 16, 18, 19 and 52.

The Specialty Care team (SC) (formerly the DCoE Psychological Health Clinical Standards of Care Directorate) has the responsibility to develop, implement, manage, and coordinate programs delivered in MHS specialty behavioral healthcare settings in a way that ensures evidence-based treatments are adopted in these settings, measures are embedded into the care system, and quality and access to care are improved. The SC team provides psychological health subject matter expertise for development, dissemination, and implementation of evidence-based clinical support tools, clinical care pathways, implementation networks, and analysis of psychological health clinical care literature and treatment for service members and their families.

Posttraumatic Stress Disorder (PTSD) Care Pathway

The SC team is the DoD lead for the MHS PTSD Care Pathway, which

- Translates clinical practice guidelines (CPGs) into local clinical processes and structure
- Collects performance and return on investment data at the patient, clinic, and enterprise levels
- Standardizes both the multi-disciplinary care process and care documentation to continuously monitor care quality, value, and cost
- Provides detailed guidance at each phase of care (diagnosis, treatment, etc.), over a defined time period, for a specific condition.

The PTSD Care Pathway Treatment Module was successfully constructed in early 2013 with Service collaboration. During a December 2013 Pathway Conclave, attended by Service representatives, the team revised the Tri-Service Work Flow Behavioral Health Alternate Input Method (AIM) form to incorporate salient aspects of the PTSD Care Pathway. This BH AIM form, part of the Armed Forces Health Longitudinal Technology Application (AHLTA), resides in the electronic medical record, gives the provider real-time cues about evidence-based treatments from relevant VA/DoD clinical practice guidelines, and suggests follow-up questions to ask the patient.

Capturing data through the BH AIM form, the Pathway will reflect patient experience and satisfaction with care and will improve continuity and

quality of care for any beneficiary with a PTSD diagnosis across transitions (e.g., Permanent Change of Station). It will help providers deliver evidence-based PTSD treatment, store patient symptom severity self-reports, provide point-of-care clinical practice guideline tips for providers, and create a process for structured, standardized documentation of PTSD care. Integrated with the existing electronic health information system, the Pathway will enhance proper coding of services provided, assess provider adherence to PTSD evidence-based practices and CPGs, improve practice management leading to cost savings, optimize Relative Value Units (RVU) through improved coding accuracy, enhance efficiency for peer reviews to ensure or improve care quality, and increase clinic staff efficiency.

In addition, the Pathway will provide an enterprise-wide clinical solution to monitor quality, outcome, cost, and value of providing care and standardize processes and metrics to facilitate enterprise-wide data collection and analysis through the MHS PH Dashboard to inform program evaluation.

The revised BH AIM Form will be used to guide the pilot implementation at an MHS psychological health specialty care clinic in 2014.

Integrated Mental Health Strategy (IMHS) Strategic Actions

IMHS Strategic Action #28 – Explore Gender Differences in Delivery and Effectiveness of Mental Health (MH) Services

Exploring gender differences in the delivery and effectiveness of mental health services, this SA sought to improve the accessibility and quality of care, developed strategies for overcoming healthcare disparities and barriers to care, and identified the need for further research.

The SA #28 team submitted a comprehensive summary review report on the ongoing DoD/VA women's research portfolio, as well as the research portfolios on service members and veterans—of both genders—who have experienced military sexual trauma (MST), military sexual assault (MSA) , or military sexual harassment (MSH). The group generated a report that addressed all DoD/VA surveillance, treatment, and prevention efforts. Lastly, the task group held a two-day summit in August 2013, during which a DoD/VA consensus list of prioritized recommendations was generated. All deliverables for this SA have been submitted to IMHS Leadership.

IMHS Strategic Action #10 – Recommend Quality Measures of Mental Health

This SA explored and recommended quality measures for mental health services based on DoD/VA CPGs and related evidence-based practices. The overall goal is to ensure quality and continuity of care across the departments. The SA #10 team identified an initial set of quality/ process metrics to be used within the DoD and VA. These findings were incorporated into a final report and submitted and approved by IMHS Leadership and briefed to the Health Executive Council. This SA is ongoing, and leadership for this SA was moved to the Health Systems Effectiveness team.

IMHS Strategic Action #12 – Outcomes Measures

This SA explored and recommended outcome measures for mental health services based on DoD/VA CPGs and related evidence-based practices. During the reporting period, the work group identified an initial set of outcome metrics to be used within the DoD and VA. These findings are

currently being reviewed, and leadership of the SA has been transferred to the Health Systems Effectiveness team.

IMHS Strategic Action #26 – Translation of Mental Health (MH) Research into Innovative Practice

This SA promotes the translation of MH research into innovative actions, programs, and policies transforming scientific discoveries arising from clinical or population studies into clinical applications to reduce MH morbidity and mortality. This SA had three goals: implement ways to monitor ongoing MH-related research to track study progress and facilitate early translation of results; present key DoD/ VA stakeholders with recommendations for adoption of promising models and practices; and utilize standard operating procedures and other tools to ensure collaboration and communication for activities that foster identification of MH research appropriate for translation into actions, programs, and policies.

The SA team drafted guidelines by which MH research findings are identified, prioritized, and recommended for translation; conducted a pilot of the proposed guideline to identify, prioritize, and recommend two actionable research findings; and completed standard operating

procedures and policies for this process. The team developed a strategic proposal to establish a VA/DoD collaborative structure to implement high-value MH research findings and evaluate their effectiveness.

The Joint Incentive Fund (JIF) provided a grant for JIF 26, *Practice Based Implementation Network (PBIN),* based on this SA. The PBIN project will create a practical enduring infrastructure of 20 "pilot clinics" (10 DoD and 10 VA) to demonstrate the feasibility of using a clinical network to promote adoption of evidence-based practices, recruit clinics and clinicians to support practice-change initiatives, identify barriers to adoption of new practices, and create methods to overcome these obstacles. The network will initially focus on the implementation of routine patient outcomes monitoring in participating clinics. In 2013, the team created a project management plan, began the approval process, and created four internal working groups that address components necessary to construct the PBIN foundation. The project is scheduled for completion in 2015.

IMHS Strategic Action #27 – Creating a Culture of Program Evaluation

This SA reviewed pilot and demonstration projects, innovative local and regional programs, and other potential innovations in the provision of military psychological healthcare. The goal of this SA is to disseminate promising practices via a web-based repository that includes new, innovative, and effective ways to treat PH conditions. The team created a report summarizing promising advances related to the treatment of PH conditions in the VA and military environment and reviewing lessons learned. The report was submitted to IMHS leadership for review.

RAND Studies

The National Defense Authorization Act for Fiscal Year 2008 directed the U.S. Government Accountability Office (GAO) to evaluate various aspects of beneficiaries' access to care under the TRICARE Standard and Extra options, which resulted in the June 2011 GAO Report to Congressional Committees entitled, "Defense Health Care: Access to Civilian Providers under TRICARE Standard and Extra."

The study, *Availability and Efficacy of Military-Culture Appropriate Psychological Health Treatment and Services for Geographically Distant U.S. Service Members and Their Families,* is DoD's first attempt to evaluate the degree of access to high quality psychological healthcare—delivered in a culturally competent manner by providers familiar with military culture—to service members and their families in remote or rural areas. The study has constructed a novel geospatial mapping of where beneficiaries reside calculating their location relative to mental health clinics located at the nearest MTFs. It also categorized rural mental healthcare risk and care utilization, identified best practices, and provided recommendations on how to meet the mental healthcare needs of these service members and families.

Providing high-quality treatment and improving outcomes for individuals with traumatic brain injuries and/or psychological health problems is a high priority for the MHS. While the number of individuals treated for these conditions has grown significantly in the last decade, the extent to which care is provided consistent with evidence-based treatment guidelines or MHS expectations and standards is unclear. Currently,

there are no mechanisms in place to assess the quality of care provided, understand whether the care is having a positive effect on outcomes, or identify areas for improvement. The study, *Framework for Quality Assessments of Department of Defense Traumatic Brain Injury and Psychological Health System of Care,* developed a framework to assess quality of care being delivered, conducted an extensive review of existing quality measures for psychological health conditions, identified candidate measures for consideration, and prepared a detailed descriptions of more than 50 candidate quality measures. This study is relevant to the PTSD Care Pathway effort. During the next year, the final report on the selected set of quality measures for PTSD and depression will be publicly released, a survey of behavioral health providers will be completed, and a report of the findings and recommendations will be completed.

The level of adherence to DoD/VA practice guidelines for PTSD and depression in the MHS is unknown, and there are currently no mechanisms in place to routinely assess the quality of care provided for PTSD and Major Depressive Disorder (MDD) or to understand whether the care is having positive effect on outcomes. The study, *Assessment of the Impact of Fidelity to Clinical Practice Guidelines on Treatment Outcomes for Posttraumatic Stress Disorder (PTSD) and Major Depressive Disorder (MDD) in the MHS,* will describe the extent to which mental health providers in the MHS implement evidence-based healthcare consistent with established clinical practice guidelines for PTSD and MDD and will evaluate the relationship between guideline-consistent care and clinical outcomes for these conditions. The project work plan is in progress, and human subjects research approvals from RAND's and the U.S. Army Medical Research and Materiel Command (MRMC)'s institutional review boards have been received. Approval to access Defense Health Agency data on treatment provided is being sought. This project is scheduled for completion in 2015.

The study, *PH Treatment Needs and Outcomes of Minority Service Member Groups in DoD,* will analyze the behavioral healthcare needs of diverse demographic groups in the military. Conducting primary data collection and analysis from service members and civilians, the study will research mental healthcare utilization and treatment preference differences between minority groups and non-minority groups in the military and between minority groups in military and civilian populations. If detected, such differences would have important implications for DoD treatment and prevention services. In 2013, the foundation for the proposed study was developed including sampling and survey processes. Obtaining the necessary licenses and approvals for survey administration will begin in early 2014. This is a two-year study and should be completed in 2015.

Thirty-seven to 72 percent of military personnel use complementary and alternative medicine (CAM), such as acupuncture, yoga, meditation, and massage, with one-third of these using CAM for psychological conditions including stress, depression, and anxiety. Integrative medicine (IM), mainstream medical therapies combined with safe and effective CAM therapies, is used in many MTFs for prevention and treatment of PH problems such as PTSD, depression, and substance abuse. IM is also used

with traumatic brain injury (TBI) patients. The study, *Cost-effectiveness of Integrative Medicine approaches to the prevention and treatment of PH Conditions and TBI in the DoD,* seeks to determine the availability of CAM and IM in MTFs, the procedures related to its use, and the extent to which it is used for the prevention and treatment of PH problems and the treatment of TBI. The study will employ an environmental scan instrument and build an internet-based survey system to allow multiple MTF respondents at each site to input data on the usage of these modalities. The study team will also assess the medical and cost effectiveness of CAM/IM for PH and TBI by completing a series of systematic reviews to gather, summarize, and, where possible, synthesize the evidence for CAM modalities for PH conditions and TBI. In the project's first year, four reviews will address meditation and acupuncture for PTSD and major depression treatment. This project will also deal with coding for CAM/IM interventions in military healthcare utilization databases. As of the end of 2013, the year-one work plan was completed, RAND IRB approval was obtained, systematic reviews were finalized, literature searches were completed, and known CAM/IM procedure codes healthcare utilization databases were assembled with a plan going forward for how to determine the frequency of these codes in TRICARE data. The management of this study will be transferred to the Health Systems Research & Analysis team in 2014.

Clinical Support Tools

The SC team developed and disseminated 12 Clinical Support Tools (CSTs), which support adoption and use of the VA/DoD Clinical Practice Guidelines (CPGs) for Posttraumatic Stress Disorder (PTSD), Substance Use Disorder, and Opioid Therapy for Pain Management. The tools were approved and disseminated by both the VA and the Army Quality Management Office (QMO). The team also supported development of the new VA/DoD Assessment and Management of Patients at Risk for Suicide CPG. These products are available on the VA (http://www.healthquality.va.gov) and Army QMO (https://www.qmo.amedd.army.mil/pguide.htm) websites.

Posttraumatic Stress Disorder (PTSD)
VA/DoD Essentials for Posttraumatic Stress Disorder: Provider Tool
Understanding Posttraumatic Stress Disorder: Patient Tool
Implementing the 2010 VA/DoD Clinical Practice Guideline for Post-traumatic Stress: A Guide for Clinic Leaders
Experiencing Posttraumatic Stress Disorder as a Family: A Guide to Thrive
Posttraumatic Stress Disorder Pocket Guide: To Accompany the 2010 VA/DoD Clinical Practice Guideline for the Management of Post-traumatic Stress
Substance Use Disorder (SUD)
Substance Abuse: What Line Leaders Need to Know
Opioid Therapy for Chronic Pain
Indications for Consultation and Referral during Opioid Therapy
Opioid Therapy and Methadone Use in Primary Care for Chronic Non-cancer Pain
Managing Side Effects and Complications of Opioid Therapy for Chronic Pain
Opioid Therapy for Chronic Pain Pocket Guide
Tapering and Discontinuing Opioids
Taking Opioids Responsibly for Your Safety and the Safety of Others: Patient Information Guide on Long-term Opioid Therapy for Chronic Pain

Table 1. 2013 Clinical Support Tools

The DoD Psychological Health Council and DoD Sexual Assault Prevention and Response Office (SAPRO) asked the team to develop a clinical support tool that provides healthcare providers a standardized process to use when patients make a report of sexual assault or harassment to their healthcare provider.

Psychological Health Research Needs Data Call

At the request of U.S. Army Medical Research and Materiel Command (MRMC), the team conducted the first ever DoD PH Research Needs Data Call to gather input from MTF clinicians and leaders and prioritize needs. A memo from the Assistant Secretary of Defense for Health Affairs tasked each Service with identifying 25 experts in military PH. Using a computer-based survey system, each expert provided input on military PH research topics along with general comments about the military PH system. Data collection ran from July 26–September 20, 2013, during which ninety-seven responses were collected. Data have been analyzed and preliminary briefings provided to DHCC leadership. Results will be presented to MRMC in 2014.

International Initiative for Mental Health Leadership — Military

Since 2011, the SC Team has been the DoD host for the International Initiative for Mental Health Leadership (IIMHL) Military match site. The IIMHL is a unique collaboration of eight countries that focuses on improving mental health and addictions services. In the U.S., the IIMHL is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). This leadership collaboration has focused on discovering ways to meet the mental health needs of rural and remote service members and their families, a critical need identified by U.S., United Kingdom and Australian mental health leaders when the collaboration began. The DoD RAND study on the mental health needs of rural and remote family members was initiated in support of this IIMHL project. While the Australian Institute of Family Studies (AIFS) sent their senior scientists to DCoE in 2012 for IIMHL collaborations, travel restrictions limited the SC team's travel to AIFS for the March 2013 conference. Collaboration between DCoE and AIFS continued in 2013, and AIFS strengthened its ties with the U.S. military and VA in support of this initiative. In addition to SAMHSA, the project also involves Department of Health and Human Services (HHS), VA, and Defense Health Agency (DHA) experts. There is growing interest from the Canadian Ministry of Defence, the Canadian Mental Health Commission, and the Royal College of Psychiatrists to join this collaboration in 2014. IIMHL will conduct two meetings in 2014.

HEALTH SYSTEMS RESEARCH & ANALYSIS

DHCC's Health Systems Research & Analysis (HSRA) team initiates, conducts, and manages a portfolio of innovative programmatic and externally-funded psychological health research while leading and assisting with research priority setting and knowledge dissemination, translation, and integration efforts to close the science-to-service delivery gap. Current projects are and have been competitively funded by the Uniformed Services University of the Health Sciences, the National Institute on Aging, the National Institute of Mental Health, the Department of Defense Deployment Related Medical Research Program, and the Department of Veterans Affairs.

DHCC's clinicians, researchers, and scientists published five articles in peer-reviewed periodicals, published one book and one book chapter, delivered 17 presentations, and exhibited three poster presentations at conferences in 2012 and published eight articles in peer-reviewed periodicals and delivered four presentations at conferences in 2013.

The research team maintains a DHCC-wide infrastructure that provides services including:

- Clinical, epidemiological, and health services research
- Development of surveys and mental health screening tools
- Creation and refinement of mathematical and statistical models and techniques
- Database creation and management
- Manuscript and report preparation

HSRA's 2012–2013 research portfolio consisted of the following nine projects.

Alcohol Screening, Brief Intervention, and Referral to Treatment (ASBIRT)

The military is in the process of rolling out Alcohol Screening, Brief Intervention, and Referral to Treatment (ASBIRT), a program designed to screen service members for alcohol misuse using the Alcohol Use Disorders Identification Test (AUDIT)-C alcohol screening tool, provide

empirically-supported brief interventions with the goal of lowering alcohol consumption, and refer individuals to specialized treatment programs (e.g., the Alcohol Safety Action Program (ASAP)), when appropriate. ASBIRT will also include care manager coordination between patient, provider, and specialist, and extensive training of primary healthcare providers and primary care behavioral health consultants. Because the implementation of ASBIRT will occur in the near future and will be widespread, the ASBIRT working group, a collaboration between the HSRA and the Primary Care – Behavioral Health teams, determined that an ASBIRT pilot demonstration project would not provide sufficiently timely data to be used in the implementation of ASBIRT in primary care. Instead, the working group is now coordinating with the Health Systems Effectiveness team to develop an ASBIRT evaluation research project encompassing the entire rollout of ASBIRT into Army primary care. The aim of this project will be to evaluate ASBIRT training outcomes, providers' attitudes towards ASBIRT, and pre- and post- implementation screening and referral rates. The current methodological plan is to collect evaluation data via the computerized training and evaluation program that ASBIRT providers will use for training purposes. Data will be collected pre- and post- training as well as at one year follow-up.

Collaborative Care: A Scholarly Reader

In the past three decades, the collaborative care model has developed into the most widely supported multimodal approach to integrated mental healthcare, supported by dozens of randomized controlled clinical trials in a number of conditions, care settings, and populations. The large (and growing) literature base related to collaborative care presents a need for a representative summary of the important science for use as an introduction to the field. The aim of this project is to develop a scholarly Reader composed of seminal readings related to the history, evolution, and future of the collaborative care model.

Our method is to review the literature and identify, via expert recommendation and consensus, a collection of readings related to collaborative care that are particularly illustrative, scientifically rigorous, or otherwise important to the development, implementation, and future directions of the model. The Reader is not intended to be an exhaustive list or systematic review, but rather a hand-picked collection to serve as an educational resource for a variety of consumers. Further, the Reader aims to present more than just data; through annotations and structure, it helps readers identify articles that are personally relevant and highlights each article's particular contribution of note.

The short-term objective of this project is to use the Reader as a teaching tool in DHCC's MHS-wide Patient Centered Medical Home – Behavioral Health efforts as well as to conduct several trials and studies on related issues. The long-term objective is to publish the Reader in a peer-reviewed journal and/or as a stand-alone publication. In 2012–2013, we solicited expert recommendations, completed the literature review, and developed the bibliography for the Reader. Currently, we are developing annotations for readings and preparing a manuscript, with publication expected in 2014.

DESTRESS-PC: A Brief Online Self-Management Tool for PTSD

DESTRESS-PC (**De**livery of **S**elf **Tr**aining and **E**ducation for **S**tressful **S**ituations—**P**rimary **C**are version) is a brief Internet-based online self-management tool for posttraumatic stress disorder (PTSD) based on empirically valid cognitive behavioral therapy strategies. A previous controlled trial of DESTRESS in service members with PTSD found greater improvements in PTSD, depression, and high end-state functioning versus web-based supportive care.

This primary care-based two-parallel-arm randomized controlled trial assessed the feasibility and efficacy of DESTRESS-PC for reducing the PTSD symptoms of Iraq and Afghanistan war-zone exposed soldiers and veterans; increasing their mental health-related functioning while reducing depression, generalized anxiety, and somatic symptoms; and improving attitudes regarding formal mental health treatment. While the goal of this study is to improve primary care mental health services for military personnel and veterans with PTSD related to war-zone trauma, the research is also relevant to providing early, high-quality access to low-stigma mental health services for victims of other traumatic events, including terrorist attacks and natural or man-made disasters.

Participants in the study were randomly assigned to either the DESTRESS-PC intervention or optimized usual PTSD care (the control condition). During the six-week DESTRESS-PC protocol, study participants logged into a secure (non-military) website three times per week to undertake PTSD self-management activities that included cognitive behavioral therapy and stress inoculation training. Homework assignments included exercises that helped participants build coping skills, monitor themselves for arousal and negative affect symptoms, anticipate and mitigate symptom triggers, refocus on work, family and enjoyable leisure pursuits, and reengage with beneficial parts of their lives they had been avoiding. Progress through the intervention and completion of homework assignments were monitored by a study nurse. Nurse care managers, supervised by mental health professionals, also checked in with participants by phone every other week, with the option of more frequent contact, and provided feedback about participants' status to their primary care providers. Blinded raters assessed outcomes 6-, 12-, and 18-weeks post-randomization.

Recruitment ended in 2011 at all three study sites — Charleston VA (Goose Creek, SC), Charleston VA (Savannah, GA), and Womack Army Medical Center (Ft. Bragg, NC). In total, 133 combat veterans meeting preliminary study criteria were consented with 80 meeting full eligibility criteria randomized to the study condition. Sixty-six participants completed the full study protocol. Primary data analysis is complete, and a manuscript is under development with expected publication in 2014.

Evaluating Alternate Response Formats of the Posttraumatic Stress Disorder Checklist, Civilian Version (PCL-C)

The **P**osttraumatic Stress Disorder **C**heck**l**ist, **C**ivilian Version (**PCL-C**) is a 17-item self-report measure developed for measuring PTSD symptom severity, which has often been used to estimate PTSD "caseness" (possible presence of the disorder) and severity when administration of a structured clinical interview is not feasible. In addition to its relative brevity, the PCL-C has been demonstrated to have excellent psychometric properties. One potential flaw of the validated PCL-C is its use of a 1–5 likert scale, which may result in response bias because the minimum anchor of the scale does not inherently indicate the absence of the attribute (specifically, PTSD symptoms), allowing for differential interpretation by respondents. Using a zero-anchored scale would potentially increase response accuracy and make the measure easier to manually score, particularly in busy clinical settings; however, it may also lead to differential response patterns within a population, potentially invalidating the known psychometric properties of the measure. The purpose of this study is to evaluate the equivalence of a zero-anchored PCL-C in a primary care sample by comparing 120 DoD beneficiary primary care patients' responses on the validated version of the PCL-C (with a likert scale range of 1–5) to the responses on a modified version (with a likert scale range of 0–4). Data collection and analysis were completed in 2013. Manuscript preparation is underway with expected publication in 2014.

Multiple Somatic Symptoms (MSS) in U.S. Military Personnel

Multiple somatic symptoms (MSS) are common among individuals seeking healthcare in the general population. Physical symptoms account for more than 400 million clinical visits in the United States each year, and, at least one-third of the time, these symptoms remain idiopathic after evaluation. Physicians are traditionally taught to view multiple somatic symptoms without a medical explanation as "somatization."

While military conflicts dating back to the Civil War have been marked by the emergence of unexplained physical symptoms, the causes, correlates, and prognoses of these war-related syndromes remain poorly understood. With large numbers of service members returning from deployment to recent and current conflicts in Iraq and Afghanistan, several policy groups have suggested that DoD achieve a better understanding of the expected rates of MSS among its personnel. We believe that careful and systematic efforts to understand MSS among military personnel will provide useful data for fashioning health policies and programs, especially for those who are seeking care with deployment-related health concerns. Intensified efforts to understand MSS in the military may also foster trust between service members and the government agencies that provide benefits and healthcare for them.

This study will use a competing risk model to examine the prevalence, incidence, relationship to deployment, and longitudinal trajectories of MSS status in 76,924 U.S. service members who participated in the Millennium Cohort Study—a prospective health project launched in 2001 at the DoD Center for Deployment Health Research and designed to evaluate the long-term health effects of military service, including deployments. Data analyses and manuscript are underway with publication expected in 2014.

Prospective Study of Functional Status in Veterans at Risk for Unexplained Illness

DHCC collaborated with the East Orange New Jersey VA War-Related Illness and Injury Study Center (WRIISC) on a prospective longitudinal study to understand whether stress response, ability to cope with stress, or personality characteristics affect the likelihood of developing medically unexplained symptoms after service in OIF/OEF. Measures were both self-reported and physiological, and participating military personnel were tested during their pre-deployment (phase I) and post-deployment (phase II) processing. Participants also completed phone interviews and mailed surveys three months and a year after return from deployment (phases III and IV). The study is expected to help identify individuals at risk for developing medically unexplained symptoms after future deployments and guide future work on intervention strategies.

Phase I data collection from 790 service members was completed in fall of 2008. By the end of 2011, 419 service members had completed phase II (once non-deployed service members were removed from the data set), 296 completed phase III, and 328 finished phase IV. Participation in phases I-IV is now complete. The study remains active for data analyses and manuscript development.

Refining a Single Item PTSD Screener (SIPS) for Primary Care

PTSD is frequently under-diagnosed in military primary care. In a previous research study, DHCC developed and evaluated the **S**ingle **I**tem **P**TSD **S**creener (**SIPS**) to facilitate screening by primary care providers in a DoD primary care population. DHCC has been awarded additional grant funding to complete phase 2 of the study, in which the SIPS will be further refined and evaluated. The goal of this project is to improve the SIPS's sensitivity and specificity with the desired outcome that the item will perform as well as or better than the widely used four-item screen, the PC-PTSD. The original SIPS and two alternate versions will be tested against a gold standard PTSD structured diagnostic interview and a self-report questionnaire with a representative sample of 288 DoD healthcare beneficiaries recruited from a DoD primary care clinic waiting area.

In the spring of 2012, initial study approval was obtained from the Walter Reed National Military Medical Center Institutional Review Board (IRB) and the Uniformed Services University of the Health Sciences IRB. Later that year, revisions to the study methodology to fine-tune the screening questions, clarify the safety protocol, and provide monetary compensation to participants were approved by the IRBs. Recruitment and data collection began in early fall 2013 and is projected to continue through 2014.

STEPS UP: A Randomized Effectiveness Trial for PTSD and Depression in Primary Care

Approximately one-fifth of returning service members from the wars in Iraq and Afghanistan have been identified as having symptoms of PTSD and/or depression. Many service members with these symptoms are referred for specialty mental healthcare, but less than half actually follow through with the referral. With 90–95% of service members visiting their military primary care provider annually, primary care is an ideal platform to manage PTSD and depression. Empirically tested systems strategies for treating depression and other mental disorders can fill the urgent need to improve access, quality, and outcomes of mental healthcare in the military health system. These strategies include care manager coordination (connecting patient, provider, and specialist), collaborative care (negotiated patient-provider problem definition, monitoring of status and treatment response, self-management support, and tele-health sustained follow-up), and stepped care (logical, patient-centered and guideline-concordant treatment sequencing). These strategies are unstudied in the military health system and virtually unstudied for PTSD.

The RESPECT-Mil collaborative care management program for PTSD and depression already exists as the standard of care. **St**epped **E**nhancement of **P**TSD Services **U**sing **P**rimary care (**STEPS UP**) is poised to offer significant enhancements to the optimized usual care in the following ways:

- STEPS UP adds the option for centralized, telephone-based care management which
  - Improves fidelity to the care model through ongoing training and supervision
  - Improves continuity of care since care management follows the patient through changes of assignment and healthcare system
  - Allows for service during evening and weekend hours when the clinic is closed.
- STEPS UP adds centralized, weekly psychiatrist case reviews with all care managers.

- STEPS UP adds training for care managers in motivational interviewing and behavioral activation strategies to help participants engage in their treatment and to help care managers intervene when necessary to promote treatment uptake and adherence.
- STEPS UP adds the option for psychosocial interventions —stepped in intensity and based on patient preference and symptom severity—to supplement pharmacotherapy including:
  - Web-based psychoeducation and self-management techniques
  - Telephone-based cognitive behavioral therapy with flexible, modularized delivery sequencing
  - Face-to-face psychotherapy with a behavioral health specialist working in primary care.
- STEPS UP adds enhancements to the existing RESPECT-Mil care management software (FIRST-STEPS) to improve the efficiency and delivery of clinical supervision and staffing of patient cases, risk assessment, case management, and treatment intensification in the intervention.

The effectiveness of the STEPS UP package will be compared against optimized usual care at six Army posts (Forts Bliss, Bragg, Carson, Campbell, Stewart, and Joint Base Lewis-McChord) over four timepoints (baseline, 3 months, 6 months, and 12 months). The study team hypothesizes that STEPS UP will improve (1) PTSD and depression symptom severity (primary hypothesis) and (2) other anxiety and somatic symptom severity, alcohol use, mental health functioning, and work functioning. The team further hypothesizes that (3) STEPS UP will be deemed a cost-effective management package for PTSD and depression, and (4) patients, their family members, and clinicians will find the approach an acceptable, effective, and satisfying way to deliver and receive care.

Study recruitment was completed in August 2013 with 666 active duty service members who screened positive for PTSD and/or depression randomized to either the STEPS UP intervention or optimized usual care at the six Army posts. Follow-up data collection is expected to continue until September 2014. Baseline data analyses are underway, and a design manuscript is in development with projected publication in 2014.

Veteran Status, Health and Mortality in Older Americans

This study was originally funded by the National Institute on Aging and extended by Walter Reed National Military Medical Center and the Uniformed Services University of the Health Sciences. It evaluated whether older veterans experience higher mortality than do their non-veteran counterparts and used demographic modeling to see if this trend increases with age and whether physical health is more important than mental health in the process of mortality convergence and crossover between older veterans and non-veterans. Using data from the Survey of Asset and Health Dynamics among the Oldest-Old (AHEAD) and the Survey of Health and Retirement Study (HRS), the study employed such statistical techniques as the structural hazard rate model, multinomial logit regression, mathematical simulation, and mixed models with repeated measures. New statistical models have been developed as a result of this research.

Project findings suggest a mortality crossover between veterans and non-veterans that probably occurs just before age 70. Since this crossover does not tend to happen abruptly, the two mortality schedules seem to experience a long-standing process of convergence. At age 70, variations in physical health and mental disorders account for approximately 61% of the total effect of veteran status on the mortality of older Americans. At age 75, the portion of such indirect effects falls to 42%. At age 85, only one-fifth of the excess mortality among veterans is captured by physical health conditions and mental disorders. However, veteran status does not have significant influences on transitions in functional status among those functionally independent at baseline.

This research shows that the application of different statistical models leads to distinct variations in the predicted values of health transition scores at a series of time points, providing evidence that without considering the selection bias in the process of health transitions, estimation of the effects on health transitions of older persons could be severely biased. Consequently, the study team is currently working to develop advanced longitudinal models on health transitions in older persons using updated data on health dynamics.

HEALTH SYSTEMS EFFECTIVENESS

The DHCC Health Systems Effectiveness (HSE) team formed in early 2013 and provides ongoing monitoring support of DHCC programs and initiatives, collaborates with DCoE HQ to support evaluation efforts spanning DCoE's component centers, and leads projects related to the measurement of psychological health status of DoD Forces. In 2013, the team reviewed more than 15 program evaluations or program evaluation guidance documents and provided substantive critical feedback.

DoD Psychological Health Imperatives Dashboard

"A Presidential Executive Order, mandates from Congress in the Fiscal Year 2013 National Defense Authorization Act, and the Department of Defense (DoD) Agency Priority Goals require DoD to evaluate and improve effectiveness of its mental health (MH) programs. Outcome measurement is a standard of care in many disciplines, and its use is widespread in medicine for evaluation, quality surveillance, and risk mitigation. An inferential assessment of Military Health System programs, underwritten by the DoD Cost Analysis and Program Evaluation section, revealed outcome measurement in MH to be an area in need of immediate improvement."[1]

To respond to this need, the HSE team is leading development of the DoD Psychological Health Imperatives Dashboard (PHID), a robust monitoring system that will aggregate and analyze data from multiple DoD health informatics systems to provide senior MHS leadership with information necessary to manage and modify psychological health programming. This initiative will standardize PH data collection efforts and reporting formats across the MHS to facilitate detailed comparisons of performance and to identify potential best practices.

The HSE team coordinated with DCoE HQ to define and establish a relationship with the Clinical Enterprise Intelligence (CEI) initiative in order to collect and analyze psychological health data from the Health Services Data Warehouse (HSDW). The HSDW collects health and medical data from a variety of DoD health informatics systems to create a central data repository that is updated in near real-time. The HSE team plans to leverage the emergent DCoE-CEI partnership to capitalize on information technology (IT) infrastructure developments executed to implement the HSDW. Building upon this partnership and HSDW capacities, the PHID will display critical information in near-real time to facilitate evidence-based, programmatic decision making.

In support of this effort, the HSE team hosted the Phase 2 Psychological Health Measurement Meeting September 18–19, 2013 with representatives from the ASD/HA, the Services, VA, SAMHSA, RAND, and MIT to determine what MHS and the Services need to know regarding the psychological health system, identify relevant measurement categories, select metric sets for each category, define calculation algorithms for novel metrics, and identify data collection and IT/process infrastructure gaps that might limit reporting. The meeting generated a set of recommendations for metrics, collection processes, implementation of the Behavioral Health Data Platform as the enterprise IT solution for clinical outcome data, and training requirements.

[1] Office of the Assistant Secretary of Defense (Health Affairs), Memorandum, *Military Treatment Facility Mental Health Clinical Outcomes Guidance*, 09 Sep 13.

In 2014, the team will finalize PHID metric calculation specifications, continue the relationship with the Clinical Enterprise Intelligence initiative in order to host the PHID in the CarePoint IT environment, work with CarePoint staff to develop database code to extract and report metrics, and develop a marketing/awareness plan to inform MHS leadership of PHID availability and utility.

RAND Toolkit for Improving PH and Traumatic Brain Injury (TBI) Programs

DoD has implemented numerous programs to support service members and their families in coping with the stressors from a decade of conflict in Iraq and Afghanistan. These programs, which address both psychological health and traumatic brain injury (TBI), number in the hundreds and vary in their size, scope, and target population. To ensure that resources are wisely invested to maximize the benefits of such programs, DCoE asked the RAND National Defense Research Institute to develop a set of tools to assist with understanding, evaluating, and improving program performance.

The four-volume toolkit, released in late 2013, helps program overseers answer questions about whether their programs fully address the needs of the population they serve, what tools are available to assess a program's effect on service members, does the evidence indicate that a particular program is ready for expansion, and how can program performance be improved.

The *RAND Program Classification Tool* allows decision makers to characterize and compare programs along a number of dimensions, including whether the programs have specified goals, which clinical and nonclinical areas the programs address, and whether an evaluation has been conducted. The *Online Measure Repository* helps identify appropriate outcome metrics for assessing program performance against specified goals and for conducting formal program outcome evaluations. The *RAND Program Expansion Tool* helps assess the effectiveness of an individual program to determine whether continuing or expanding the program is justified, and the *RAND Program Manager's Guide* provides practical guidance for programs managers to help them assess and improve program performance and conduct continuous quality improvement. The HSE team provided government oversight to the project, coordinated staffing, and reviewed draft and final work products.

RAND Studies

The HSE team provides government oversight to 11 evaluations of DoD psychological health programs carried out by a Federally Funded Research and Development Center (FFRDC) at the RAND Corporation through the Office of the Undersecretary of Defense for Personnel and Readiness. HSE staff provides input into study design, facilitates coordination between RAND and evaluation stakeholders, reviews interim and final work-products, and assists with dissemination. At the end of 2013, three of the RAND projects were completed, six were in quality assurance or security review, and two were still in the analysis or report-writing phase. All of these projects will conclude in 2014.

IMHS Strategic Actions 10 (Quality Metrics) and 12 (Outcomes Measures)

The HSE team contributed to DoD efforts to implement two connected DoD/VA Integrated Mental Health Strategy (IMHS) Strategic Actions: 10 (Quality Metrics) and 12 (Outcomes Measures). The IMHS 10/12 working group defined processes for the assessment and selection of high-quality metrics for psychological health processes and clinical outcomes that can be adopted in both the MHS and VA systems. After extensive background research, the working group developed a criteria set and scoring procedures modeled on those used by the National Quality Forum (NQF). The adoption of an NQF-based process will allow both the DoD and the VA to select system performance metrics that are of high quality and that can be implemented across systems to enhance visibility of the entire trajectory of care as beneficiaries move from the MHS to VA-based services. The working group produced planned IMHS 10/12 deliverables on or ahead of schedule in 2013.

Collaboration with DHCC Teams

The HSE team provided monitoring and evaluation support to DHCC's Patient Centered Medical Home – Behavioral Health (PCMH-BH) initiative (formerly RESPECT-Mil). As PCMH-BH is implemented across the MHS, the HSE team is revising information collection tools and reporting formats to capture the expanded mission and scope of the program. Working with staff from DHCC's Primary Care-Behavioral Health Implementation Team (PCBHIT), HSE staff improved database operations to facilitate data management and report generation and to improve workflow. Furthermore, the HSE team continues to work with MTFs and DoD to explore potential IT solutions that would reduce reliance on paper-and-pencil instruments to collect program information and, ultimately, ease administrative burden at local PCMH-BH sites.

The HSE team supported the Specialty Care (SC) team's PTSD Clinical Care Pathways initiative and the JIF 26 PBIN project. Support to these initiatives included assistance with focused program evaluations and providing consultative services related to data collection and information management/information technology (IM/IT) systems.

Finally, the HSE team supported projects and activities carried out by DHCC's Population Health (PopH) and Health Systems Research & Analysis (HSRA) teams. Support to the PopH team included critical review of program evaluation reports produced by the Resilience and Prevention Study initiative as well as consultative input to the monitoring and evaluation elements of JIF 1 (Chaplains Roles) and JIF 7 (Problem Solving Training in Primary Care). Support to the HSRA team included monitoring services to facilitate analysis of subject recruitment for the STEPS UP clinical trial as well as data analysis supporting manuscript and presentation development.

Coordination with DCoE Headquarters

In 2012, the Office of the Secretary of Defense (OSD), Cost Assessment and Program Evaluation (CAPE) office tasked DCoE with conducting program evaluations of DoD PH programs. The HSE team supported this effort by establishing coordination mechanisms with relevant DCoE HQ elements, reviewing initial work products including a rapid evaluation method and an initial summary report of DoD PH programs, and working with DCoE HQ to establish a prioritized list of programs for evaluation.

The HSE team also coordinated with DCoE HQ to define and establish a relationship with the Clinical Enterprise Intelligence (CEI) initiative to collect and analyze psychological health data from the Health Services Data Warehouse (HSDW). Finally, the HSE team continues to provide consultative and substantive feedback to DCoE's efforts to develop centralized psychological health and traumatic brain injury registries. Once fully implemented, these registries will enhance the quality of care that service members receive and will expedite the exchange of medical information between the MHS and the VA to support both continuity of care and benefits determination.

ADMINISTRATION & OPERATIONS

DHCC's Administration & Operations (A&O) team has the responsibility to oversee and support all the administrative functions within the organization. The team also serves as the principle liaison with DCoE headquarters to synchronize mission, taskings, and organizational governance matters. A&O provides information management, information technology, web services and communications support to DHCC.

Web-Based Outreach to Providers and Military Personnel

DHCC's website, www.PDHealth.mil, is fundamental to the Center's communication function. The website contains information for a wide audience, which includes clinicians, active and reserve component service members, veterans, and family members. The content covers the deployment cycle, the Post-Deployment Health Clinical Practice Guideline and other deployment-related CPGs, health conditions and concerns related to deployment, healthcare and support services, and risk communication resources.

Material available to visitors includes Tri-Service policies and directives; clinical guidance; provider/patient education material including manuals, fact sheets, and videos; relevant news articles; forms and measures; and links to websites with related information. All the print, online, and video-enabled outreach products developed by DHCC are made available for worldwide access on the site.

In 2013, the A&O team developed and began implementing an updated content management strategy plan for www.PDHealth.mil, including conducting a content inventory and gap analysis, aligning the content taxonomy with DHCC's communication strategy, and developing a new content matrix in preparation for a site refresh.

Clinical Consultation through Helplines and Email

DHCC operates two toll-free telephone helplines with access from Europe and the United States: the DoD Helpline for Military Personnel and Families and the DHCC Helpline for Clinicians and Providers. DHCC also provides an email support service that can be accessed both directly and through the Center's website. Service members most often call for help in completing their Deployment Health Assessments (DD 2795, 2796, and 2900) or getting a copy of forms they completed previously. They also ask for information regarding specific deployment-related health concerns and medical policies.

DHCC's Clinician Helpline provides access for clinical consultation, referral services for post-deployment health issues, and guideline implementation information. The most common reasons that healthcare providers called DHCC are: for assistance with deployment mental health assessment training and conducting Deployment Health Assessments (DD 2795, 2796, and 2900), to order Post-Deployment Health Clinical Practice Guideline Desk Reference Toolboxes, to ask questions about

interpretation of specific deployment-related military healthcare policies, to inquire about treatment for specific health conditions, and for coding guidance for deployment-related visits.

The A&O team also staffs the 1-800 DoD-HA Deployment Health Support Contact Center located at Force Health Protection & Readiness, Office of the Assistant Secretary of Defense for Health Affairs. Initiated in 1996 to assist veterans of the first Gulf War with questions and concerns about the health effects of their deployment, this helpline now provides a place for service members, veterans, and their family members to ask questions about specific chemical or biological agent test or deployment exposures, medical disability, transition to VA care, and other health questions related to their deployments.

The *Deployment Health News*

DHCC celebrated 10 years of delivering the *Deployment Health News* in 2012. DHCC publishes this electronic newsletter every business day with subscribers increasing to 5,500 from 4,000 subscribers by the end of 2013. The news digest provides annotated links to timely deployment health articles selected by a subject matter expert. These articles are gathered from the news media and other publicly available sources including periodicals, professional journals, and government and private sector websites and deal with subjects such as emerging or controversial deployment health concerns, promising practices for optimal treatment, and innovative collaborative care system approaches to care delivery.

Beginning March 2013, the A&O team developed new branding and new marketing for the *Deployment Health News* and implemented a GovDelivery email solution which includes audience engagement analytics and reporting.

Communications and Outreach

DHCC's communications and outreach program builds public awareness and promotes discussion about deployment-related psychological health concerns. The program also seeks to educate military personnel and the wider community about relevant clinical approaches and education programs. Communications activities in 2012 and 2013 included responding to media requests by facilitating interviews with Center staff and by placing articles in mass media outlets as well as in scientific and medical publications and websites.

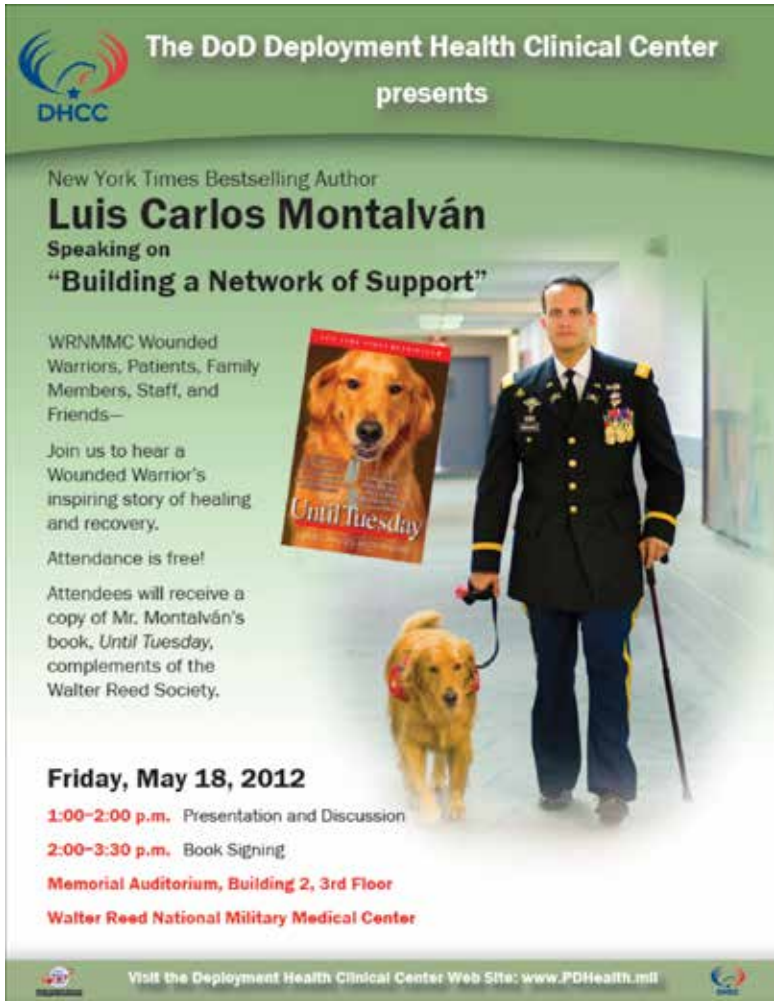
In 2012, DHCC's director participated on a March panel during a one hour program about PTSD on NPR's *The Kojo Nnamdi Show*. DHCC's director was also interviewed for an article on *PsychCentral.com* about the RESPECT-Mil program in June and a Stars and Stripes article in July. In conjunction with speaking at a workshop titled "Real World Implementation of Integrated Care Programs" presented at the American Psychiatric Association Annual Meeting in May, he taped a video about RESPECT-Mil. He also taped a Public Service Announcement about the program in August. Two DHCC staff members gave a webinar on "Treating Depression in Primary Care," as the May entry in the DCoE Webinar program, to 300 attendees.

Communication activities in 2013 included a DHCC staff interview for a February *Bloomberg Businessweek* article on using transcendental meditation to decrease

stress and anxiety in combat veterans and an interview for a Soldiers Magazine article about the psychological health aspects of the Army's integration of women in combat for Women's History Month in March. A DHCC staff member discussed the relationship between physical and mental fitness for a March USO blog entry on adaptive sports and the Marine Corps trials for the Warrior Games. In April a staff member discussed the importance of sleep to mental health for an article on the DCoE website, while another created a series of 18 podcasts on PTSD and TBI for BrainLineMilitary.org's "Ask the Expert" series. In October, DHCC staff participated in the DCoE Webinar entitled "Sexual Assault and Harassment in the Military." DHCC's director taped a piece on mental health stigma in the military, which aired on the *Maryland Newsline* program on UMTV, the cable television operation of the University of Maryland, in December, while two DHCC staff members were featured in a *Military Times* article on beating holiday stress.

Healing Arts Outreach

DHCC hosted Luis Carlos Montalvan, a highly decorated Iraq War veteran and New York Times-bestselling author at a presentation at Walter Reed National Military Medical Center (WRNMMC) in May 2012. Luis, a wounded warrior, shared his inspiring story of healing and recovery with WRNMMC staff and patients. He spoke about "Building a Network of Support," remaining after his talk to speak with wounded service members and to sign donated copies of his book, *Until Tuesday*.



DHCC sponsored a talk by Iraq War veteran and New York Times-bestselling author, Luis Montalvan, for patients and staff at the Walter Reed National Military Medical Center.

In 2014, DHCC will continue its realignment to become the single point of accountability for psychological health in the military by refining its organizational structure and redistributing its staff and expertise according to these focus areas.

Primary Care – Behavioral Health (PC-BH)

The Primary Care – Behavioral Health team will become the Primary Care – Behavioral Health Directorate and will continue the transition from RESPECT-Mil to Primary Care Behavioral Health (PCBH) The team will work closely with the Patient-Centered Medical Home Behavioral Health Tri-Service Working Group—comprising program leads from the Army, Navy, Air Force, and National Capital Region – Medical (NCR-Med)—to engage and encourage more primary care involvement and leadership for the program across the Services. The team will also focus on outcome measurement at participating sites as well as on educating service members, families, and health care professionals on the benefits of the PCBH program.

As the PCBH program continues to mature, Service care models will be evaluated and revised to meet the changing needs of service members and their families while training programs for Internal Behavioral Health Consultants (IBHCs) and Behavioral Health Care Facilitators (BHCFs) will be updated as needed.

Psychological Health Promotion

The Population Health team will become the Psychological Health Promotion (PHP) Directorate with an updated mission to develop, implement, manage and coordinate programs delivered across the continuum of care, as well as outside the medical context, to promote resilience and to prevent psychological health problems. The Real Warriors Campaign will be re-scoped to align with advances in evidence-based practices and to support a holistic and comprehensive approach to promote access to care, help-seeking, and well-being.

JIF 1, *Improving Patient-Centered Care via Integration of Chaplains with Mental Health Care,* will provide three courses to 20 DoD and 20 VA chaplains

on topics including spiritual assessments, evidence-based practices, posttraumatic stress disorder, suicide awareness, and military sexual trauma; create learning collaboratives for chaplains and mental health providers; and continue broad outreach through the DCOE Chaplains Working Group. JIF 7, *Implementation of Problem Solving Training (PST) in Primary Care,* will conduct its first training session in early 2014.

Psychological Health Clinical Care

The Specialty Care team will become the Psychological Health Clinical Care (PHCC) Directorate in 2014. PHCC will focus on development, implementation, dissemination, and evaluation of clinical support tools, clinical research findings, and clinical programs related to the direct delivery of psychological health clinical care in the MHS. PHCC will initiate JIF 26, the VA/DoD Practice Based Implementation (PBI) Network, at ten pilot sites across the Services and work toward developing and maintaining an enduring network. The directorate will also conduct an evaluation of the PTSD Care Pathway and associated Tri-Service

Work Flow Alternate Input Method (AIM) form for behavioral health. PHCC will develop and disseminate several clinical support tools for the VA/DoD Clinical Practice Guideline on Suicide Prevention and Risk Management. The team will also develop and disseminate clinical support tools for use by healthcare providers who treat patients who are victims of or are accused of sexual assault or harassment. These tools will help providers more easily navigate the complex medical and legal referral processes, documentation requirements, and evidence-based treatment required to provide high quality treatment interventions and support for both victims and those accused. Finally, the team will implement the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model in the Patient Centered Medical Home setting to help healthcare providers better assist patients who engage in alcohol misuse.

Research

The DHCC Health Systems Research & Analysis team will become the Research Directorate and will continue to administer its portfolio of existing research projects. Opportunities for additional studies will be pursued through the appropriate channels. Researchers plan to continue data analysis and generate manuscripts for *STEPS UP: Stepped Enhancement of PTSD Services Using Primary Care: A Randomized Effectiveness Trial and continue data collection for Refining a Single Item PTSD Screener (SIPS) for Use in DoD Primary Care*.

The Research Directorate's Integrative Medicine initiative will focus on synthesizing scientific evidence on the effectiveness of meditation, acupuncture, and exercise for ameliorating symptoms of posttraumatic stress disorder and major depressive disorder in preparation for the development of clinical recommendations and clinical support tools.

The directorate will continue data analyses for its projects, preparing manuscripts detailing research findings for submission to peer-reviewed publications, and presenting these findings at conferences.

Evaluation & Measurement

The Health Systems Effectiveness team will become the Evaluation & Measurement (E&M) Directorate and will expand its operational relationships with the Armed Forces Health Surveillance Center and the Health Services Data Warehouse (through DCoE Headquarters) to secure access to psychological health surveillance and epidemiology data for reporting and medical intelligence. The directorate will develop its program monitoring and evaluation capacity by adding staff and engaging in marketing efforts to expand its client-program base while continuing to offer services to existing clients.

The directorate will continue to develop the Psychological Health Imperatives Dashboard to provide senior MHS leadership with enhanced visibility over the psychological health of the active duty population and the overall functioning of the psychological healthcare system. Metric definitions and calculation algorithms will be finalized, and the Dashboard will be implemented within the CarePoint IT environment. The directorate will conclude oversight of its existing portfolio of RAND studies and will initiate a new partnership with RAND to augment existing evaluation efforts of the behavioral health elements of the Patient Centered Medical Home across the Services.

Administration & Operations

DHCC's Administration & Operations team will become the Administration & Operations (A&O) Directorate and will continue to oversee and support all the administrative functions within the organization as well as liaise with DCoE headquarters to synchronize mission, taskings, and organizational governance matters. The directorate will continue to implement the updated content management strategy plan for PDHealth.mil in preparation for a site refresh. Strategic communication responsibilities will move to special advisor staff in DHCC headquarters.

Consolidating the Psychological Health Mission

In 2014, DHCC will pursue implementation of the Defense Health Board recommendation to change its name to better align with its mission as the single point of accountability for military psychological health. DHCC will improve coordination and collaboration with the Services, VA, and other Federal agencies and establish a VA deputy director for DHCC. The Center will work to improve awareness of DoD PH capabilities (e.g., programs, services, resources) to bring about better coordination of care, support, management of resources, and collaboration across the MHS.

APPENDIX A: COLLABORATIONS

DHCC Inter-Service, Inter-Agency, and University Collaborations

Department of Defense and Military Services

- Defense and Veterans Brain Injury Center
- Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury
- Defense Equal Opportunity Management Institute
- Defense Health Agency Behavioral Health Branch
- Defense Health Agency National Capital Region Medical Directorate
- Defense Health Agency Patient Centered Medical Home Branch
- Defense Health Board
- Defense Suicide Prevention Office
- Department of Defense Addictive Substance Misuse Advisory Committee
- Department of Defense Deployment Related Medical Research Program
- Department of Defense Family Advocacy Program
- Department of Defense Psychological Health Council
- Department of Defense Sexual Assault Prevention and Response Office
- Force Health Protection & Readiness, Office of the Assistant Secretary of Defense for Health Affairs
- Human Performance Resource Center, Force Health Protection & Readiness
- National Center for Telehealth & Technology
- National Defense University
- Naval Center for Combat & Operational Stress Control
- Naval Health Research Center (San Diego, CA)
- Marine and Family Programs Division
- Military OneSource
- Military Operational Medicine Research Program
- Office of Clinical Program Policy, Office of the Assistant Secretary of Defense for Health Affairs
- Office of Diversity Management and Equal Opportunity, Office of the Undersecretary of Defense for Personnel and Readiness
- Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy
- Uniformed Services University Consortium for Health and Military Performance
- Uniformed Services University of the Health Sciences
- U.S. Air Force Comprehensive Airman Fitness
- U.S. Air Force Medical Operations Agency
- U.S. Armed Forces Health Surveillance Center
- U.S. Army Comprehensive Soldier and Family Fitness
- U.S. Army Medical Command Patient Centered Medical Home Task Force
- U.S. Army Medical Command Quality Management Directorate
- U.S. Army Medical Research and Materiel Command
- U.S. Army Public Health Command
- U.S. Navy 21st Century Sailor Office
- U.S. Navy Bureau of Medicine and Surgery
- Walter Reed Army Institute of Research
- Yellow Ribbon Reintegration Program

Department of Veterans Affairs

- Bedford Veterans Affairs Medical Center, Bedford, MA
- Boston Veterans Affairs Medical Center, Boston, MA
- Central Office, Washington, DC
- Coaching Into Care, Mental Health and Chaplaincy
- OIF/OEF/Operation New Dawn (OND) Outreach Team
- Mental Health and Chaplaincy
- Montgomery Veterans Affairs Medical Center, Jackson, MS
- National Center for PTSD
- Office of Quality and Performance
- Ralph H. Johnson Veterans Affairs Medical Center, Charleston, SC
- Veterans Affairs Maryland Health Care System Depleted Uranium Follow-Up Program (Baltimore, MD)
- Veterans Affairs Puget Sound Health Care System, Seattle, WA
- War-Related Illness and Injury Study Centers (East Orange, NJ, and Washington, DC)

Department of Health & Human Services

- National Institute of Mental Health
- National Institute on Aging
- Substance Abuse and Mental Health Services Administration

University and Other Collaborations

- American Red Cross
- Analytic Services, Inc. (ANSER)
- Australian Institute of Family Studies
- Blue Star Families
- Boston University School of Medicine
- Center for Deployment Psychology
- Center for the Study of Traumatic Stress
- Dartmouth University School of Medicine
- Duke University Medical School
- Institute of Medicine
- International Initiative for Mental Health Leadership
- International Society for Traumatic Stress Studies (ISTSS)
- Massachusetts Institute of Technology
- Medical University of South Carolina
- Military Family Research Institute at Purdue University
- National Alliance on Mental Illness
- National Military Family Association
- National Network of Depression Centers
- National University
- New York University College of Dentistry
- RAND Corporation
- RTI International
- Rutgers University/University of Medicine and Dentistry of New Jersey
- Student Veterans of America
- Swords to Plowshares
- The American Legion
- The John D. and Catherine C. MacArthur Foundation
- Ultrasis UK Ltd./U Squared Interactive, LLC
- University of Michigan Institute for Social Research
- University of Washington School of Medicine
- Walter Reed Society

APPENDIX B: PUBLICATIONS

2012

Articles in Peer-Reviewed Publications

Brown M., Creel A., Engel C., Herrell R., & Hoge C. (2012). Factors associated with interest in receiving help for mental health problems in combat veterans returning from deployment to Iraq. *The Journal of Nervous and Mental Disease, 199, 10,* 797–801.

Gadermann A., Engel C., Naifeh J., Nock M., Petukhova M., Santiago P., Wu B., Zaslavsky A., & Kessler R. (2012). Prevalence of DSM-IV major depression among U.S. military personnel: Meta-analysis and simulation. *Military Medicine, 177, Supplement,* 47–59.

Liu X., Engel C. (2012). Predicting longitudinal trajectories of health probabilities with random-effects multinomial logit regression. *Statistics in Medicine, 31, 29,* 4087–4101.

Quigley K., McAndrew L., Almeida L., D'Andrea E, Engel C., Hamtil H., & Ackerman A. (2012). Prevalence of environmental and other military exposure concerns in Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Journal of Occupational and Environmental Medicine, 54, 6,* 659–664.

Ursano R., Benedek D., & Engel C. (2012). Trauma informed care for primary care: The lessons of war. *Annals of Internal Medicine, 157, 12,* 905–906.

Books and Book Chapters

Bates M., Bradley J., Bahraini N., & Goldenberg M. (2012). Clinical management of suicide with military and veteran personnel. In R. Simon & R. Hales (Eds.), *Textbook of Suicide Assessment and Management (2nd Edition).* Washington, DC: American Psychiatric Publishing.

Bowles S., Pollock L., Cato C., Moore M., MacDermid Wadsworth S., Anagnostopoulos V., Sun K., Campise M., Mueller W., Freeland D., Tarney M., Brogdon K., Brogdon J. Alvarado A., & Bates M. (2012). Building resilience in the military family during and following deployment. In N. Ainspan & W. Penk (Eds.) *When the Warrior Comes Home: A Family Guide for Transition from the Front Line to the Home Front.* Annapolis, MD: Naval Institute Press.

Campbell J., Greenberg J., & Weil J. (2012). Confronting mild-TBI co-occurring PTSD symptoms in combat deployed service members. In J. Tsao (Ed.), *Traumatic Brain Injury: A Neurologic Approach to Diagnosis, Management, and Rehabilitation.* New York: Springer Publishers.

Cato C. (2012). Suicide in the military. In A. Rubin, E. Weiss, & J. Coll (Eds.), *Handbook of Military Social Work.* Hoboken, NJ: Wiley.

Liu X. (2012). *Survival analysis: models and applications.* Hoboken, NJ: Wiley.

Presentations

Barry D., Finch W. Ethics in primary prevention. The Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, Silver Spring, Maryland, August 2012.

Bates M., Roberts M., & Moor M. Three DoD frameworks for advancing the science and practice of resilience. Association for Behavioral and Cognitive Therapies Annual Convention, Washington, DC, November 2012.

Crowley B. Common pitfalls in private forensic practice. 43rd Annual meeting of the American Academy of Psychiatry and Law, Montreal, Quebec, October 2012.

Dobmeyer A. A competency-based approach for improving interprofessional practice in integrated primary care settings. The assessment of mental and behavioral health across the life span in primary care settings symposium at the 120th Annual American Psychological Association Convention, Orlando, Florida, August 2012.

Dobmeyer A. Behavioral health screening and assessment of adults in primary care. The assessment of mental and behavioral health across the life span in primary care settings symposium at the 120th Annual American Psychological Association Convention, Orlando, Florida, August 2012.

Dobmeyer A. Ethical considerations in integrated care: Behavioral health consultation and care management models. Collaborative Family Healthcare Association Conference, Austin, Texas, October 2012.

Engel C. Disseminating effective integrated mental health and primary care services for PTSD and depression in the U.S. military. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania, May 2012.

Engel C. Integrating psychiatric and general medical care: Military and civilian models. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania, May 2012.

Engel C. Real world implementation of integrated care programs: Four perspectives. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania, May 2012.

Engel C. RESPECT-Mil: Integration of mental healthcare in primary care settings and the role of collaborative care in suicide prevention. Annual DoD/VA Suicide Prevention Conference, Washington, DC, June 2012.

Engel C. RESPECT-Mil (Re-Engineering Systems of Primary Care Treatment in the Military): An update on a large-scale primary care clinic implementation and evaluation initiative. 28th Annual Meeting of the International Society for Traumatic Stress Studies (ISTSS), Los Angeles, California, November 2012.

Engel C., Cordova E., Gore K., Litz B., & Magruder K. Web-based nurse-assisted PTSD self-management intervention for primary care to increase access to care for combat veterans: A randomized controlled trial. 28th Annual Meeting of the International Society for Traumatic Stress Studies (ISTSS), Los Angeles, California, November 2012.

Finch W. Resources and strategies to promote psychological health. Association of the United States Army Annual Meeting and Exposition, Washington, DC, October 2012.

Finch W. Resources and strategies to promote psychological health. Pro Bono Counseling Training Workshop, Baltimore, Maryland, November, 2012.

Liu X. Survival models on unobserved heterogeneity and their applications in analyzing large-scale survey data. Advances in Methodology and Applications: Bio-demography and Multistate Event History Analysis in Interdisciplinary Studies on Healthy Aging Meeting, Beijing and Hangzhou, China, October 2012.

McGraw K. Integrity: Navigating culture and keeping yourself intact. Leadership in the 21st Century – Empowering Women Officers in the U.S. Public Health Service Conference, June 2012.

McGraw K. Military culture for the non-military behavioral health practitioner. SAMHSA 5th National Conference on Behavioral Health for Women and Girls: Health, Empowerment, Resilience and Recovery, San Diego, California, July 2012.

Millegan J., Engel C. Geographic moves and mental health services use among U.S. military children. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania, May 2012.

Nacev V. Comprehensive review of vicarious traumatization and self-care/ Institute for Violence, Abuse, and Trauma 17th International Conference, San Diego, California, September 2012.

Nacev V. Developmental, complex and posttraumatic stress disorder – Controversial issues in labeling and intervention. Institute for Violence, Abuse, and Trauma 17th International Conference, San Diego, California, September 2012.

Nacev V. Substance abuse and intimate partner violence. Institute for Violence, Abuse, and Trauma 17th International Conference, San Diego, California, September 2012.

Nacev V. Understanding and coping with the invisible wounds of trauma. Keynote speaker, Institute for Violence, Abuse, and Trauma 17th International Conference, San Diego, California, September 2012.

O'Toole J. Improving psychological health outcomes for service members through outreach and service delivery integration. 117th Annual Continuing Education Meeting of AMSUS, Phoenix, Arizona, November 2012.

O'Toole J. Improving psychological health outcomes for service members through outreach and service delivery integration. National Institute on Minority Health and Health Disparities Summit on the Science of Eliminating Health Disparities, National Harbor, Maryland, October 2012.

O'Toole J. Traumatic stress and first responders. 2012 Pennsylvania Homeland Security Conference, Harrisburg, Pennsylvania, October 2012.

Resnick L., Engel C. Inside the VA/DoD collaboration guidebook for healthcare research. Department of Veterans Affairs Employee Education System and VA Health Services Research and Development Service (HSR&D) Conference, National Harbor, Maryland, June 2012.

Verbrugge L., Liu X. Midlife trends in activities and disability. 24th REVES Meeting, Taichung, Taiwan, May 2012.

Poster Presentations

Cordova E., Gore K., McCutchan P., Freed M., Liu X., & Engel C. Operating characteristics of the PCL in a military primary care setting. Uniformed Services University Research Days, Bethesda, Maryland, May 2012.

Engel C., Cordova E., Gore K., Coe T., Liu X., & Ursano R. Randomized trial of a web-based nurse-assisted PTSD self-management intervention for primary care in combat veterans. 140th Annual Meeting & Expo of the American Public Health Association, San Francisco, California, October 2012.

Engel C., Cordova E., Gore K., Litz B., & Magruder K. Web-based nurse-assisted PTSD self-management intervention for primary care to increase access to care for combat veterans: A randomized controlled trial. 28th Annual Meeting of the International Society for Traumatic Stress Studies (ISTSS), Los Angeles, California, November 2012.

Engel C., Weil J., Curry J., Barry S., Freed M., McCutchan P., Gore K., Dobson D., Weis M., Williams K., Williams J., Oxman T., & Dietrich A. Disseminating effective integrated mental health and primary care services for PTSD and depression in U.S. military. American Psychiatric Association Annual Meeting, Philadelphia, Pennsylvania, May 2012.

McCutchan P., Curry J., Barry S., Baliton L., McCarthy T., Gore K., & Engel C. First-Steps: A web-enabled care management tool supporting RESPECT-Mil and the patient centered medical home. Uniformed Services University Research Days, Bethesda, Maryland, May 2012.

Nacev V., Kaplan D. Alcohol abuse by patients with traumatic brain injury: Pre- and post-injury, 120th Annual American Psychological Association Convention, Orlando, Florida, August 2012.

2013

Articles in Peer-Reviewed Publications

Bates M., Fallesen J., Huey W., Packard G., Ryan D., Burke C., Smith D., Watola, D., Pinder E., Yosick T., Estrada A., Crepeau L., & Bowles S. (2013). Total force fitness in units part 1: Military-demand resource model. *Military Medicine, 178, 11,* 1164–82.

Dobmeyer A. (2013). Primary care behavioral health: Ethical issues in military settings. *Journal of Families, Systems, and Health. 31, 1,* 60–68.

Engel C. (2013). Suicide, mental disorders, and the U.S. military: Time to focus on mental health service delivery. *Journal of the American Medical Association, 310, 5,* 484–485.

Funderburk J., Dobmeyer A., Hunter C., Walsh C., & Maisto S. (2013). Provider practices in the primary care behavioral health (PCBH) model: An initial examination in the Veterans Health Administration and the United States Air Force. *Journal of Families, Systems, and Health. 31, 4,* 341–353.

Gore K., McCutchan P., Prins A., Freed M., Liu X., Weil J., & Engel, C. (2013). Operating characteristics of the PTSD Checklist in a military primary care setting. *Psychological Assessment, 25, 3,* 1032–1036.

Khusid M. (2013). Self-care mindfulness approaches for refractory posttraumatic stress disorder. *Psychiatric Annals, 43, 7,* 340–344.

McAndrew L., D'Andrea E., Lu S., Abbi B., Yan G., Engel C., & Quigley K. (2013). What pre-deployment and early post-deployment

factors predict health function after combat deployment?: A prospective longitudinal study of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) soldiers. *Health and Quality of Life Outcomes, 11, 1,* 73.

Millegan J., Engel C., Liu X., & Dinneen M. (2013). Parental Iraq/Afghanistan deployment and child psychiatric hospitalization in the U.S military. *General Hospital Psychiatry, 35, 5,* 556–560.

Nieuwsma J., Rhodes J., Jackson G., Cantrell W., Lane M., Bates M., Dekraai M., Bulling D., Ethridge K., Drescher K., Fitchett G., Tenhula W., Milstein G., Bray R., & Meador K. (2013). Chaplaincy and mental health in the Department of Veterans Affairs and Department of Defense. *Journal of Health Care Chaplaincy, 19, 1,* 3–21.

Raskind M., Peterson K., Williams T., Hoff D., Hart K., Holmes H., Homas D., Hill J., Daniels C., Calohan J., Millard S., Rhode K., O'Connell J., Pritzl D., Feiszli K., Petrie E., Gross C., Mayer C., Freed M., Engel C., & Peskind E. (2013). A trial of prazosin for combat trauma PTSD with nightmares in active-duty soldiers returned from Iraq and Afghanistan. *American Journal of Psychiatry, 170, 9,* 1003–1010.

Verbrugge L., Liu X. (in press). Midlife trends in activities and disability. *Journal of Aging and Health.*

Yan G., McAndrew L., D'Andrea E., Lange G., Santos S., Engel C., & Quigley K. (2013). Self-reported stressors of National Guard women veterans before and after deployment: The relevance of interpersonal relationships. *Journal of General Internal Medicine, 28, S2,* S549–555.

Book Chapters

Bates M., Brim W., Lunasco T., & Rhodes, J. (in press). Military culture and warrior ethos. In S. Cozza, M. Goldenberg, and R. Ursano (Eds.), *Clinical Manual for the Care of Military Service Members, Veterans, and Their Families.* Washington, DC: American Psychiatric Publishing.

Dobmeyer A., Goodie J., & Hunter C. (2013). Healthcare provider and system interventions promoting health behavior change. In K. Riekert, J. Ockene & L. Pbert (Eds.), *Handbook of Health Behavior Change (4th Edition).* New York: Springer Publishers.

Presentations

Arena I., Bates M., Bowle S., Gaspar-Bates J., & Swallow C. The myths and realities of military culture today. 14th Annual Intercultural Management Institute Conference, Washington, DC, March 2013.

Bates M. Integrating resilience into care with service members: Total force fitness and military-demand resource model. Annual Meeting of the American Psychological Association, Honolulu, Hawaii, August 2013.

Bates M. Military culture. Annual Meeting of the American Psychological Association, Honolulu, Hawaii, August 2013.

Belsher B., Fast E., France D., Maron D., Kuhn E., Prins A., & Cueva D. Feasibility of an internet-based, brief telephone monitoring intervention for OEF/OIF veterans with posttraumatic stress symptoms. 29th Annual Meeting of the International Society for Traumatic Stress Studies, Philadelphia, Pennsylvania, November 2013.

Bender J. Department of Defense Recovery Care Coordinator (RCC) training for the Office of Warrior Care Policy. VA Recovery Care Coordinator Training, June 28, 2013.

Engel C., Cordova E., Gore K., Litz B., Magruder K., Coe T., Yeager D., Liu X., & Ursano R. Randomized trial of an online early intervention for combat PTSD in primary care: DESTRESS-PC. 141st Annual Meeting of the American Public Health Association, Boston, Massachusetts, November 2013.

Engel C., Freed M., Lane M., Jaycox L., Bray R., Zatzick D., & Litz B. DoD STEPS UP: Design, roll-out and early lessons from a randomized effectiveness trial of collaborative PTSD care in Army primary care. 29th Annual Meeting of the International Society for Traumatic Stress Studies, Philadelphia, Pennsylvania, November 2013.

Finch W. Brief update on the DCoE/RAND studies on military families. 2013 International Research Symposium on Military Families, Indianapolis, Indiana, June 18, 2013.

Finch W. Ethics in primary prevention. U.S. Public Health Services Scientific and Training Symposium, Phoenix, Arizona, May 23, 2013.

APPENDIX B: PUBLICATIONS

Finch W. Military families and transitional stress: What critical information is missing? Center for the Study of Traumatic Stress Forum on Health and National Security, Silver Spring, Maryland, September 18, 2013.

Hawkins J. Posttraumatic stress disorder and interpersonal violence. Family Advocacy Staff Training, Quantico, Virginia, June 13, 2103.

Hawkins J. Posttraumatic stress disorder and interpersonal violence. Military Health System Speaker Series, Arlington, Virginia, October 16, 2013.

Hawkins J. Violence in the military. U.S. Public Health Services Scientific and Training Symposium, Phoenix, Arizona, May 23, 2013.

Hawkins J., Finch W. A review of current community outreach efforts after deployment. U.S. Public Health Services Scientific and Training Symposium, Phoenix, Arizona, May 22, 2013.

Hawkins J., Finch W., & Lee D. Deployment-related health issues for women in uniform. Joint Women's Leadership Symposium, National Harbor, Maryland, June 6, 2013.

Khusid M. The role of art therapy in resilience and well-being. National Summit on Art and Health in the Military, Washington, DC, April 10, 2013.

McGraw K. Military females and PTSD. Nova Southeastern University's Shepard Board Law Center, Fort Lauderdale, Florida, February 1, 2013.

O'Toole J. Improving psychological health outcomes through outreach. AMSUS Annual Continuing Education Meeting, Seattle, Washington, November 2013.

O'Toole J. Psychological first aid: maintaining balance as a first responder. Geisinger-Bloomsburg Hospital Staff In-Service, Bloomsburg, Pennsylvania, August 23, 2013.

O'Toole J. Tri-service integrator of outpatient programming systems (TrIOPS). U.S. Public Health Services Scientific and Training Symposium, Phoenix, Arizona, May 22, 2013.

Rhodes J. Service specific roles of chaplains in suicide awareness. Warrior Resilience Conference – Virtual, August 2013.

Rhodes J. Strategic overview of the Service Chiefs of Chaplains. Joint Incentive Fund 1 Working Group, Durham, North Carolina, July 18, 2013.

Rhodes J. The Joint Incentive Fund 1 Chaplain Training Program. Navy Chiefs of Chaplains at the Pentagon, Arlington, Virginia, March 19, 2013.

Rhodes J. The role of the chaplain in the Department of Defense. Center for Deployment Psychology, Bethesda, Maryland, November 14, 2013.

Verbrugge L., Liu X. Survival of the fittest in the AHEAD cohort. REVES/Network on Health Expectancy Meeting, Austin, Texas, May 2013.

Wienclawski L. Military culture panel presentation. American University's 2013 Intercultural Management Institute Conference, Washington, DC, March 15, 2013.

Poster Presentations

Nacev V., Lee D. Integrative recovery support model. Annual Meeting of the American Psychological Association, Honolulu, Hawaii, August 2013.

Roberts M. & Lee D. Using innovative multimedia outreach to promote help-seeking behavior and reduce stigma associated with mental health treatment. 29th Annual Meeting of the International Society for Traumatic Stress Studies, Philadelphia, Pennsylvania, November 2013.

Name of Project: Collaborative Care: A Scholarly Reader.

Funding Organization: n/a.

DHCC Staff Assigned:

Phoebe McCutchan, M.P.H.
Bradley Belsher, Ph.D.
Daniel Evatt, Ph.D.

Principal Investigator:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Status:

In 2012–2013, we solicited expert recommendations, completed the literature review, and developed the bibliography for the Reader. Currently, we are developing annotations for readings and preparing a manuscript, with publication expected in 2014.

Name of Project: Evaluating Alternate Response Formats of the Posttraumatic Stress Disorder Checklist, Civilian Version (PCL-C).

Funding Organization: n/a.

DHCC Staff Assigned:

Phoebe McCutchan, M.P.H.
Elizabeth Low, B.A.

Principal Investigator:

Michael C. Freed, Ph.D.

Collaborating Co-Investigators:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Kristie Gore, Ph.D., RAND Corporation.

Status:

Data collection and analysis were completed in 2013; manuscript preparation is underway with expected publication in 2014.

Name of Project: Multiple Somatic Symptoms (MSS) in U.S. Military Personnel: Competing Risks Analysis of Three Wave Incidence, Mortality, and Resolution.

Funding Organization: n/a.

DHCC Staff Assigned:

Phoebe McCutchan, M.P.H.
Xian Liu, Ph.D.

Principal Investigator:

Michael C. Freed, Ph.D.

Collaborating External Personnel and Organizations:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Cynthia LeardMann, M.P.H., Naval Health Research Center.

Tyler C. Smith, M.S., Ph.D., National University Technology and Health Sciences Center.

Edward J. Boyko, M.D., M.P.H., Seattle ERIC, VA Puget Sound.

Gary D. Gackstetter, D.V.M., M.P.H., Ph.D., Analytic Services, Inc. (ANSER).

Status:

Data analyses and manuscript preparation are underway; publication expected in 2014.

Name of Project: Prospective Study of Functional Status in Veterans at Risk for Unexplained Illness.

Funding Organization: Department of Veterans Affairs, Health Services Research & Development Service.

Principal Investigator:

Michael C. Freed, Ph.D.

Collaborating External Personnel and Organizations:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Karen S. Quigley, Ph.D., Bedford (MA) Memorial VA Hospital, Bedford, MA.

Lisa M. McAndrew, Ph.D., Department of Veterans Affairs NJ Healthcare System, War Related Illness and Injury Center, East Orange, NJ.

Elizabeth A. D'Andrea, Ph.D., Department of Veterans Affairs NJ Healthcare System, War Related Illness and Injury Center, East Orange, NJ.

Judith Lyons, Ph.D., G.V. (Sonny) Montgomery Veterans Affairs Medical Center, Veterans Affairs Trauma Recovery Program, Jackson, MS.

Karen G. Raphael, Ph.D., New York University College of Dentistry, New York, NY.

Chin-Lin Tseng, Ph.D., University of Medicine and Dentistry of New Jersey, Newark, NJ.

Presentations:

Quigley K., D'Andrea E., Ackerman A., Hamtil H. & Engel C. Health and psychological features of soldiers deploying to Iraq and Afghanistan. Association of Military Surgeons of the United States Annual Meeting, San Antonio, Texas, November 2006.

D'Andrea E., Ackerman A., Hamtil H., Engel C., & Quigley K. Health and psychological features of soldiers deploying to Iraq and Afghanistan. Health Services Research and Development Service National Meeting, Washington, DC, February 21–23, 2007.

Quigley K., D'Andrea E., Ackerman A., Hamtil H., Yen C., & Engel C. Military stress: Pre-war physiological predictors of post-war health outcomes. Talk given as part of a symposium "Military Stress and Virtual Reality Stress Inoculation and Treatment" (Chair: K.S. Quigley) at the Annual Meeting of the Association for Applied Psychophysiology and Biofeedback, Daytona Beach, Florida, May 16, 2008.

Quigley K., D'Andrea E., Ackerman A., Yen C., Hamtil H., & Engel C. Blood pressure reactivity and recovery to a lab stressor in soldiers deploying to Iraq and Afghanistan predicted self-reported physical health at return from deployment. 48th Annual Meeting of the Society for Psychophysiological Research, Austin, Texas, October 1–5, 2008.

D'Andrea E., Ackerman A., Yen C., Hamtil H., Engel C., & Quigley K. Social support in soldiers returned from deployment in Iraq or Afghanistan: Predicting physical symptoms. 114th Annual Meeting of the Association of Military Surgeons of the United States, San Antonio, Texas, November 9–14, 2008.

Quigley K., D'Andrea E., Ackerman A., Yen C., Raphael K., & Engel C. Unit cohesion and pre-war reactivity: What makes soldiers more resilient after deployment to Iraq or Afghanistan. Annual Meeting of the American Psychosomatic Society, Chicago, Illinois, March 7, 2009.

Quigley K., D'Andrea E., Ackerman A., Hamtil H., & Engel C. Stress Reactivity during preparation for combat deployment: Resilience and risk factors for post-deployment physical health. Annual Meeting of the Association of Applied Psychophysiology and Biofeedback, Albuquerque, New Mexico, April 3, 2009.

Quigley K., D'Andrea E., Engel C., Lyons J., & Raphael K. The HEROES project: Prospective study of post-deployment health in Iraq and Afghanistan veterans. Evolving Paradigms II: A National VA/DoD OEF/OIF Conference, Las Vegas, Nevada, September 23, 2009.

McAndrew L., D'Andrea E., Ackerman A., Chandler H., Yen C., Batorsky B., Engel C., & Quigley K. Impact of combat deployment on weight. Society for Behavioral Medicine, Seattle, Washington, April 7–10, 2010.

Quigley K. Prospective study of physical symptoms and functional status in reservists deploying to OEF/OIF. The Center for Integrated Healthcare, Syracuse VA Medical Center, June 2010.

McAndrew L., D'Andrea E., Engel C., Batorsky B., Yen C., & Quigley K. Gender differences in psychological and deployment factors immediately after OEF/OIF deployment. HSR&D National Meeting on Building the Evidence Base to Improve Healthcare Outcomes for Women Veterans, Washington, DC, July 14–16, 2010.

Quigley K. Assessing resilience through functional status: Pre- to post-deployment changes in reservists deploying to OEF/OIF. Academy Health Annual Research Meeting, Seattle, Washington, June 2011.

Quigley K. Healthy resilience after operational and environmental stressors (HEROES): Phases 1 & 2. VA/DoD Deployment Health Working Group Workshop, July 2011.

Quigley, K. Health impact of combat stressors: A prospective view. The Center for Depression, Anxiety and Stress Research Speaker Series at McLean Hospital, Harvard University, Belmont, Massachusetts, December 12, 2012.

Publications:

Quigley K., McAndrew L., Almeida L., D'Andrea E., Engel C., Hamtil H., & Ackerman A. (2012). Prevalence of environmental and other military exposure concerns in Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Journal of Occupational and Environmental Medicine, 54, 6,* 659–664.

McAndrew L., D'Andrea E., Lu S., Abbi B., Yan G., Engel C., & Quigley K. (2013). What pre-deployment and early post-deployment factors predict health function after combat deployment?: A prospective longitudinal study of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) soldiers. *Health and Quality of Life Outcomes, 11, 1,* 73.

Yan G., McAndrew L., D'Andrea E., Lange G., Santos S., Engel C., & Quigley K. (2013). Self-reported stressors of National Guard women veterans before and after deployment: The relevance of interpersonal relationships. *Journal of General Internal Medicine, 28, S2,* S549–555.

Status:

Active. Data collection is complete; data analyses and manuscript development continue.

Name of Project: Randomized Trial of an Online Early Intervention for Combat PTSD in Primary Care: DESTRESS-PC.

Funding Organizations: National Institute of Mental Health and Department of Defense.

DHCC Staff Assigned:

Elizabeth Harper-Cordova, M.A. (Study Director).
Xian Liu, Ph.D.

Principal Investigator:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Collaborating External Personnel and Organizations:

Brett T. Litz, Ph.D., Boston University School of Medicine, the Boston VAMC.

Kathryn Magruder, M.D., M.P.H., Medical University of South Carolina and the Charleston VA.

T. Ray Coe, Ph.D., LTC, MC, USA, Womack Army Medical Center, Fort Bragg.

Presentations:

Magruder K., Engel C., Litz B., Gore K., & Yeager D. Primary care intervention for PTSD in Operation Iraqi Freedom and Operation Enduring Freedom veterans: A VA and DoD randomized controlled trial of a novel web-based approach. 114th Annual Meeting of Association of Military Surgeons of the United States, San Antonio, Texas, November 9–14, 2008.

Engel C., Harper-Cordova E., Gore K., Litz B., Magruder K., Coe T., Yeager D., Liu X., & Ursano R. Randomized trial of a web-based nurse-assisted PTSD self-management intervention for primary care: Study design and status. Mental Health Research Forum, Kansas City, Missouri, August 31–September 3, 2009.

Engel C., Harper-Cordova E., Gore K., Litz B., & Magruder K. Web-based nurse-assisted PTSD self-management intervention for primary care to increase access to care for combat veterans: A randomized controlled

trial. 28th Annual Meeting of the International Society for Traumatic Stress Studies (ISTSS), Los Angeles, California, November 2012.

Engel C., Harper-Cordova E., Gore K., Litz B., Magruder K., Coe, T., Yeager D., Liu X., & Ursano R. Randomized trial of an online early intervention for combat PTSD in primary care: DESTRESS-PC. 141st Annual Meeting of the American Public Health Association: Boston, Massachusetts, November 2013.

Status:

Primary data analysis is complete, and a manuscript is under development with expected publication in 2014.

Name of Project: Refining a Single Item PTSD Screener (SIPS) for Use in DoD Primary Care, Phase 2.

Funding Organization:
Uniformed Services University of the Health Sciences.

DHCC Staff Assigned:

Elizabeth Harper-Cordova, M.A. (Study Director).
Elizabeth Low, B.A. (Study Coordinator).
Phoebe McCutchan, M.P.H.
Alexa Hays, B.A.
Laura Novak, B.S.
Xian Liu, Ph.D.
Bradley Belsher, Ph.D.
Daniel Evatt, Ph.D.

Principal Investigator:

Michael C. Freed, Ph.D.

Collaborating Co-Investigators, External Personnel and Organizations:

Charles C. Engel, M.D., M.P.H., RAND Corporation.

David M. Benedek, M.D., COL, MC, USA, Uniformed Services University of the Health Sciences.

Presentations:

Russell L., Weil J., Gore K., Freed M., Liu X., Arnold M., Melvin K., & Engel C. Refining a single item screener (SIPS) for use in DoD primary care. Poster presentation at the Uniformed Services University of the Health Sciences Research Week, Bethesda, Maryland, May 10–12, 2010.

Weil J., Gore K., Liu X., Freed M., Arnold M., Russell L., Melvin K., & Engel C. Refining and evaluating a single item screener (SIPS) for use in DoD primary care. Poster presentation at the International Society for Traumatic Stress Studies, Montreal, Quebec, November 2010.

Status:

In 2012, initial study approval and study methodology revisions to fine-tune the screening questions, clarify the safety protocol, and provide monetary compensation to participants was obtained from the Walter Reed National Military Medical Center and the Uniformed Services University of the Health Sciences Institutional Review Boards (IRBs). Recruitment and data collection began in early fall 2013 and is projected to continue through 2014.

Name of Project: Stepped Enhancement of PTSD Services Using Primary Care: A Randomized Effectiveness Trial.

Funding Organization: Department of Defense Deployment Related Medical Research Program.

DHCC Staff Assigned:

Brian Crowley, M.D., D.L.F.A.P.A. (Psychiatrist).
Bradley, Belsher, Ph.D. (Clinical Research Psychologist).
Daniel Evatt, Ph.D. (Clinical Research Psychologist).
Koby Ritter, RN (Centralized Nurse Care Facilitator).
Mary Hull, RN, M.S.N. (Nurse Care Facilitator, Fort Stewart Site).
Laura Novak, B.S. (Clinical Research Coordinator).
Alexa Hays, B.A. (Research Programs Assistant).

Principal Investigator:

Michael C. Freed, Ph.D.

Collaborating Co-Investigators, External Personnel and Organizations:

Robert M. Bray, Ph.D., RTI International (Partnering Principal Investigator).

Lisa Jaycox, Ph.D., RAND Corporation (Partnering Principal Investigator).

Charles C. Engel, M.D., M.P.H., RAND Corporation.

Donald Brambilla, Ph.D., RTI International.

Christine Eibner, Ph.D., RAND Corporation.

Tara Lavelle, Ph.D., RAND Corporation.

Wayne Katon, M.D., University of Washington.

Becky Lane, Ph.D., RTI International.

Brett Litz, Ph.D., M.A., VA Boston Health Care System, Boston University.

Terri Tanielian, M.A., RAND Corporation.

Jürgen Unützer, M.D., M.P.H., University of Washington.

Douglas Zatzick, M.D., University of Washington.

Kristie Gore, Ph.D., RAND Corporation.

Presentations:

Engel C., Bray R., Jaycox L., Litz B., Zatzick D., & Tanielian T. A randomized effectiveness trial of a systems-level approach to stepped care for war-related PTSD. Uniformed Services University of the Health Sciences Research Week, Bethesda, Maryland, May 11–13, 2009.

Engel C., Jaycox L., Bray R., Freed M., Litz B., Tanielian T., Zatzick D., Unützer J., & Katon W. Improving primary care for U.S. troops with PTSD and depression in military primary care clinics: RESPECT-Mil and STEPS UP. International Society for Traumatic Stress Studies (ISTSS) Conference, Montréal, Québec, Canada, November 3, 2010.

Engel C., Freed M., Jaycox L., Bray R., Litz B., Zatzick D., Unutzer J., Katon W., Tanielian T., Brambilla D., Eibner C., Kuesters P., Novak L., Cooper J., Delaney E., Rae Olmsted K., Weil J., & Gore K. Stepped enhancement of PTSD services using primary care (STEPS UP). Armed Forces Public Health Conference, Hampton, Virginia, March 20, 2011.

Engel C., Freed M., Jaycox L., Bray R., Zatzick D., Litz B., Unützer J., Katon W., Tanielian T., Brambilla D., Eibner C., Kuesters P., Novak L., Cooper J., Delaney E., Rae Olmstead K., Weil J., & Gore K. Stepped enhancement of PTSD services using primary care (STEPS UP): Design and methods of a DoD funded randomized effectiveness trial. Poster presentation at the Uniformed Services University of the Health Sciences Research Week, Bethesda, Maryland, May 17–18, 2011.

Engel C., Freed M., Lane M., Jaycox L., Bray R., Zatzick D., & Litz B. DoD STEPS-UP: Design, roll-out and early lessons from a randomized effectiveness trial of collaborative PTSD care in Army primary care. 29th Annual Meeting of the International Society for Traumatic Stress Studies, Philadelphia, Pennsylvania, November 2013.

Status:

Study recruitment was completed in August 2013 with 666 active duty service members who screened positive for PTSD and/or depression randomized to either the STEPS UP intervention or optimized usual care at the six Army posts. Follow-up data collection is expected to continue until September 2014. Baseline data analysis is underway, and a design manuscript is in development, with projected publication in 2014.

Name of Project: Veteran Status, Health and Mortality in Older Americans.

Funding Organization: National Institute on Aging.

DHCC Staff Assigned:
Xian Liu, Ph.D.

Principal Investigator:

Xian Liu, Ph.D.

Presentations:

Liu X., Engel C., Kang H., & Cowan D. The effect of veteran status on mortality among older Americans and its pathways. Population Association of America 2003 Annual Meeting, May 2003.

Liu X., Engel C., & Kang H. Veteran status and transitions in functional conditions in older Americans. 2004 Annual Meeting of the Population Association of America, Boston, Massachusetts, April 2004.

Liu X., Engel C., & Kang H. Survival convergence and the preceding mortality crossover for two population subgroups. Southern Demographic Association Annual Meeting, Hilton Head, South Carolina. October 2004.

Liu X., Engel C., & Kang H. Survival convergence and the preceding mortality crossover for two population subgroups. Annual Meeting of the Population Association of America, Philadelphia, Pennsylvania, March 31-April 2, 2005.

Liu X., Engel C., & Armstrong D. Linkages of health conditions, functional status and self-rated health in older Americans. 2005 Annual Meeting of the Southern Demographic Association, Oxford, Mississippi, November 3–5, 2005.

Liu X., Engel C., Armstrong D., & Kang H. Health conditions, disability and self-rated health in older Americans. 2006 Annual Meeting of the Population Association of America, Los Angeles, California. March 31–April 2, 2006.

Liu X., Engel C., Armstrong D., & Kang H. Health conditions, disability and self-rated health in older Americans. 2007 Annual Meeting of the Population Association of America, New York, New York, March 29–April 1, 2007.

Liu X., Engel C., & Liang J. Development of a structural multinomial logit model in population research. 2007 Annual Meeting of the Southern Demographic Association, Birmingham, Alabama, October 11–13, 2007.

Liu X., Engel C., Kang H., & Gore K. Development of an unbiased longitudinal model on functional status transitions in older persons. 2008 Annual Meeting of the Population Association of America, New Orleans, Louisiana, April 16–19, 2008.

Liu X., Engel C., Kang H., & Gore K. Reducing selection bias in longitudinal analysis of functional status transitions in older persons. Southern Demographic Association 2008 Annual Meeting, Greenville, South Carolina, October 30–November 1, 2008.

Liu X., Engel C., & Kang H. Health conditions and functional status transitions in older Americans. Population Association of America 2009 Annual Meeting, Detroit, Michigan, April 30–May 2, 2009.

Liu X., Engel C., & Kang H. Longitudinal impact of specific health conditions on functional limitations of older Americans. Population Association of America Annual Meeting, Detroit, Michigan, April 30–May 2, 2009.

Liu X., Engel C., Kang H., & Gore K. Reducing selection bias in analyzing longitudinal health data with high mortality rates. 2009 REVES Meeting of the International Network on Health Expectancy, Copenhagen, Denmark, May 27–29, 2009.

Liu X., Engel C. Predicting longitudinal trajectories of health probabilities with random-effects multinomial logit regression. 2011 REVES Meeting of the International Network on Health Expectancy, Paris, France, May 25–27, 2011.

Liu X. Survival models on unobserved heterogeneity and their applications in analyzing large-scale survey data. Celebration of Population Studies Center at 50, the Population Studies Center, Institute for Social Research, University of Michigan, October 20–23, 2011.

Verbrugge L., Liu X. Midlife trends in activities and disability. 24th REVES Meeting, Taichung, Taiwan, May 2012.

Liu, X. Survival models on unobserved heterogeneity and their applications in analyzing large-scale survey data. Advances in Methodology and Applications: Bio-demography and Multistate Event History Analysis in Interdisciplinary Studies on Healthy Aging Meeting, Beijing and Hangzhou, China, October 2012.

Verbrugge L., Liu X. Survival of the fittest in the AHEAD cohort. REVES/Network on Health Expectancy Meeting, Austin, Texas, May 2013.

Publications:

Liu X., Engel C., Kang H., & Cowan D. (2005). The effect of veteran status on mortality among older Americans and its pathways. *Population Research and Policy Review 24,* 573–592.

Liu X., Engel C., Kang H., & Armstrong D. (2006). Veterans and functional status transitions in older Americans. *Military Medicine 171,* 943–949.

Liu X., Engel C., Armstrong D., & Kang H. (2008). Survival convergence and the preceding mortality crossover for two population subgroups. *Population Research and Policy Review, 27, 3,* 293–306.

Liu X., Engel C., Kang H., & Gore K. (2010). Reducing selection bias in analyzing longitudinal health data with high mortality rates. *Journal of Modern Applied Statistical Methods, 9, 2,* 403–413.

Liu X., Engel C. (2012). Predicting longitudinal trajectories of health probabilities with random-effects multinomial logit regression. *Statistics in Medicine, 31, 29,* 4087–4101.

Liu X. (2012). *Survival analysis: models and applications.* Hoboken, NJ: Wiley.

Verbrugge L., Liu X. (in press). Midlife trends in activities and disability. *Journal of Aging and Health.*

Status:

This study remains active for additional data analyses and manuscript preparation.

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