

EDITORIAL

MILITARY MEDICINE, 178, 7:705, 2013

War Related Illness and Injury Study Center (WRIISC): A Multidisciplinary Translational Approach to the Care of Veterans With Chronic Multisymptom Illness

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INTRODUCTION

Chronic multisymptom illness (CMI)¹ is defined as the presence for at least 6 months of one or more of the following three symptom complexes: musculoskeletal pain, general fatigue, and mood or cognitive problems. CMI has been documented after armed conflicts since the Civil War and unfortunately has surfaced again as Veterans return from the theaters of operation in Afghanistan and Iraq.^{2,3} CMI is a complex chronic health condition where symptoms may vary depending on a Veteran's era of deployment and the presence of other comorbid disorders. Because of the disparate nature of the symptoms, Veterans with CMI often see many providers in multiple specialties, resulting in poorly coordinated or conflicting treatment plans. Further, clinical research on CMI is in its infancy with few established treatments. With-

out a more systematic approach to the evaluation of these efforts, evidence-based best practices will remain elusive.

We and others^{4,5} argue that an interdisciplinary and translational approach, moving research from basic science to clinical applications, is optimal to improve the care of patients. Current understanding of best practices includes the need for timely and accurate recognition of CMI in primary care; the development and implementation of a multidisciplinary management plan that facilitates self-management of symptoms; and scheduled oversight of this plan by health-care personnel with diverse skills. Bringing a multidisciplinary team of providers, researchers, and educators together to evaluate Veterans improves the care of the individual Veteran and provides system-wide benefits. The War Related Illness and Injury Study Centers (WRIISCs), conceptually related to the Veterans Health Administration's (VHA's) Patient Aligned Care Team (PACT) initiative, represent examples of the Veterans Affairs (VA) multidisciplinary, translational approach to CMI.

In 2001, in response to a Congressional mandate, the VA Office of Public Health implemented the WRIISCs to focus on the post-deployment health concerns of Veterans and their unique health-care needs. The WRIISC mission is "to develop and provide expertise for Veterans and their health care providers through clinical evaluation, research, education, and risk communication."⁶ The four-pillared approach is implemented across the WRIISC program at three VA Medical Center sites: East Orange, NJ; Washington, DC; and Palo Alto, CA.

Clinical Services

Veterans with debilitating deployment-related health concerns and CMI can be referred by a clinician to the WRIISC for a comprehensive secondary evaluation. The WRIISC offers these Veterans a multiday health evaluations administered by an interdisciplinary provider team including occupational medicine physicians and other specialists. The team develops a personalized health management plan referred to as "road map" based on the assessment of the Veteran by all providers in the team,

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The views expressed are those of the authors and do not reflect the official policy or position of the U.S. government. The Department of Veterans Affairs had no input into the design of the research, the analyses, the interpretation of data, or the decision to submit the article.

doi: 10.7205/MILMED-D-13-00053

as well as previous workup documented in the medical records. The road map contains a detailed discussion of the findings as well as concrete recommendations for any additional diagnostic workup, treatments, and self-management of symptoms.

The WRIISC also offers Veterans and clinicians telephonic consultations by environmental and occupational exposure experts. The WRIISC expert assesses the Veteran's specific military exposure concerns, his lifetime exposure concerns, any detected health risks in the context of current health problems, and recommends ways to mitigate these risks. Thus, the WRIISC program assists clinicians and Veterans with this specialized knowledge of occupational and environmental medicine without requiring the patient to travel.

Education and Risk Communication

The WRIISC clinical services are supported by the education and risk communication personnel who review patient education materials and ensure that WRIISC personnel use risk communication principles in all interactions with Veterans and the public. In addition, the WRIISC clinical experience identifies gaps in Veteran and VA providers' knowledge and develops and delivers content to fill these gaps.

Research

As a core function, our clinical program provides a means of surveillance for health problems related to deployment. For instance, frequent observation of an unusual symptom or health condition detected through WRIISC clinical assessments prompts a systematic analysis to determine if the clinically observed event was related to a specific factor or an anomaly of the highly selected population seen at the WRIISC.

The WRIISC also provides a unique environment to serve as a laboratory for trying new approaches to care. The potential for close interaction between experts in CMI and Veterans with CMI provides WRIISC researchers with the opportunity to explore new clinical interventions that can be implemented in other settings. For instance, the advanced brain imaging technology used at the District of Columbia and California WRIISCs evaluates Veterans with a history of mild traumatic brain injury and has led to specific clinical management recommendations. Similarly, WRIISC research detected an unexpectedly high prevalence of balance difficulties in Veterans with CMI. As a result, the NJ WRIISC quickly implemented a clinical protocol to assess balance in Veterans referred for evaluation. Conversely, the WRIISC interdisciplinary teams allow for relatively rapid translation of clinical observations into promising research projects. A systematic approach to this is in place across all three WRIISCs through a long-term follow-up study of health concerns of Veterans evaluated at the WRIISCs using mailed surveys.

HOW A TRANSLATIONAL SPECIALTY CARE CENTER MAKES A DIFFERENCE

A multidisciplinary approach promotes better understanding of the patient's issues by examining the patient through

multiple lenses. Different types of providers have different strengths by virtue of their training and experience. By allowing these team members to function at the peak of their training and expertise, the patient benefits. Although this approach has a greater initial cost of time and resources, it likely provides long-term benefit by clarifying treatment approach, a value to the VHA that has a mission to care for Veterans for the rest of their lives.

Second, multiple assessments of the patient within a finite time period allows for corroboration of findings among team members and highlighting discrepancies that can be clarified with the patient. A team-based approach with overlap in assessment content allows for multiple data points on relevant issues. The additional clarity accorded by the richer data allows for more individualized recommendations for management.

Third, even if every team member focused narrowly on the disease under consideration without explicit attention to a more holistic, contextual approach, the translational specialty care center is more likely than an individual practitioner to achieve the biopsychosocial approach to the illness that will most benefit the patient. With assessments by multiple providers, someone will ask a question that reveals about the "other" factors affecting the patient. Since the psychosocial issues often form barriers to effective management, being aware of them helps the team resolve problems.

Finally, by taking the time to share information among the team members, theories of the illness cause, prognosis, and management can be shared; 'tested' with information gained independently by colleagues; and formulated into a more patient-centered summary of findings and recommendations. The creativity, knowledge, and experience of each team member contribute to the development of the plan, resulting in a more accurate, comprehensive, and understandable result for sharing with the patient.

The evidence that a translational specialty care center actually improves patient outcomes is difficult to obtain. Reviews on the topic repeatedly cite limitations because of the quality of the studies, but in general find weak-to-moderate evidence of improved outcomes relative to single-discipline approaches to care. They also find that patients with more serious health issues benefit more from multidisciplinary approaches than those with less severe problems, and that higher-intensity programs result in greater benefit than lower-intensity programs.^{7,8} Although finding support for translational specialty care centers is difficult, we agree with the Institute of Medicine⁹ that it is critical to continue to evaluate the effectiveness.

Although one can see that patient care provided in a translational specialty care center helps a relatively small number of individuals, it profoundly helps those who are seen.

Patient satisfaction ratings for the WRIISC clinical services are consistently very high. In addition, for many translational specialty care centers, including the WRIISC, there are other benefits to society beyond improving patient outcomes,

including translating clinical expertise into knowledge that can be disseminated to others, providing a critical mass of potential research participants, informing the research agenda of clinically relevant questions and hypotheses, as well as maintaining higher personnel satisfaction and retention.

These benefits are harder to quantify, but should not be ignored when making decisions to fund and further develop programs such as these. Observations made during clinical care are translated into research questions and educational services that may establish new standards of care, impacting an entire population of patients. Policy makers in VHA and Department of Defense should consider the costs and benefits of more systematic integration of successful translational specialty centers like the WRIISCs throughout their health-care systems, perhaps using a stepped care model already used for chronic pain (e.g., VHA DIRECTIVE 2009-053) to promote comprehensive surveillance, management, and evaluation of CMI. By ensuring the most appropriate level of care, these organizations could improve the outcomes and cost-effectiveness of care for deployed Veterans and service members.

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