UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, DC 20301-4000

PERSONNEL AND
READINESS

AUG 11 2014

The Honorable Carl Levin
Chairman
Committee on Armed Services
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

The enclosed report, covering Fiscal Year 2014, is submitted in response to section 711 of the National Defense Authorization Act for Fiscal Year 2010 (Public Law 111-84), which required the Department of Defense (DoD) to develop and implement a comprehensive policy on pain management by the Military Health System and provide a report annually. Key elements include a description of the policy, changes made, ongoing research, provider training, beneficiary education, and adequacy and effectiveness of pain management services.

DoD implemented the policy on pain management in March 2011. Since that time, DoD implemented the Patient Centered Medical Home model in its primary care clinics in order to provide comprehensive care by a Primary Care Manager and a team of health care professionals, which is especially important to patients with chronic pain. Increased numbers of pain management specialists were incorporated into both military treatment and purchased care facilities, and new tools and training programs are available to improve the care provided to beneficiaries. Through these and other changes, DoD achieved improved patient satisfaction with pain management.

Thank you for your interest in the health and well-being of our Service members, veterans, and their families. A similar letter is being sent to the Committee on Armed Services of the House of Representatives.

Sincerely,

Jessica L. Wright

Enclosure:
As stated

cc:
The Honorable James M. Inhofe
Ranking Member

UNDER SECRETARY OF DEFENSE
4000 DEFENSE PENTAGON
WASHINGTON, DC 20301-4000

PERSONNEL AND
READINESS

AUG 11 2014

The Honorable Howard P. "Buck" McKeon
Chairman
Committee on Armed Services
U.S. House of Representatives
Washington, DC 20515

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Sincerely,

Jessica L. Wright

Enclosure:
As stated

cc:
The Honorable Adam Smith
Ranking Member

REPORT TO THE CONGRESS

THE IMPLEMENTATION OF A COMPREHENSIVE POLICY ON PAIN MANAGEMENT BY THE MILITARY HEALTH CARE SYSTEM

Office of the Secretary of Defense

September 2014

The estimated cost of this report or study for the Department of Defense is approximately $7,840 for the 2014 Fiscal Year. This includes $0 in expenses and $7,840 in DoD labor.
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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Pain is a pervasive problem that affects patients, families, and society in many ways. While significant advances have occurred in understanding the nature of acute and chronic pain, and in the performance of technically advanced diagnostic and therapeutic procedures, currently available treatments for pain rarely result in complete resolution of symptoms. The Institute of Medicine in its 2011 report entitled "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research," estimated that approximately 100 million adult Americans are affected by chronic pain at an annual cost of $560-635 billion in direct medical treatment costs and lost productivity. There is great variation among individuals in pain occurrence, severity, duration, response to treatment, and degree of disability. Yet despite its high prevalence, there is often significant variability in the management of pain, and it is often undertreated. Multiple factors contribute to this variability, and significant barriers must be overcome before acute and chronic pain can be managed more effectively. The Military Health System (MHS) faces many of the same challenges managing pain as the country as a whole, and some very unique ones as well due to its structure, patient population, and distinctive mission which often culminates in combat-related trauma.

- The Policy for Comprehensive Pain Management (Health Affairs Policy 11-003) published on April 25, 2011, encompasses the key components of pain assessment, treatment, management, and research; it was not updated during this reporting period.

- Deployment of the Patient Centered Medical Home (PCMH) model in primary care clinics incorporates a comprehensive, integrated approach to primary care and provides an effective means to manage and educate beneficiaries with acute and chronic pain. Since the last report to Congress, an additional 125 direct care PCMH practices have achieved National Committee for Quality Assurance (NCQA) recognition.

- Adoption of Clinical Practice Guidelines (CPG) for Low Back Pain, Opioid Therapy for Chronic Pain, and Post-Operative Pain, along with the incorporation of electronic notification and tracking mechanisms in the Armed Forces Health Longitudinal Technology Application (AHLTA) and the development of provider toolkits has provided clinicians ready access to evidence-based practices and facilitated provision of the right care at the right time. Since the last report to Congress, an additional CPG entitled "Non-Surgical Management of Knee and Hip Osteoarthritis" has been released, along with a Summary and Pocket Guide for providers to utilize for quick reference.

- The Acupuncture Training Across Clinical Settings (ATACS) program has continued its development during this reporting period, and the initial training of providers in the provision of Battlefield Acupuncture across DoD has begun. In addition, recommendations for standardized credentialing and privileging programs for all three Services have been presented to Service leadership for consideration.

- Development and deployment of the Pain Assessment Screening Tool and Outcome Registry (PASTOR) continued during the past year. This program was initially developed as a demonstration project to create a clinical registry and clinician information support tool for pain management.

- Overall Fiscal Year (FY) 2013 inpatient satisfaction with pain management in the MHS' direct care system continues to improve year over year and to exceed national benchmarks.

- Pain management research has led to continued deployment and validation in the past year of the Department of Defense (DoD) and Veterans Health Administration (VHA) Pain Rating Scale, a common DoD and VHA pain assessment tool. This common tool provides a tremendous advantage in evaluating outcomes and developing effective pain management strategies.

- The development of an ambitious training program to educate both healthcare personnel and beneficiaries has continued bolstered by dedicated funding.

As a result of the numerous activities and efforts during this reporting period, MHS beneficiaries have access to more timely, appropriate management of their pain . Additional efforts continue through research, provider and beneficiary education and exploration of new modalities, to ensure that every patient receives the most efficacious pain assessment and management available.

Comprehensive Pain Management Policy

Section 711 of the National Defense Authorization Act for Fiscal Year 2010 (P.L. 111-84) requires the Department of Defense to develop and implement a comprehensive policy on pain management by the military health care system. Specifically, the policy is required to cover each of the following:

- The management of acute and chronic pain.
- The standard of care for pain management to be used throughout the Department of Defense.
- The consistent application of pain assessments throughout the Department of Defense.
- The assurance of prompt and appropriate pain care treatment and management by the Department when medically necessary.
- Programs of research related to acute and chronic pain, including pain attributable to central and peripheral nervous system damage characteristic of injuries incurred in modern warfare, brain injuries, and chronic migraine headache.
- Programs of pain care education and training for health care personnel of the Department.
- Programs of patient education for members suffering from acute or chronic pain and their families.
- Section 711 further requires the Secretary to revise the policy on a periodic basis in accordance with experience and evolving best practice guidelines. The Department is also required to submit a follow-up report on October 1 each year thereafter through 2018. Each report shall include the following:
- A description of the policy implemented and any revisions made to the policy.
- A description of the performance measures used to determine the effectiveness of the policy in improving pain care for beneficiaries enrolled in the military health care system.
- An assessment of the adequacy of Department pain management services based on a current survey of patients managed in Department clinics.

- An assessment of the research projects of the Department relevant to the treatment of the types of acute and chronic pain suffered by members of the Armed Forces and their families.

- An assessment of the training provided to Department health care personnel with respect to the diagnosis, treatment, and management of acute and chronic pain.

- An assessment of the pain care education programs of the Department.

- An assessment of the dissemination of information on pain management to beneficiaries enrolled in the military health care system.

INTRODUCTION

Every individual in the United States is at risk to develop chronic pain, whether due to genetic predisposition, another chronic disease, a surgical procedure, an injury, or the natural aging process. Pain is a unique and subjective experience for everyone who suffers its effects, and the degree of pain an individual experiences depends on multiple factors that include genetics, emotions, cognition, and cultural and societal influences. In light of this tremendous individual variability, pain, particularly chronic pain must be treated using multidisciplinary, biopsychosocial approaches. Chronic pain is a debilitating condition that can adversely affect an individual's ability to perform physical activity, their psychological health, and their social responsibilities including work and family life; patients with chronic pain are five times more likely to utilize health care services than those without chronic pain. It's been estimated that over 50 percent of chronic pain patients also suffer from coexisting symptoms of depression or anxiety that also affect the utilization of healthcare services.

Chronic non-cancer pain is defined by the American Society of Interventional Pain Physicians as pain that persists beyond the usual course of an acute disease, or a reasonable time for an injury to heal, and is associated with chronic pathologic processes that cause continuous pain or pain at intervals for months or years. The International Association for the Study of Pain refines this somewhat by defining chronic pain as "pain that persists beyond normal tissue healing time, which is assumed to be three months". In its 2011 report entitled "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research," the Institute of Medicine (IOM) identified several key barriers that impede the provision of effective pain management in the primary care setting. These include the high prevalence of chronic pain in the US population, which adversely affects the ability to take effective actions on a national scale; provider attitudes and training, which can impede the delivery of high-quality care; patient attitudes which may interfere with their ability to recognize their need to address pain early on; and geographic barriers, which place residents of rural communities at a disadvantage. The IOM also identified a need to provide educational opportunities for primary care practitioners and other providers to improve their knowledge and skills in pain assessment and treatment, to include safe and effective opioid prescribing, as well as for better collaboration between pain specialists with primary care practitioners and teams when primary care providers have exhausted their expertise and the patient's pain persists.

Based on results of the August 2009 Army Pain Management Task Force, the DoD developed a comprehensive pain management policy to improve clinical, administrative and research processes involved with the provision of pain management care and services within the DoD. The DoD/VA Joint Executive Council, in turn, chartered a work group to actively collaborate on a standardized DoD/VA approach to pain management that would improve the quality and effectiveness of care to beneficiaries of the Veterans Health Administration and the Military Health System. This DoD/VA Pain Management Work Group has built upon the work initiated by the Army task force and expressed in the DoD's comprehensive pain management policy.

As presented in section 711 of the National Defense Authorization Act for Fiscal Year 2010 (P.L. 111-84), this report is an update to our report of 2013 on the implementation of DoD's comprehensive pain management policy.

COMPREHENSIVE PAIN MANAGEMENT POLICY

1. Policy Description

The comprehensive pain management policy focuses on the key components and subcomponents of pain assessment, treatment, management, and research. The policy strives to reinforce that pain is not only a symptom of disease, but is often, in fact, a disease process in itself. As is the case for all disease processes, the approach taken towards treatment needs to be evidence-based and utilize best practices. The policy was not formally revised during the past reporting year, and progress has continued on meeting the goals outlined in the document.

Assessment of Pain:

In 1996, the American Pain Society (APS) described the routine assessment of pain as the "5th vital sign". By so doing, the APS sought to reinforce that the assessment of pain is as important as the routine assessment of the standard four vital signs (pulse, respiration, blood pressure, and temperature), and that providers need to take action when patients report they are experiencing pain. DoD Instruction (DoDI) 6025.13, "Medical Quality Assurance (MQA) and Clinical Quality Management in the Military Health System," addresses military treatment facility (MTF) accreditation, and the requirement that all MTFs be accredited by either the Joint Commission or other accrediting body. All inpatient MTFs are currently reviewed and accredited by The Joint Commission and MTFs providing ambulatory care only are either accredited by The Joint Commission or the Accreditation Association for Ambulatory Health Care. Both of these accrediting organizations incorporate standards that focus on a patient's right to pain management, patient education about pain and pain management, pain assessment in all patients, and a facility's collection of data on the effectiveness of pain management. By virtue of their accreditation, all MTFs have demonstrated successful adherence to these pain management standards.

The Code of Federal Regulations, title 32, section 199.6, requires all civilian hospitals (acute care, general and special) that provide inpatient and outpatient services (to include clinical and ambulatory surgical services) under TRICARE "to be accredited by The Joint Commission [TJC] or meet other such requirements as the Secretary of Health and Human Services, the Secretary of Transportation, or the Secretary of Defense finds necessary in the interest of the health and safety of patients who are admitted to and furnished services in the institution." Therefore, all institutional providers that are

contracted into the TRICARE network by one of the regional Managed Care Support Contractors (MCSC) must also be accredited. As is required for DoD's MTFs, these facilities must also meet the same rigorous pain management standards set forth by their accrediting organization.

Neither DoD instructions nor accreditation body standards specify what tool should be used to assess pain within the DoD, only that an assessment be performed. Both the August 2009 Army Pain Management Task Force Report and the October 2010 Army Surgeon General's OPERATION ORDER (OPORD) 10-76 (USAMEDCOM COMPREHENSIVE PAIN MANAGEMENT CAMPAIGN PLAN) noted that the most commonly used pain assessment tool, the 11 point, 0-10 Visual Analog Scale (VAS), was inadequate to meet patient and provider needs. Therefore, development was begun on a new tool that would be able to measure pain intensity, mood, stress, biopsychosocial impact and functional impact. A more complete description of this tool, which underwent further validation and deployment during the past year, can be located under the research section of this report.

Pain Management and Treatment:

Patient Centered Medical Home:

A 2010 survey by Breuer et al. [Breuer, B., R. Cruciani, and R. K. Portenoy. 2010. Pain management by primary care physicians, pain physicians, chiropractors, and acupuncturists: A national survey. *Southern Medical Journal* 103(8):738-747] reported that primary care practitioners are responsible for treating 52 percent of chronic pain patients in the United States. Appropriate management by the primary care practitioner may be crucial in providing timely relief and in preventing acute pain from progressing to a persistent or chronic pain state. The Patient Centered Medical Home (PCMH) provides a comprehensive, integrated approach to primary care, to include treatment for acute and chronic pain. It incorporates a number of principles that facilitate a holistic approach to patients with simple and complex medical needs and also facilitates partnerships among individual patients, their primary care physicians (PCP), and when appropriate, their families. In the PCMH model, the PCP leads a team of healthcare professionals who collectively take responsibility for the ongoing care of the patient. The PCP is responsible for either personally providing care for the patient, or for appropriately arranging treatment by other qualified healthcare professionals. The patient's care needs are coordinated and/or integrated across the entire health care system (acute and subspecialty care, inpatient care, home health care, skilled nursing care) and the patient's community (family, public and private community-based services). The PCMH facilitates education of both the patient and his/her family on the etiology and management of acute and chronic pain, which may reduce the likelihood of disability, address the under-treatment of pain, and provide for individual tailoring of treatment plans.

In September 2009, the Assistant Secretary of Defense (Health Affairs) directed all MTFs to implement the PCMH model in their primary care clinics. In response to this directive, the TRICARE Management Activity (now part of the Defense Health Agency (DHA)), with concurrence from the three Services, contracted with the National Committee for Quality Assurance (NCQA) to survey all MTFs world-wide to assess their readiness to function as a PCMH. Subsequently, each MTF primary care clinic was surveyed to determine whether they had met the standards to become an NCQA-recognized medical home. There are approximately 440 PCMH practices in the MHS' Direct Care System, which include family medicine, primary care, pediatrics, internal medicine, flight medicine and undersea medicine clinics. To date, NCQA has surveyed and recognized 297 practices as part of its formal recognition process, of which 92 percent have achieved Level 3, NCQA's highest level of recognition. By the end of calendar year 2014, an additional 140 practices will have undergone the survey process.

Clinical Practice Guidelines:

In 1990, the Institute of Medicine defined Clinical Practice Guidelines (CPGs) as "systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances." CPGs provide guidance on the diagnosis, treatment and management of patients based upon clinical evidence obtained from an intensive, comprehensive review and analysis of the published medical literature. The recommendations within a CPG should not be viewed as sacrosanct, since a provider's clinical judgment regarding the appropriate management of each individual patient should remain paramount. Clinicians and patients must develop individual treatment plans that are customized to the specific needs and circumstances of each patient.

In 2004, the DoD/VA Health Executive Council (HEC) chartered the DoD/VA Evidence-Based Practice Work Group (EBPWG) to advise providers on the use of clinical and epidemiological evidence to improve the health of the population across the MHS and VHA. The EBPWG selects topics for the development of CPGs based on high cost, high volume, high risk, and problem prone conditions. Three CPGs related to the treatment of acute and chronic pain have been available for several years, and have been discussed in prior reports to Congress. These are: Opioid Therapy (OT) for Chronic Pain, Lower Back Pain (LBP), and Post-Operative Pain (POP). A new CPG was released in April, 2014 for the Non-Surgical Management of Knee and Hip Osteoarthritis; this CPG had been referred to in previous reports as the Degenerative Joint Disease (DJD) CPG. It was retitled prior to release to clarify the focus of the guideline. A CPG Summary and Pocket Guide for providers and the entire health care team will be released before the end of the year. Still under development in collaboration with the American Pain Society is the Perioperative Pain Control CPG; a release date for this CPG has yet to be announced.

While it is important to develop and implement CPGs as educational tools to align medical practice patterns with the most currently available clinical evidence, it is also important to make them easy to use and integrate into routine provider practice. The report of the Army task force revealed that many DoD providers were unaware of the CPGs for pain management, and of those who were, many found them difficult to use or integrate into their practices. To address this problem, electronic solutions were developed to embed in the military's computerized patient medical record, the Armed Forces Health Longitudinal Technology Application (AHLTA), that would simplify the use of these CPGs by military providers. To date, Alternate Input Method (AIM) forms have been developed within AHLTA that detail an evidence –based approach to the treatment of low back pain and opioid therapy for providers to follow. Additional AIM forms are under development for the remaining pain-related CPGs. To assist DoD providers utilize the OT CPG "at the bedside," a provider tool kit is available in hard copy and electronically on the VHA web-site. In addition, the PMWG is working to ensure that any future electronic medical record system is designed with the CPG algorithms embedded within them, to facilitate the use of these evidenced based practices by providers.

Specialty Care Referral:

In October 2009, the VHA established an integrated, biopsychosocial Stepped Care Model of Pain Management in which care for most pain conditions is delivered in the primary care setting. This Biopsychosocial Model posits that the causes and outcomes of many illnesses, including pain, often involve the interaction of physical and pathophysiologic factors, psychological traits and states, and social-environmental factors. The model incorporates, and is supported by, timely access to secondary consultation and collaborative care from multiple specialties to include pain management, behavioral health, physical and rehabilitative medicine, and other specialties. It is an effective approach to providing a continuum of care to a population of patients with a spectrum ranging from acute pain caused by injuries or diseases to chronic pain diseases and disorders that may be expected to persist for more than 90 days, and in some instances, for the patient's lifetime. While the goal is for the primary care provider to render as much of the care as possible, consultation with pain medicine, as well as other specialists, in managing complex, severe and high risk patients may be needed. Based upon recommendations made in the Army's pain task force report strongly recommending adaptation of the stepped care model by the DoD, all three Services have begun to deploy this model within their MTFs.

In an effort to successfully implement the stepped care model, the MHS has increased the number of pain management specialists in its MTFs and in its purchased care networks to provide specialized treatment for patients who require treatment beyond that available from the primary care manager. The Stepped Care, tiered approach towards pain management provides the appropriate level of pain management capability, provider education, and access to consultative/referral support at each level of care (i.e. from Primary Care to Specialty Care). During this reporting period, the Army has continued to deploy Interdisciplinary Pain Management Centers (IPMC) at each of its

eight medical centers. IPMCs provide the highest tier of pain management, which is delivered by a multidisciplinary team of providers working together to provide consultation, care, and expertise for interventional pain medicine. The goals of the IPMCs are rehabilitation and functional restoration through the use of integrative medicine modalities.

During this reporting period, the Navy has been re-engineering its approach to providing comprehensive pain management services, with the goal of shifting the program focus to a more interdisciplinary, preventative approach, including integration with primary care and the Medical Home Port [Patient Centered Medical Home]. In June 2013, the Navy's Comprehensive Pain Management Program (NCPMP) was placed in a strategic pause in order to allow the Bureau of Medicine and Surgery (BUMED) Medical Operations (M3) leadership to assess the existing program components and identify ways to effectively integrate pain care management into primary care utilizing a multidisciplinary team of subject matter experts with collaboration from Specialty Care providers. Since entering the strategic pause, the NCPMP has realigned its goals to ensure that it is truly a comprehensive, preventive and interdisciplinary program. This approach increases the emphasis on primary care provider education and the optimal use of existing Navy Medicine resources. The integration of pain care management in the primary care setting maximizes the care provided within the medical home and transforms the delivery of primary care into an integrated, team-based approach. This offers patients access to same day appointments, proactive preventive services, standardized clinical processes, interactive secure messaging, expanded healthcare teams including specialists such as Behavioral Health providers, and promotion of responsible use of the Emergency Room. This partnership aims to improve the quality of pain care to achieve the desired end state of improved quality of life, functionality, readiness, and cost of care (value). Improvements in both the Army and Navy programs during this reporting period have provided improved access to pain care services for beneficiaries regardless of whether they are located near a major Military Treatment Facility or in a more remote location world-wide.

DoD is currently exploring new technologies to address the problem of providing access to specialty care for patients with complex chronic diseases such as chronic pain, who reside in areas that are relatively inaccessible to or remote from these specialized services. The Extension for Community Healthcare Outcomes (ECHO™) program which was pioneered at the University of New Mexico (UNM) employs an 'academic detailing' intervention using video technology. The program offers local providers the opportunity to co-manage difficult and complex patients, while simultaneously affording them with the training and technical skills that over time allows them to become highly skilled in the treatment of these chronic and complex diseases. Ultimately, this creates a center of excellence in their own community, and diminishes the need to obtain specialty evaluations in these remote areas. ECHO™ has demonstrated lower costs and improved outcomes in the treatment of chronic diseases such as Hepatitis C. The VHA has adopted the ECHO™ model, and has begun transforming their Specialty Care Services program by developing Specialty Care Access Networks (SCAN), so that all veterans, even those

distant from medical centers, will have access to specialty level care for chronic disease management when needed.

DoD is currently working on adapting the ECHO™ program to provide pain management services in remote sites and smaller MTFs. During this reporting period, the Army has continued its planned two-year collaborative initiative with UNM to adapt this best practice for use in the Army's pain program. The objective of the ECHO™ program is to complement the capacity, competence and confidence of remote primary care providers. Utilizing weekly video tele-conferencing to create regional communities of practice, ECHO™ links the IPMC specialty teams (i.e., hubs) with their designated Patient Centered Medical Homes (i.e., spokes). This improves provider knowledge, increases care coordination, and decreases the need for continued specialty referrals to the direct and purchased care systems. During this reporting period, Navy Medicine also initiated the process of implementing the ECHO™ program by formally partnering with representatives from the University of New Mexico's (UNM) Project ECHO™ team. Over the next year, selected Navy providers will observe weekly UNM ECHO™ clinics, attend a two day Project ECHO™ "boot camp" and actively participate in UNM's existing pain ECHO™ clinic. Navy trainees will then launch their own ECHO™ clinics, hosted at Naval Medical Center San Diego and Naval Medical Center Portsmouth. The UNM ECHO™ team will observe these live clinics and provide weekly feedback to the Navy Pain Medicine ECHO™ participants until each "hub" is self-sustaining. The Navy Pain ECHO™ program will leverage best practices, methodologies and lessons learned from existing ECHO™ models including the Army MEDCOM Pain Management ECHO™ Program and the Veteran's Health Affairs SCAN ECHO™ model. As the Navy Pain ECHO™ program establishes additional "hubs and spokes" and continues to grow, Navy Medicine will be positioned to integrate its ECHO™ Program with future Army, Air Force and DHA ECHO™ initiatives.

Education and Training:

Many health care professionals have little or no training in pain management and are unable to effectively respond to the pain care needs of their patients. As noted in prior reports to Congress, pain management receives very little attention in the curricula of many U.S. medical and allied health professions schools, and in fact, health care professional programs at most major medical educational and training sites do not include a dedicated pain management curriculum. The military medical training programs are no exception, and consistently mirror these deficiencies. The lack of a consistent approach to pain management education results in considerable variation in pain management understanding and practice within all medical professions.

In IOM's 2011 report entitled "Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research," IOM recommended "health professions education and training programs, professional associations, and other groups that sponsor continuing education for health professionals should develop and provide educational opportunities for primary care practitioners and other providers to improve their knowledge and skills in pain assessment and treatment, including safe and effective

opioid prescribing." DoD concurs with the IOM's recommendations that providers need additional training in the areas of pain management and medication misuse. A more detailed description of DoD's efforts can be found below in the 'Training and Healthcare Education' section.

One of the major goals of DoD's comprehensive pain management program is to aid in the restoration of function and relief of pain by broadening access to state-of-the-art, evidence-based, standardized, multimodal, and interdisciplinary pain care across Military Medicine, ensuring treatment efficacy through practice guidelines, education, and analysis of treatment outcomes. Although DoD's efforts to date have been based on the best available evidence currently available, a patient data screening and outcomes repository system which is capable of gauging the effectiveness of existing programs or guiding future implementation strategies and the development of clinical practice guidelines (CPG) is lacking.

DoD has begun work on integrating the National Institutes of Health (NIH) Patient Reported Outcomes Measurement Information System (PROMIS) as part of a MHS Pain Assessment Screening Tool and Outcomes Registry (PASTOR). Further information on PASTOR can be found in Section six below. During this reporting year, the development of this program was completed. The PROMIS program will provide a tremendous advancement in standardization of patient assessments, and will assist in educating health care providers in the provision of truly effective pain management care to MHS beneficiaries. The program will (1) provide pain patient focused outcomes data to improve clinical decision making, (2) develop data driven and military specific clinical practice guidelines, (3) obtain critical data to assure needs based alignment of resources, and (4) integrate existing validated outcomes measures into the PASTOR.

In order to maximize training opportunities while standardizing care, an annual pain skills training event is held. Alternating in location, the event includes guest instructors and attendees from all of the services, as well as the VA. Each course during the event teaches a specific skill that can be applied directly for patient care, and continuing medical education credits and a certificate suitable for credentialing are granted. Previous topics have included auricular acupuncture, regional anesthesia, behavioral health modalities, manipulation therapy, advanced chronic pain procedures, ultrasound for procedures, trigger point injections, massage therapy, and use of new technology. During this reporting period the Pain Care Skills Training was held at Naval Medical Center Portsmouth, VA, with the global objective of providing pain skills training for PCMs, Family Practice Physicians, Pain Specialists, PAs, Nurses, Corpsmen, Pharmacists, Case Managers and other clinicians to understand, review, evaluate, and obtain information on emerging research related to pain management. The emphasis was on providing a multimodal approach covering a variety of techniques and treatments that military healthcare could embed into all MTFs; the ultimate goal would be a decrease in the likelihood of opioid dependence for chronic pain issues and an increase in the overall functionality of patients. The training event had over 250 attendees that included participants internationally from all three Services and the VA. Training included an Advanced Acute Pain Course, Auricular/Battlefield Acupuncture, Behavioral Health

skills for pain, Chronic Pain Ultrasound course, OMT (Orthopedic Medicine Therapeutics), Massage Therapy, Mind Body Medicine, Pain Pharmacology & Trigger Point Injections, and Science & Technology.

Research:

DoD is actively engaged in research, as demonstrated by the multitude of research publications, presentations, and projects that DoD providers and educators participate in. Section four and the appendix below describe in more detail the Department's considerable focus on pain management research.

2. *Performance Measures*

Like most organizations, DoD strives to continuously improve its performance and the quality of care provided to its beneficiaries. Performance measures are tools that provide senior leaders and other stakeholders with data that enables them to evaluate their health plan's overall performance across key dimensions of quality and value, and also drive strategic quality improvement initiatives.

Congress has requested a description of the performance measures used to determine the effectiveness of DoD's pain management policy in improving pain care for beneficiaries enrolled in the military health care system. DoD tracks numerous performance measures, yet in the area of pain management, the number and breadth of measures is still quite limited. DoD, working in conjunction with the PMWG has continued to work on identifying and developing relevant measures that will enable an appropriate assessment of the effectiveness of its pain management policy in improving pain care for beneficiaries enrolled in the military health care system. This entails the development of measures that assess care in both the inpatient and outpatient settings.

During the reporting period, the Navy Comprehensive Pain Management Program (NCPMP) has engaged a variety of providers, specialists and other subject matter experts to develop metrics and methodologies to track provider compliance with two pain-related Clinical Practice Guidelines (CPGs) – Low Back Pain and Opioid Therapy for Chronic Pain. The metrics will be utilized to assess the impact of these CPGs on clinical care, identify issues that might prevent compliance with the CPGs, and promote the increased use of CPGs across Navy Medicine. Data sources for the metrics includes the Military Health System (MHS) Mart (M2), BUMED's military health data reporting tool, and the Tri-Service Workflow. Data that cannot be retrieved from M2 or Tri-Service Workflow has been gathered through individual chart reviews. The metrics currently being assessed for Low Back Pain relate to proper use of and proper avoidance of imaging for patients with Low Back Pain and the metrics for Opioid Therapy for Chronic Pain relate to screening for appropriateness of opioid prescription, use of an Opioid Care Agreement (OCA) and ongoing patient assessment and surveillance. Additionally, outcome measures related to both CPGs have been developed in order to allow Navy Medicine to better understand the impact of increased CPG compliance on patient outcomes. The outcome

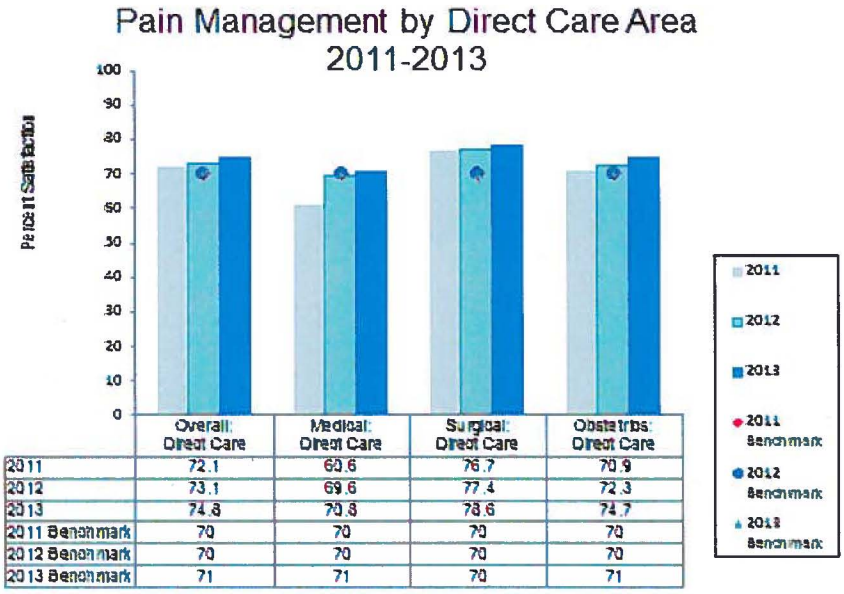
measure related to Low Back Pain assesses the percentage of acute low back pain patients progressing to chronic low back pain status. The outcome measures related to Opioid Therapy for Chronic Pain include Emergency Room utilization by chronic opioid therapy patients, the prevalence of opioid overdoses among chronic opioid therapy patients and the prevalence of chronic opioid therapy patients receiving opioid prescriptions in an Emergency Room setting. Baseline data has been collected and a process for ongoing data collection has been established. Once an analysis of the data has been performed, opportunities to assist providers and MTFs with increasing compliance will be identified, which may include the development of educational tools and materials, as well as the identification of barriers that may exist in the clinical setting that prevent providers from increasing CPG compliance.

3. *Adequacy of Pain Management Services*

Congress has requested an assessment of the adequacy of DoD's pain management services be included in this annual report based on a current survey of patients managed in Department clinics. While there is no standardized survey across the DoD for patient satisfaction in the outpatient setting, the Services do measure patient satisfaction with pain management in primary care and some specialty care clinics. The PMWG is working on developing a standardized survey instrument for beneficiaries to provide this feedback in the future.

DoD has been assessing beneficiary satisfaction with inpatient pain management as part of its annual Hospital Consumer Assessment of Healthcare Provider and Systems (HCAHPS) survey. This survey was developed in partnership between the Centers for Medicare and Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ). Data are collected on a sample of inpatients treated for medical, surgical, or obstetrical diagnoses during each fiscal year (prior to 2010, samples were obtained on a calendar year basis). Overall patient satisfaction with pain management is based upon responses to two pain related questions: "During this hospital stay, how often was your pain well controlled?", and "During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?" The survey question responses are grouped into four broad categories: Medical, Surgical, Obstetrical, and Overall. Results in each category form an aggregate score which can be compared to the national benchmark in each category for all hospitals reporting results from this survey.

The below chart depicts DoD's performance on inpatient satisfaction from 2011through 2013. Performance overall has continued to incrementally improve from 72.1 percent satisfaction in 2011 (national benchmark 70 percent) to 74.8 percent satisfaction in 2013 (national benchmark 71 percent), with DoD satisfaction exceeding the national benchmark in all four categories.



	Overall: Direct Care	Medical: Direct Care	Surgical: Direct Care	Obstetrics: Direct Care
2011	72.1	60.6	76.7	70.9
2012	73.1	69.6	77.4	72.3
2013	74.8	70.8	78.6	74.7
2011 Benchmark	70	70	70	70
2012 Benchmark	70	70	70	70
2013 Benchmark	71	71	70	71

4. *Pain Research*

DoD performs numerous research projects which are relevant to treating the types of acute and chronic pain suffered by members of the Armed Forces and their families. Acute and chronic pain is ubiquitous in trauma patients, and there is a high cost for pain management in Wounded Warriors. Prior to 2010, pain management was seriously underrepresented in DoD's research investment strategy, and the widespread patient dissatisfaction with pain control and other outcomes measures suggested an urgent need for a change in this strategy. In fiscal year 2010, funding was allocated to create the Defense and Veterans Pain Management Institute (DVPMI) which allowed DoD to perform research, development, test and evaluation specifically for pain management. On May 13, 2011, the Assistant Secretary of Defense for Health Affairs designated the DVPMI as a Center of Excellence, and the organization was renamed as the Defense and Veterans Center for Integrative Pain Management.

Since 2003, DoD personnel have written and published multiple articles in world-renowned peer reviewed journals regarding the management of both acute and chronic pain; several articles are also currently pending publication (see Appendix for details on interval research and publications since submission of our 2013 report). In addition, several clinical protocols have been developed and are currently undergoing clinical trials in both battlefield and non-battlefield pain management. These protocols will greatly enhance the knowledge and management of acute and chronic pain, particularly for soldiers wounded on the battlefield where early intervention may prevent long term chronic pain and narcotic dependence. A protocol is currently under Institutional Review Board (IRB) review for a joint research effort to assess the efficacy and safety of non-pharmacologic and non-procedural complementary and integrative medicine (CIM)

therapeutic modalities (for example, auricular acupuncture, therapeutic massage, Yoga) for beneficiaries with chronic low back pain. Another joint protocol is under IRB review aimed to comprehensively assess effectiveness of pain management efforts; this project will provide detailed data on effects on clinical outcome, quality of care, readiness, patient and provider satisfaction, and cost (return on investment (ROI)).

Work continued in the past year on the VA/DoD Regional Anesthesia Military Battlefield Pain Outcomes Study collaborative research project; data collection for the study has been completed and is currently being analyzed. This is currently the only long term outcomes study looking at both the physical and biopsychosocial aspects of pain in wounded warriors. This study is providing valuable information on the pain experience of wounded warriors and insight into the effectiveness of traditional and novel pain management techniques. This project also represents a template for additional research collaboration between the DoD and VHA that will enhance wounded warrior care throughout the federal healthcare system.

As noted above, since our last report to Congress DoD has completed the Defense and Veterans Pain Rating Scale (DVPRS) validation study, which was the first attempt by a major medical system to develop a new pain scale and will now provide a standardized methodology to measure pain throughout the military care continuum. The scale is unique in that it utilizes standardized functional language to define the customary 0-10 numeric scale in addition to other graphic features (http://www.dvcipm.org/clinical-resources/pain-rating-scale). The Pain Management Task Force (PMTF) report of May 2010 called for a standardized pain assessment tool to provide a common set of pain measurement questions and visual cues (PMTF – 4.1.2). As a newly developed tool, the DVPRS required validation of its accuracy and utility prior to deployment in the field. Validation testing was completed, and the results were published (see appendix for reference), documenting its value to clinicians. Deployment of this tool to DoD healthcare facilities has begun, and further validation will continue as its utilization increases within both the DoD and VHA. It is expected that standardization of how patients are queried about their pain will provide the DoD and VHA a tremendous advantage in evaluating treatment outcomes and developing effective pain treatment strategies. The DVPRS also serves as a screening instrument for the more comprehensive PASTOR tool and is an integral component of that clinical support tool and registry.

5. *Training, Education and Healthcare Personnel*

Integral to achieving and maintaining a successful pain management program within the DoD is the provision of appropriate training to health care personnel with respect to the diagnosis, treatment, and management of acute and chronic pain. Further, the DoD was tasked with collaborating with the Veterans Health Administration to ensure patients receive the same type and standard of care for pain management regardless of whether they are seen in a VA or DoD facility, and that an interruption in treatment does not occur as a result of moving between health care systems. To accomplish this goal, a

standardized pain management curriculum and training program are required. Since our last report, the VA and DoD have continued their collaboration, utilizing funding received from the Healthcare Executive Council to establish the Joint Incentive Fund Pain Education Project (JPEP). The goal of the JPEP is to develop a common standard/content for basic and intermediate pain management education and training for DoD/VA providers and to synchronize DoD/VA education curriculum content, supporting materials, and a variety of commonly accessible delivery systems. The results of this initiative will be decreased variance in the practice of pain management, reduced inefficiencies, and a common pain education and training curriculum that will enhance not only pain care, but also the general health care of all individuals with complex comorbidities such as traumatic brain injury, depression, and substance abuse. The program should be fully developed and ready to pilot by fall 2014, and ready for full implementation across both DoD and the VA by fall 2015.

Complementary and integrative medicine (also referred to as complementary and alternative medicine) includes such modalities as acupuncture, manipulation, yoga, biofeedback, and therapeutic massage. While scientific evidence exists regarding some of these therapies, for most, there are key questions that have yet to be answered through well-designed scientific studies – questions, such as whether these therapies are safe and effective for the purposes for which they are used. It is well known that there are medically acceptable practices in both complementary and traditional western medicine that are utilized which lack adequate evidence of both safety and effectiveness from well-designed research and data. Among these, integrative practices in particular are often debunked as being ineffective or as effective merely due to their placebo effect. The Army has been collaborating with several organizations with a common interest in expanding the utilization of complementary integrative medicine modalities. These include The National Center for Complementary and Alternative Medicine (NCCAM) at NIH, the Bravewell Collaborative, and the Samueli Institute. DoD has also been working with the VA through an educational subgroup of the PMWG to develop a tiered, standardized training and certification curriculum for acupuncture that will be tailored to the education level of the provider. The Acupuncture Training Across Clinical Settings (ATACS) program was established utilizing dedicated funding from the Healthcare Executive Council's Joint Incentive Fund. ATACS will develop, pilot, evaluate, and implement a uniform tiered acupuncture education and training program in Battlefield (Auricular) Acupuncture (BFA) for approximately 1,200 Military Health System (MHS) and Veterans Health Administration (VHA) healthcare providers, to include standardized training, credentialing, and quality assurance processes. BFA is a single, limited procedure using an ear acupuncture technique that provides rapid, effective pain relief with minimal adverse effects, is portable and accessible, and can be deployed in all medical environments. It can be safely used as an alternative or complement to opioids; when opioids alone are deemed clinically risky or in cases where current medications and other therapies are not working; and in cases where the existence of and potential for substance abuse, addiction and tolerance issues make medication therapies impractical. BFA can be used to mitigate the difficult and ongoing challenges facing the DoD with medication overuse/abuse/diversion, poly-pharmacy, and medication side-effects. To date 125 providers and 16 faculty have been fully trained in battlefield acupuncture.

During this reporting period, training and credentialing protocols have been developed, and training has begun at a limited number of MTFs. Though acupuncture is currently not a TRICARE benefit, the Services are moving forward with implementing this treatment option within MTFs. It is their belief that despite the lack of conclusive peer-reviewed scientific literature, acupuncture, as well as other forms of CAM (that is, orthopedic manipulation therapy (OMT)), has clinical utility as an alternative to such potentially harmful treatments as chronic opioid therapy.

6. *Patient Education*

In response to the PMTF report (May 2010 – 4.1.9) recommendation for a Pain Assessment Screening Tool and Outcomes Registry (PASTOR), DVCIPM launched the Chronic Pain Impact Network (CPAIN) PASTOR demonstration project between Walter Reed National Military Medical Center, Madigan Army Medical Center, and the University of Washington. This project confirmed the utility for clinicians and patients of an electronic pain information system to inform clinical encounters dealing with pain issues. PASTOR leverages the National Institutes of Health (NIH) Patient Reported Outcomes Measurement Information System (PROMIS) to provide a better understanding of what treatment combinations work best for different types of pain. PROMIS represents an existing Federal investment of approximately $100 million and leverages existing PROMIS capabilities to provide a military clinical decision tool and pain registry. Scientists at Northwestern University teamed with the military to integrate PROMIS measures with the needs of military personnel and their families who require pain management. For example, some of the topics addressed within the system explore substance abuse issues, behavioral health, and pain therapy effectiveness. This reduction in patient burden, without loss of clinical reliability, enables PASTOR to assess multiple facets of pain and opioid use. The system, which is efficient for both patients and providers to use, can generate information that assists providers in enhancing care by increasing their awareness to real or potential pain-related health problems. PASTOR pilots were started in January 2014 at Walter Reed National Military Medical Center and Madigan Army Medical Center. The system will also aid providers in delivering effective patient-centric pain management education. It will be the key resource for pain management outcomes data for both the DoD and VHA, and is being designed to work with and complement the Patient Centered Medical Home.

Other patient education projects are also in place or in development at the time of this report. The Navy has developed a lecture series to assist providers in educating patients, has produced a handout on pain management to assist patients and their families better understand the pain management process, and developed an interactive video training tool aimed to be released as "General Medical Training" about prescription medication misuses for all Service members. DoD will continue to collaborate with the VA to determine if some of the projects they have already developed or that are in development process can be adapted to meet the needs of their beneficiary population. Examples of these projects include patient education materials currently available on the "My HealtheVet" website, and an on-line interactive pain evaluation, that includes a pre-

and post-test, and provides the Veteran with an individualized assessment of their pain awareness and understanding. The Navy's Health Promotion and Wellness Wounded, Ill, and Injured team at the Navy and Marine Corps Public Health Center developed a patient information website with the objective of facilitating effective pain management, improved level of functioning and return to mission through the provision of resources to meet the needs of those who are wounded, ill, and injured, their family members and caregivers.

APPENDIX

Publications

Bleckner L, Solla C, Fileta B, Howard R, Morales C, & Buckenmaier III C. Serum Free Ropivacaine Concentrations among Patients Receiving Continuous Peripheral Nerve Block Catheters: Is it Safe for Long-term Infusions? Anesthesia & Analgesia 2014 January; 118(1): 225-9.

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Waiting for Clearance:

Regional Anesthesia Catheters Reduce the Incidence of Neuropathic Post-Amputation Pain.
Buckenmaier III C, Buccheit T, Van de Ven T, McDuffie M, Shaw A, Macleod D, Hsia J, & White W. American Academy of Pain Medicine Conference, March 2014. Poster Presentation