Office of The Army Surgeon General

Pain Management Task Force

Final Report
May 2010

Providing a Standardized DoD and VHA Vision and Approach to Pain Management to Optimize the Care for Warriors and their Families

Public

Pain Management Task Force Report

Providing a Standardized DoD and VHA Vision and Approach to Pain Management to Optimize the Care for Warriors and their Families

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EXECUTIVE SUMMARY

Introduction

The Army Surgeon General LTG Eric B. Schoomaker chartered the Army Pain Management Task Force (TF) in August 2009 to make recommendations for a MEDCOM comprehensive pain management strategy that was holistic, multidisciplinary, and multimodal in its approach, utilizes state of the art/science modalities and technologies, and provides optimal quality of life for Soldiers and other patients with acute and chronic pain. TSG appointed BG Richard Thomas, Assistant Surgeon General for Force Projection, as the TF Chairperson. Task Force membership included a variety of medical specialties and disciplines from the Army, as well as representatives from the Navy, Air Force, TRICARE Management Activity, and Veterans Health Administration (VHA).

The Task Force conducted its review and analysis utilizing site visits, interviews with clinical subject matter experts and medical staff, and data collection through Regional Medical Commands, as well as through a review of medical literature, and policies and regulations of U.S. Army Medical Command (MEDCOM) and the Department of Defense (DoD).

The Task Force conducted 28 site visits from October 2009 through January 2010 at Army, Navy, and Air Force Medical Centers, Hospitals and Health Clinics, as well as VHA and civilian hospitals. Visits outside of Army Medical Treatment Facilities (MTFs) were scheduled based on recommendations from Service representatives, while also taking into account the facilities' reputations for innovative and state of the art approaches to pain medicine. During site visits, leadership and staff were asked to assess pain management capabilities, strengths, weaknesses, and best practices at their respective facilities.

National Defense Authorization Act for 2010

Section 711 of the National Defense Authorization Act for fiscal year 2010 tasked the Secretary of Defense to develop and implement a comprehensive policy on pain management by the military health care system, no later than March 31, 2011.

Overview of Pain in the United States and the Military Health System

Pain is the most frequent reason patients seek physician care in the United States, and more than 50 million Americans suffer from chronic pain. The annual cost of chronic pain in the U.S. is estimated at $100 billion, including health care expenses, lost income, and lost productivity. Back pain alone is the leading cause of disability in Americans under 45 years of age. The failure to adequately address pain in the health care system continues to result in unnecessary suffering, exacerbation of other medical conditions, and huge financial and personnel costs.

The variability that characterizes the practice of pain management in the U.S. health care system is a result of several factors. To begin with, each medical provider's understanding and approach to pain management is unique and variable, as it is significantly influenced by each physician's academic medical training, mentors, cultural beliefs, and personal experiences with pain. In addition, there is a lack of clear ownership of pain medicine by any one medical specialty. According to the American Academy of Pain Medicine, "pain medicine" is a relatively new medical specialty that is evolving along with its place in the medical hierarchy.

Although there are many treatment modalities for pain management, one of the major components for the treatment of pain continues to be the use of Over-The-Counter and prescription medications. The use of medications is appropriate, required, and often an effective way to treat pain. However, the possible overreliance on medications to treat pain has other unintended consequences, such as the increased prevalence of prescription medication abuse and diversion throughout the United States. According to the Office of National Drug Control Policy, prescription opioid analgesics are the most commonly abused prescription drugs in the U.S., with the highest rate of abuse occurring among those ages 18-25.

For patients interested in treatments other than, or in addition to, medication, Complementary Alternative Medicine (CAM) is a popular option. Though CAM is increasing in popularity among patients, this popularity has yet to result in a parallel increase in acceptance and use within traditional medicine. There is a wide range of these therapies and treatments, such as acupuncture and yoga therapy, that have proven valuable in reducing an overreliance on use of medications to treat pain.

Many of the Military Health System's (MHS) challenges with pain management are very similar to those faced by other medical systems, but the MHS also faces some unique issues because of its distinctive mission, structure and patient population. For example:

- The nation expects the MHS to provide the highest level of care to those carrying wars' heaviest burdens.
- The transient nature of the military population, including patients and providers, makes continuity of care a challenge for military medicine.
- Pain management challenges associated with combat polytrauma patients require integrated approaches to clinical care that cross traditional medical specialties, not all of which are universally available across the MHS.

MEDCOM and MHS lack a comprehensive pain management strategy that addresses current deficiencies. As a result, pain management initiatives are fragmented - often driven by local champions and subject to retirements, changes of command, and annual budget priorities for their continued existence.

Finally, the MHS care for Warriors is rooted in a military culture that praises selflessness, toughness, and willingness to accept pain. "No pain, no gain" is a philosophy embraced by much of the Active Duty force and their leadership. This attitude often causes delays in seeking treatment, as Soldiers, Sailors, Airmen, and Marines attempt to work through their pain and "tough it out." This frequently results in relatively minor acute issues later becoming harder-to-manage chronic conditions.

Pain Management Task Force Recommendations

The Pain Management Task Force developed 109 recommendations that lead to a comprehensive pain management strategy that is holistic, multidisciplinary, and multimodal in its approach, utilizes state of the art/science modalities and technologies, and provides optimal quality of life for Soldiers and other patients with acute and chronic pain.

The recommendations rely heavily on an education and communication plan that crosses DoD and VHA medical staff and patients. The Task Force also placed an emphasis on linking to existing Service and MHS initiatives (e.g. Patient Centered Medical Home, Comprehensive Soldier Fitness) that support the pain management strategy. The requirement to synchronize both effort and approach to pain management across the MHS and VHA is an essential first step in combating the variability that plagues pain management across the MHS. This requirement was the driving force behind many of the other TF recommendations.

Recommendations are divided into four areas:

1. Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management
2. Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence
3. Focus on the Warrior and Family - Sustaining the Force
4. Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention

All recommendations support the TF vision statement of "Providing a Standardized DoD and VHA Vision and Approach to Pain Management to Optimize the Care for Warriors and their Families."

The Way Ahead

Improving pain management across the DoD will require a significant reorganization, education, and training effort that will be most effective if pursued as a part of a DoD and VHA partnership.

The Uniformed Services boast an impressive group of pain medicine physician subspecialist but they are relatively few in number when compared with the mission. In addition to ensuring there are continued efforts to grow and retain pain medicine specialists, the MHS must develop a supporting team of clinicians and staff to assist specialists in addressing the pain management needs of their patients and staff.

Pain medicine should be managed by integrated care teams which employ a biopsychosocial model of care. The standard of care should have objectives to decrease overreliance on medication driven solutions and create an interdisciplinary approach that encourages collaboration among providers from differing specialties.

The DoD should continue to responsibly explore safe and effective use of advanced and non-traditional approaches to pain management and support efforts to make these modalities covered benefits once they prove safe, effective and cost efficient.

MHS Leadership must establish pain as a priority, with an urgency that leads to practice changes. The focus should be on prevention, followed by prompt and appropriate treatment that seeks to relieve acute pain and eliminate progression to chronic pain when possible.

Including the VHA in this strategy is essential. DoD and VA should cooperate and share common educational materials, venues, protocols, and formularies. A common standard would demonstrate the power of a unified effort and expedite achievement of the common goal: providing a standardized DoD and VHA vision and approach to pain management to optimize the care for Warriors and their Families.

Task Force Recommendation Objectives

Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management
Establish common pain taxonomy across the DoD and VHA.
Describe a common language DoD and VHA pain assessment tool with visual cues and a common set of measurement questions.
Establish a common baseline of pain care capabilities across DoD and VHA by creating a modified version of the 2009 VHA Pain Management Survey to distribute to all DoD MTFs.
Evaluate the utilization, potential roles, and certification requirements for Nurses in the DoD pain management strategy.
Establish a process to standardize a Military Health System credentialing process for pain medicine.
Reexamine the use of productivity measures (Relative Value Units) in evaluating primary care.
Develop a patient-centric approach to recovery, rehabilitation, satisfaction, and pain control, with greater attention to opioid control and minimizing abuse.
Establish a joint formulary to facilitate smoother transitions and minimize pain throughout the continuum of care.
Adopt a clinical information data system that provides pain assessment screening with an outcomes registry to promote consistency in pain care delivery.
Incorporate scientific advances in battlefield surgery and medical technology to improve the delivery of pain care across the continuum.
Expand telemedicine capabilities to incorporate pain management initiatives.
Add a Joint Theater Trauma Registry module to capture, define, and characterize Wounded Warrior pain issues throughout the care continuum, from the battlefield to MTFs.
Develop an electronic pain order set to assist health care providers in selecting evidence-based, individually tailored pain management plans.
Standardize medical equipment, personnel support, and training across the continuum of pain care.
Leverage advances in regional anesthesia techniques by integrating the data through an existing, sanctioned joint tracking data system.
Identify substance abuse patients in Warrior Transition Units by embedding the necessary resources to develop and implement a coordinated care and monitoring plan.
Mitigate the risk of prescription drug abuse and dependence in pain patients, with a focus on those receiving controlled substances for the treatment of chronic pain.
Develop collaborative pain research strategies that advance Warrior pain care and rapidly translate effective findings into practice.
Improve military pain research strategic communications.
Standardize the practice of pain medicine with pain management clinical practice and clinical management guidelines.

Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence
Incorporate integrative and alternative therapeutic modalities into a patient centered plan of care.
Leverage embedded osteopathic and physical therapy resources in the provision of manipulation therapies for musculoskeletal pain.
Integrate pain management into primary care, consistent with the Patient Centered Medical Home Model.
Adopt the VHA Stepped Care Model to ensure timely access to collaborative care, reduce pain and suffering, and improve quality of life for Warriors and their Families.
Integrate the prevention, early identification, and treatment of injuries as a component of the comprehensive pain management strategy.

Focus on the Warrior and Family - Sustaining the Force
Implement a drug abuse assessment strategy to ensure the efficacy of pain treatment and reduce aberrant behavior, abuse and addiction with opioids.
Provide appropriate pain management and clinical pharmacy oversight in Warrior Transition Units.
Collaborate with the Warrior Transition Command to revise the satisfaction survey to incorporate pain metrics.

Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention
Transform the pain curriculum at all levels of medical education and care delivery.
Integrate TF recommendations and STRATCOM with other related DoD and VHA programs.
Develop a pain management education plan that addresses the full spectrum of stakeholders and issues.
Establish enterprise-wide tiered pain management requirements to standardize patient care services.
Establish interdisciplinary pain management services to oversee optimum patient-centered, integrated pain care.
Develop requirements for Service pain consultants to reflect an interdisciplinary, integrative approach to pain management.
Establish an effective pain management advisory board for DoD and VHA.

TASK FORCE REPORT

I. PRELUDE TO THE PAIN MANAGEMENT TASK FORCE

In May 2008 the Health Policy and Services (HP&S) Proponency Office for Rehabilitation and Reintegration (PR&R) at Office of The Army Surgeon General (OTSG) began an examination of "Pain" as a distinctive issue for the U.S. Army Medical Command (MEDCOM). Around the same time, Congress proposed a "Military Pain Care Act" in the House and Senate versions of the National Defense Authorization Act (NDAA) for 2009. The legislative language included an assessment that stated:

"Comprehensive pain care is not consistently provided on a uniform basis throughout the systems to all patients in need of such care."

Although the Military Pain Care Act was not included in the NDAA for 2009, the Services were informed by Congress that the issue would be revisited in the NDAA for 2010. Subsequently, PR&R formed the MEDCOM Pain Management Work Group, consisting of local military pain management specialists from Army, Navy and Air Force, as well as a few OTSG staff officers. The group concluded that MEDCOM's pain management strategy was focused on complying with the Joint Commission (JC) pain standards. Although this was a worthy objective and MEDCOM appeared to be successful in meeting the JC standards for pain management, the work group was convinced that this goal was not sufficiently ambitious.

During a PR&R-sponsored strategic summit in December 2008, participants shared information about local pain care initiatives, including the Walter Reed-based Military Advanced Regional Anesthesia & Analgesia (MARAA) program that focuses primarily on the analysis of:

- Acute pain management techniques for the battlefield, and ways to make improvements.
- Pain management clinics that utilize a wide variety of integrated medicine approaches.
- The Veterans Administration's (VA) very mature pain management initiative.

At the 2009 Army Family Action Plan (AFAP) Conference, one of the four new medical issues presented to Army Senior leadership was "overmedication of Service Members and Families." Senior leaders at the MEDCOM Behavioral Health Summit singled out pain management as a priority for the organization. Several months later, the Army Suicide Prevention Task Force (ASPTF) tasked MEDCOM to develop recommendations to provide alternate approaches to pain management. The ASPTF concluded there was a possible overreliance on pain management medications, while certain complementary approaches for pain management were being underutilized. Although the Pain Management Work Group members concurred with the need to expand available treatment modalities, they were also convinced that no new approach would have the desired effect unless it was part of a comprehensive pain management strategy for MEDCOM.

Despite some successes, such as establishing a requirement for a Pain Consultant to The Surgeon General (TSG) and increased recognition of the ongoing efforts of many local pain management champions around MEDCOM, there continued to be insufficient progress toward the development of an effective comprehensive pain management strategy. The Pain Management Work Group determined that:

- Significant improvement in pain management would require a course correction for the organization.
- Pain management would need to be redefined for MEDCOM.
- MEDCOM would require a reorientation and an updated approach to a new definition of pain management.

The PR&R and HP&S leadership supported the assessment that an increased amount of command attention and resources would be required to develop and implement an effective strategy for an organization as large as MEDCOM. Following a briefing from the MEDCOM Chief of Staff, TSG elected to charter a Task Force (TF) to address the pain management challenge under his command.

II. TASK FORCE ORGANIZATION AND LIMITATIONS

Charter

Army Surgeon General LTG Eric B. Schoomaker established the Pain Management Task Force in August 2009 to make recommendations for improving clinical, administrative, and research processes for the provision of pain management care and services at MEDCOM facilities. The primary objective of the TF was to develop a template for a MEDCOM comprehensive pain management strategy that is holistic, multidisciplinary, and multimodal in its approach, utilizes state of the art/science modalities and technologies, and provides optimal quality of life for Soldiers and other patients with acute and chronic pain. A copy of the signed Charter is attached as Appendix C.

LTG Schoomaker appointed BG Richard Thomas, Assistant Surgeon General for Force Projection, as the TF Chairperson and later appointed the remainder of MEDCOM TF members, ensuring representation from the continuum of clinical specialties involved in pain management.

Because pain management challenges are not unique to MEDCOM, and a joint solution is required to ensure a uniform continuum of care is provided for Warriors and other Beneficiaries, TSG invited the Assistant Secretary of the Army for Manpower and Reserve Affairs (M&RA); Acting Under Secretary for Health for the Veterans Health Administration (VHA); Surgeons General of the Air Force and Navy; Deputy Director, TRICARE Management Activity (TMA); and United States Army Reserve (USAR) and United States Army National Guard (USNG) to nominate representatives for the TF. All of these organizations nominated individuals who were subsequently appointed to the Task Force.

Structure and Member Selection

Because relieving pain and suffering is an objective that is organic to all specialties across the health care continuum, there was an extensive list of stakeholders to be considered for inclusion on the TF. MEDCOM Regional Medical Commands submitted nominations for the TF with the understanding that TF activities would require an estimated 25% of representatives' duty time. The TF Chairperson selected the number of members as well as the cross section of specialties required to adequately represent this complex issue, while ensuring a manageable TF size. The TF member list follows in Figure 1.

Chairperson BG Thomas requested that those specialties not specifically represented on the Task Force be provided the opportunity to offer feedback on the TF recommendations prior to release of the Final TF Report. Their feedback has been solicited and integrated, as directed. A list of the medical specialties and stakeholders is attached as Appendix D.

Figure 1: Task Force Member List

Role	Person	Organization
Chairperson	BG Richard. W. Thomas	Army ASG, (FP)
Senior Medical Officer	COL (b) (6) MC	AFRRI
Acute Pain: Anesthesia	COL (b) (6) MC	MEDCOM-WRAMC
Chronic Pain: Anesthesia	MAJ (b) (6) MC	MEDCOM-WRAMC
Behavioral Health (Addiction)	COL (b) (6) MC	MEDCOM-GAHC
Pharmacy	LTC (b) (6) MS	MEDCOM-CRDAMC
Primary Care	(b) (6) PA, Pharm	MEDCOM-MAMC
PM&R (Integrative Medicine)	COL (b) (6) MC	MEDCOM-WBAMC
Research	Dr (b) (6) COL (Ret)	MRMC
IM IT: Primary Care	LTC (b) (6) MC	OTSG
Physical Medicine and Rehab	MAJ (b) (6) MC	OTSG
WTC: Primary Care	COL (b) (6) AN	WTC
Reserve Component: Primary Care	MAJ (b) (6) SP	ARNG
Orthopedic Surgeon	COL (b) (6) MC	USAR
Nursing	LTC (P) (b) (6) AN	M&RA
Primary Care	Dr. (b) (6) COL (Ret)	M&RA
TF Operations Specialist	(b) (6)	M&RA
Pain Management: Anesthesia	CDR (b) (6) MC	NAVY
Pain Management: Anesthesia	Maj. (b) (6) MC	AIR FORCE
TMA: Primary Care	CDR (b) (6) MC	TMA
VHA: Pain Medicine	Dr. (b) (6) MD	Veterans Health Administration
TF Chief of Staff: Nursing	LTC (P) (b) (6) AN	OTSG

Methodology

The Task Force conducted its review and analysis utilizing site visits, interviews with clinical subject matter experts and medical staff, and data collection through Regional Medical Commands, as well as through a review of medical literature, and policies and regulations of MEDCOM and the Department of Defense (DoD).

The large amount of information collected during the TF operations was managed through a Web portal developed on Army Knowledge Online (AKO). Access to the AKO Web portal was limited to TF members and select invited guests. Capabilities of the Web portal included document sharing, editing, and scheduling, as well as an extensive library of pain-related information links, news stories, medical literature, and educational materials.

The TF focused on developing actionable information to meet the major deliverables identified in the Charter, including the following:

1. Assessment of current pain management clinical and administrative processes, capabilities, best practices, and research;
2. Identification of safe and effective complementary and alternative approaches to pain management; and
3. Recommendations for improvements to clinical and administrative processes, capabilities, best practices, and research.

Task Force Activities

Data call

The first activity of the Task Force was a pain management data call sent to MEDCOM Military Treatment Facilities (MTFs). Regional Medical Centers (RMCs) responded with a 100% return rate, providing the TF with qualitative baseline summaries of MTF pain management activities, initiatives, resources and perceived deficiencies. This data provided the TF visibility of locations with unique approaches to pain care and the identity of local champions. Information from the data call helped further focus TF areas of exploration and analysis.

The data revealed a wide variation in approaches to treating acute and chronic pain across MEDCOM, specifically in coordination, collaboration, standardized measurement, tracking, and resource availability. MTFs of similar size and mission reported significant variations in pain management structure, staffing and available treatment modalities. Many promising local initiatives were Unfinanced Requirements (UFR). There were neither standards for patient-centered, outcomes-based care nor actionable pain metrics across the enterprise. In summary, there was no common understanding of pain management responsibilities, approaches or resourcing across commands. A copy of the MTF distribution list and data call template can be found in Appendix E.

Meetings

The Pain Management Task Force held its first meeting 24-27 August 2009. In addition to TF Chairperson BG Thomas, and the appointed members of the TF, attendees included:

- (b) (6) ASA (M&RA)
- (b) (6) Acting DASA-MHA
- RADM Thomas J. McGinnis, TMA
- BG (Ret) Stephen Xenakis, M.D.

The meeting also included invited representatives from:

- MEDCOM
- Warrior Transition Command (WTC)
- Headquarters Department of the Army (HQDA)
- Defense Centers of Excellence (DCoE)
- Veterans Health Administration (VHA)

The first day consisted of an orientation to the Pain Management Task Force goals followed by presentations from MEDCOM, Army, DoD, and VHA programs and initiatives. These briefings were organized to:

- Educate the TF membership about the wide variety of ongoing initiatives related to the TF mission;
- Educate the representatives on initiatives and programs related to TF objectives; and
- Initiate collaboration and communication among TF participants to ensure activities complement existing efforts.

The second day TF members were divided into three facilitated breakout sessions focused on identifying Policy and Performance Management, Service Delivery, Warriors in Transition, and Program Integration issues related to pain management. The TF focused on these tasks in its initial evaluation of MEDCOM pain management and began to develop a comprehensive pain management strategy. TF members decided to invite representatives from Air Force (USAF), Navy (USN), and Army Guard and Reserve to ensure full representation.

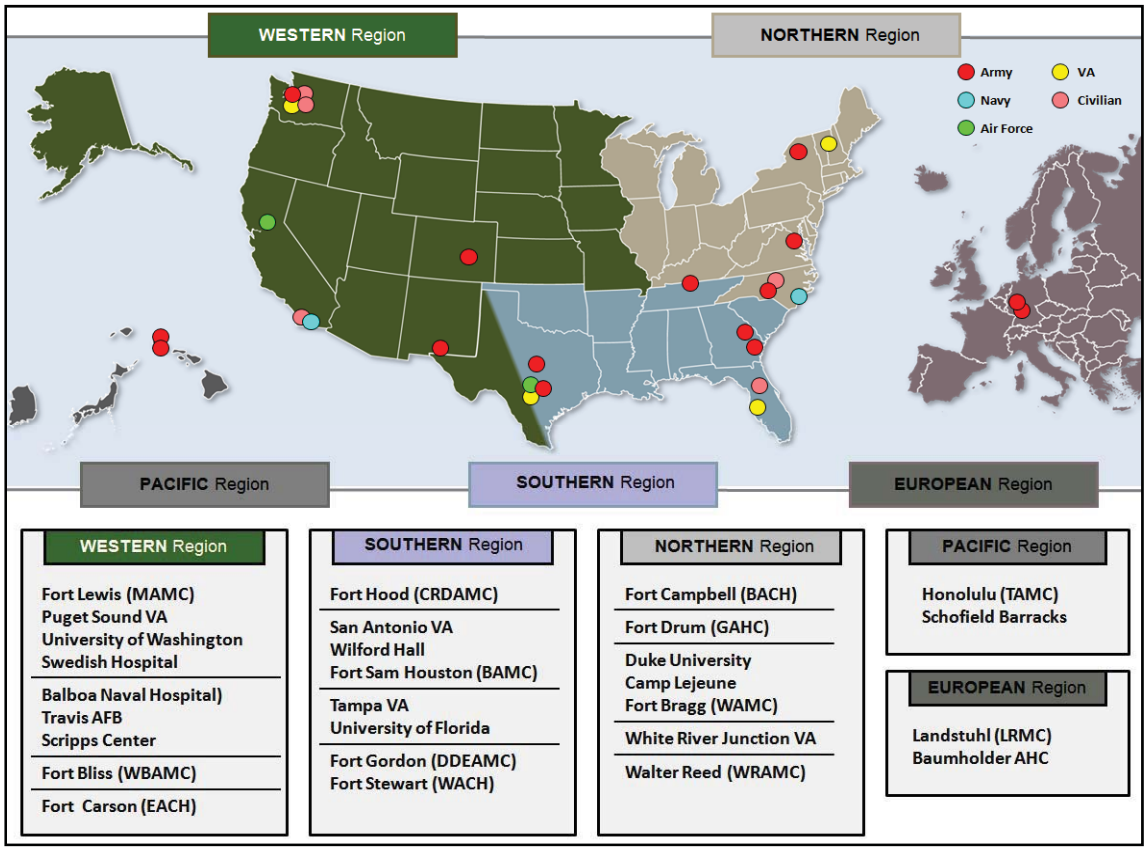
Following the initial meeting, the TF held monthly in-person meetings and weekly or biweekly telephone conferences to provide updates, conduct issue discussions, and coordinate future TF activities. Additionally, ad hoc meetings were held among TF members while working on their assigned issues.

Site Visits

The Task Force conducted 28 site visits from October 2009 through January 2010. The TF visited Army, Navy, Air Force, and VA MEDCENS, MEDDACS and Health Clinics as well as civilian facilities, which were chosen based on their reputations for innovative and state of the art approaches to pain medicine. Civilian facilities outside of MEDCOM were selected based on input from TF representatives.

The TF developed a standardized site visit template that was used to conduct interviews and report findings on the site visits (Appendix F). Interview questions asked leadership and staff to assess pain management capabilities, strengths, weaknesses, and best practices at their respective facilities. The TF found a variety of best practices and confirmed the wide variation in existing practices and available resources, further substantiating information provided through the MTF data call. Findings from the site visits, and other activities of the Task Force, are presented in this Task Force Report.

Figure 2: Task Force Site Visit Map



Limitations and Caveats for the TF Report

The Army Surgeon General chartered the Army Pain Management Task Force to evaluate MEDCOM pain management, and although the TF membership and charter were naturally "Army-centric," The Surgeon General recognized the importance of including Navy, Air Force, and Veterans Health Administration in this effort. At the start of the process, all TF members concluded that achieving significant pain management improvements in their respective organizations would require developing recommendations that could be applied to a larger DoD and VHA approach to pain care. As such, all recommendations in this report were developed with the intent of being part of a DoD and VHA comprehensive pain management strategy.

Representations in this TF Report were made as part of the TF mandate to provide recommendations regarding the DoD and VHA programs, initiatives, and projects. The Task Force understands that the Services and the Veteran's Health Administration, while having representation on the TF, have not had the opportunity to officially review and staff the recommendations within their organizations.

While the TF Report appears to focus on the inadequacies of pain medicine in the military and VHA health care systems, there was no intention to leave an impression that standards of care are not currently being met. In fact, the DoD and VA facilities continue to deliver exceptional health care within accepted standards of care. During the site visits and interviews, the TF identified numerous best practices for pain management that were later used to develop the recommendations in this report. The TF members determined that there was both a need and an opportunity to push the MHS and VHA beyond meeting the current standards of care.

The Pain Task Force conducted its evaluation and analysis over the course of six months. With the exception of scheduled monthly meetings and site visits, the appointed members continued working at their regularly assigned places of duty and positions. The Task Force leadership continually balanced the desire to leverage the synergy of gathering TF members with the competing reality that these were leaders in military medicine with clinical responsibilities.

Lastly, with the limited time available, the Task Force was not able to fully evaluate and make specific recommendations for Pediatric and Palliative Care pain management. The consensus from the Task Force members was that a thorough evaluation of these areas would require further expertise and time, neither of which were available to the TF.

III. PAIN MANAGEMENT OVERVIEW

Introduction

Treating pain is one of medicine's oldest and most fundamental responsibilities. Yet modern medicine continues to be challenged in its efforts to understand pain mechanisms and to relieve pain and suffering. Pain is an enigmatic issue that places significant burdens on patients, families, medical providers, and employers.

Pain is the most frequent reason patients seek physician care in the United States and it affects more Americans than diabetes, heart disease and cancer combined (Centers for Disease Control and Prevention and American Academy of Pain Medicine). When including health care expenses, lost income, and lost productivity, the annual cost of chronic pain in the U.S. is estimated at $100 billion (National Institutes for Health). Back pain alone is the leading cause of disability in Americans under 45 years of age.

The variability in pain management practice throughout medicine is partially due to the lack of a congruent pain curriculum in the academic preparation of various medical professionals. The topic of pain management is often poorly presented and inadequately developed in the curricula of many U.S. medical, nursing, pharmacy, and other medical professional schools, as well as in their respective continuing education.

A medical provider's understanding and approach to pain management is unique and variable. It is significantly influenced by academic medical training, currency of pain curriculum, medical mentors, cultural beliefs, and personal experiences with pain. Considerable variation in the management of pain currently exists also, in part, due to a lack of clear ownership of pain medicine by any one medical specialty. This has resulted in medical turf-wars as diverse specialties battle for reimbursement and workload credit. The failure to adequately address pain in the health care systems continues to result in unnecessary suffering, exacerbation of other medical conditions and huge financial and personnel costs.

According to the American Academy of Pain Medicine, "pain medicine" is a relatively new medical specialty that is evolving in conjunction with advances in pharmacology and interventional procedures. Its place in the medical hierarchy is still developing. There is much variability in what constitutes a "Pain Specialist" or "Pain Clinic." This creates uncertainty for patients and providers. The perception of many patients and providers is that pain management specialists fall within one of two categories: intervention-centered (e.g., needles) or medication-centered (e.g., pills). Neither of these unitary approaches to pain management completely meets the needs of patients, who often present complicated causes and reasons for their pain. Therefore, a comprehensive and integrated approach to pain management across several medical specialties is required.

Although there are many treatment modalities for pain management, one of the major components for the treatment of pain, whether in primary care or by "pain specialists," continues to be the use of Over-the-Counter (OTC) and prescription medications. Using medications to treat pain is appropriate, required, and often effective. In some cases, an increased reliance on prescription medications for pain treatment appears to be influenced by the fact that most pain medications are relatively inexpensive, patients readily accept their use, and they require minimum time expenditure on behalf of the provider and patient. The possible overreliance on medications to treat pain has other unintended consequences, however, such as an increase in prescription medication abuse and diversion throughout the United States. According to the Office of National Drug Policy, prescription opioid analgesics are the most commonly abused prescription drugs in the U.S., with the highest rates of abuse occurring among those between the ages of 18 and 25 (Wilson, 2006). These medications are often diverted from family members or friends and are viewed as "legal," less shameful to use, and safer than illegal drugs (NIDA, 2008).

For patients seeking a treatment plan that includes more than just medication, Complementary Alternative Medicine (CAM) is gaining popularity, though this has yet to result in a parallel increase in the acceptance and use of these complementary modalities within traditional medicine. There is a wide range of these therapies and treatments, such as acupuncture and yoga therapy, that have proven valuable in reducing an overreliance on use of medications to treat pain. There are many reasons individuals may seek the option to use CAM, not the least of which is the failure of current treatment to relieve their pain. Current research indicates that part of the appeal of CAM includes the opportunity for greater personal involvement in health maintenance, holistic health beliefs and, for those with chronic conditions, an active coping mechanism (Bishop, Yardley and Lewith, 2007; Sollner et al., 2000).

Understanding that pain is not just a symptom of disease but at times, is a disease process in itself, is a fundamental change occurring in modern medicine, explaining the new emphasis on effective pain control. Regardless of the treatment setting, inadequate acute pain control is associated with a myriad of physiologic changes that can significantly increase patient morbidity and possibly mortality (Dubois, 2009). Evidence suggests that untreated or poorly treated acute pain, and the pro-inflammatory and immunosuppressive responses associated with it, may result in deleterious health effects for months or even years after the initial onset of pain (Meiler, 2006). Pain is a disease state of the nervous system and deserves the same management attention given to any other disease states.

Pain in MEDCOM, MHS, and VHA

The Military Health System's (MHS) challenges with pain management are very similar to those faced by other medical systems. However, there are some unique issues faced by the MHS because of its distinctive mission, structure and patient population.

The MHS's mission to take care of Service Members and their Families extends beyond the usual relationship between a health care system and its patients. Providing world-class medical care is always an imperative, but during a time of war, its importance is heightened. The nation expects and demands that the MHS provide the highest level of care possible for those carrying the heaviest burdens. Doing any less than this is unacceptable to the military leadership, Congress, and the American people.

The likelihood that patients have their medical care coordinated by a single Primary Care Manager (PCM) remains very low in the MEDCOM. The transient nature of the military population, including both patients and providers, creates extraordinary challenges to providing continuity of care, something very important to pain management. Ongoing access to a PCM is often limited because of provider deployments, Temporary Duty (TDY) for training, or Permanent Change of Station (PCS) moves. Patients are also subject to many of these same variables. The inability to provide continuity of care is extremely problematic when attempting to develop and implement long-term treatment plans for pain management and other chronic medical conditions. This often exposes patients to duplicative appointments, laboratory tests, and medical procedures, along with inconsistent treatment approaches that can cause confusion, frustration and in some cases unnecessary suffering.

Modern military medicine is unparalleled in its ability to save Wounded Warriors. Body armor and improved delivery of battlefield medicine have increased patient survival from wounds that were fatal in previous conflicts. This, however, has resulted in pain management challenges for combat polytrauma patients. One such challenge is the need to provide pain control for potentially medically unstable Warriors immediately following injury and then continuously during transport to secondary and tertiary care facilities. Other challenges include the management of comorbid conditions, such as post concussive syndrome, mild-Traumatic Brain Injury (TBI) and PTSD. These latter conditions require integrated approaches to clinical care that cross traditional medical specialties, not all of which are universally available across the MHS.

Overall, both MEDCOM and MHS lack a comprehensive pain management strategy, exacerbating several patient-provider continuity challenges. The MEDCOM and MHS are responsible for patient care throughout the world.

However, no widely disseminated pain management philosophy is currently in place and specialty care services, personnel, and treatment modalities are neither standardized nor predictable across MTFs. The MEDCOM and MHS have no published standards for pain management structure, capabilities, or personnel for their clinics, hospitals, or medical centers.

As a result, MEDCOM and MHS pain management initiatives are fragmented, driven by local champions and subject to retirements, changes of command, and annual budget priorities for their continued existence. A PCS move for a Service or Family Member can result in loss of access to certain treatment modalities that have proven successful for pain management. Losing access to multimodal treatment options frequently results in an overreliance on medications, associated complications, decreased quality of life and, eventually unnecessary burdens on both the health care system and Families.

Another complication is that the MHS care for Warriors is rooted in a military culture that praises selflessness, toughness, and a willingness to accept pain. "No pain, no gain" is a philosophy embraced by much of the Active Duty force and their leadership. This attitude often results in delays in seeking treatment as Soldiers, Sailors, Airmen, and Marines attempt to work through their pain and "tough it out." This frequently results in relatively minor acute issues becoming harder-to-manage chronic conditions. Additionally, the military faces complex pain management challenges during a time of war when the patient population is sustaining levels of physical and emotional trauma unparalleled in civilian medicine.

"No pain, no gain" is a philosophy embraced by much of the Active Duty force and their leadership and this frequently results in relatively minor acute issues becoming harder-to-manage chronic conditions

Veterans Health Administration Pain Management Initiative

The Veterans Health Administration initiated a national pain strategy in 1998 in an effort to develop a system-wide approach to pain management, with an ultimate goal of reducing suffering among Veterans with acute and chronic pain. The strategy aimed to establish consistent pain management understanding and expectations among the patients, providers, and support staff in a medical system that cares for more than 5.8 Million patients in 153 Medical Centers, 134 Community Living Centers (NH Care), 6 independent outpatient clinics, and 783 Community Based Outpatient Clinics across the U.S. "Pain as the 5th Vital Sign" was promoted in all inpatient and outpatient clinical settings in order to ensure consistency of pain assessments throughout the VHA.

One of the elements the plan addressed was the complexity of chronic pain management, which is often beyond the expertise of a single practitioner, especially for patients whose pain problems are complicated by PTSD, combat injuries, and substance abuse. Primary care providers' ability to effectively deal with pain management challenges requires additional education and access to resources, such as pain medicine specialists and behavioral specialists, as well as interdisciplinary pain clinics in order to effectively evaluate and manage these complex patients.

The VHA pain management strategy was strengthened in October 2009 with the publication of VHA Directive 2009-053 for Pain Management (Appendix B-9). This directive provides policy and implementation procedures for the improvement of pain management consistent with the VHA National Pain Management Strategy and in compliance with generally accepted pain management standards of care. It also defined the "Stepped Care" model for pain management.

This model serves as the framework for developing organizational capabilities that support timely access to providers, treatment modalities, and specialty referrals commensurate with patient pain management needs. Stepped Care balances a focus on managing pain as early as possible in a primary care setting while providing access to pain medicine specialty consultation, and interdisciplinary and multimodal pain management resources when required. It also emphasizes optimal pain control, improved function, and increased quality of life.

Patients and Families are encouraged to be active participants in their pain management plans of care. Lastly, the national strategy promotes standardized education and training of medical staff appropriate to their clinical settings and role.

Pain Care Legislation

Section 711 of the National Defense Authorization Act for Fiscal Year 2010 (FY10 NDAA) tasked the Secretary of Defense to develop and implement a comprehensive policy on pain management by the MHS, no later than March 31, 2011. This policy will cover:

1. The management of acute and chronic pain.
2. The standard of care for pain management to be used throughout the Department of Defense.
3. The consistent application of pain assessments throughout the Department of Defense.
4. The assurance of prompt and appropriate pain care treatment and management by the Department when medically necessary.
5. 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.
6. Programs of pain care education and training for health care personnel of the Department of Defense.
7. Programs of patient education for Members suffering from acute or chronic pain and their Families.

The Secretary of Defense was also directed to revise the policy on a periodic basis in accordance with experience and evolving best practice guidelines. Not later than 180 days after the implementation date of the policy and on October 1 each year thereafter through 2018, the Secretary shall submit to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives a report on the policy that will include:

1. A description of the policy implemented, and any revisions to such policy.
2. 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.
3. An assessment of the adequacy of Department pain management services based on a current survey of patients managed in Department clinics.
4. 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.
5. An assessment of the training provided to Department health care personnel with respect to the diagnosis, treatment, and management of acute and chronic pain.
6. An assessment of the pain care education programs of the Department of Defense.
7. An assessment of the dissemination of information on pain management to Beneficiaries enrolled in the military health care system.

The Pain Task Force was nearly half-way into its evaluation of pain management in the MEDCOM, MHS, and VHA when this legislation was signed in October 2009. At that time, a comparison between the NDAA language and the Task Force's charter, ongoing analysis, and the pain management strategy under development validated the current direction of the Task Force.

IV. FINDINGS AND RECOMMENDATIONS

4.1 Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management

One of the major observations realized during the Pain Task Force site visits was a general feeling among medical providers that they were ill-prepared to manage the full continuum of pain management responsibilities for their patients. With the exception of those with advanced training in pain management, providers almost universally communicated that they did not have the necessary training, time, support staff, modalities, or available consultative services in their "pain toolkit". Pain care tools, clinical orientation, and capabilities varied greatly between MTFs, even those with a similar size and mission. There was also significant variation in the orientation, documentation, and understanding of pain management responsibilities within individual MTFs. It was difficult to find consistency in either the MTF capabilities or the expectations of their clinical staffs.

Although most primary care providers felt they could adequately provide pain care for their acute pain patients, most would qualify this statement by adding that the available modalities were largely limited to medication and possibly Physical Therapy (PT). MTFs with pain management specialty care are frequently only able to provide that care to small segments of the facilities' patients, many times for Warriors in Transition (WT) or Active Duty only. Patients unable to access specialty care at the MTFs are referred to network care of varying perceived quality and value.

It is clear that any first step in improving pain care should consist of developing a system of tools and capabilities for provider "toolkits." Developing and deploying a uniform approach to pain care that includes common taxonomy, tools, technologies, medical capabilities, and data collection across DoD and VHA will have wide appeal and the potential to make significant improvements in the practice of pain medicine. The tools, education and pain structure will create a common language, standardize measurement of pain, and facilitate enhanced data collection, treatment outcomes reporting and analysis.

After establishing each Service and MTF baseline, the pain management infrastructure and tools must be integrated into the medical practice, pain care must be optimized across the continuum, and a valid and strategically informed research agenda must be developed and resourced. The MHS should build on lessons learned from the VHA pain initiative. Finally, initial priorities should focus on Wounded Warriors and their Families by ensuring that future pilot projects target areas with large WT and Veteran populations.

Standards and System Improvements

Figure 3: A Summary of Categories for Standards and System Improvements

Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management	
Standards and System Improvements	• Standardized Pain Taxonomy • Standardized Pain Assessment Tool • Pain Management Survey • Nursing Role in Pain Management • Standardized Credentialing • Productivity Measures • DoD and VHA Pain Care Standardization • DoD and VHA Joint Formulary

4.1.1 Standardized Pain Taxonomy

Objective: Establish common pain taxonomy across the DoD and VHA.

The Joint Commission's 2001 pain management standards state that every patient has a right to have their pain assessed and treated (Joint Commission Web site). Any effective pain assessment is predicated on a clinician's understanding of "pain" and pain-related terms, yet there is no standardized DoD, much less DoD and VHA, pain taxonomy to use as a foundation for this assessment. Even among clinical experts in the field of pain medicine, it is challenging to come to a consensus on the exact definition of pain, let alone the many subsets and types of pain. A common pain vocabulary is fundamental to the creation and proliferation of a common understanding and approach to pain management among providers and patients throughout DoD and VHA.

Figure 4: Fundamental Pain Words

Pain	Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. Pain is always subjective. Pain can be acute or chronic.
Acute Pain	Acute pain is a normal physiologic response, usually time-limited, to a noxious stimulus that enhances survival by warning the individual of impending or potential injury or progression of disease. If the noxious stimulus persists, changes in the peripheral tissues and both the central and peripheral nervous systems can lead to sensitization that worsens and prolongs the pain from noxious stimulation. Appropriate management of acute pain may prevent the onset of the pathophysiologic processes that change the spinal cord and brain and lead to chronic pain.
Chronic Pain	Chronic pain continues beyond the normal time expected for healing and is associated with the onset of pathophysiologic changes in the central nervous system that may adversely affect an individual's emotional and physical well-being, cognition, level of function, and quality of life. Chronic pain serves no apparent useful purpose for the individual and may be diagnostically and therapeutically approached as a chronic disease process.

The military and VHA deliver care around the world to a population of providers and patients that is constantly on the move. Standardization across the DoD and VHA is necessary to ensure continuity of care across the continuum, as well as a common understanding and framework for providers and patients. Standardization allows for improved Provider-Provider and Patient-Provider communication, better interpretation and implementation of practice guidelines, and higher quality of data.

As an example, the Traumatic Brain Injury (TBI) Task Force developed a list of DoD and VHA TBI related terms and definitions. This proved to be a key step for further development of DoD and VHA benefits, care coordination, and transition between the variety of DoD and VHA health care settings, from in-theater to stateside. Furthermore, it helped establish and synchronize a uniform language for TBI-related research coming from both the DoD and VHA.

A common pain taxonomy must be defined and integrated into the organization. The TF reached consensus on a list of definitions, including three fundamental words – pain, acute pain, and chronic pain – in the pain taxonomy. These definitions were developed using accepted resources (International Association for the Study of Pain - IASP) and are recommended for integration into MHS policies and regulations.

The entire list of pain taxonomy is included in Appendix B-1. The list should be distributed to all DoD and VHA health care sites, posted internally, and made available to providers and patients online. A readily available list of standardized pain terms will not only enhance user satisfaction but also promote uniformity when discussing pain care throughout the DoD and VHA.

Recommendation 4.1.1.1
Establish a uniform understanding and use of key pain-related terms in the vocabulary of the DoD and VHA health care systems.

Recommendation 4.1.1.2
Identify a process to Review, Revise, and Approve DoD and VHA definitions for pain, acute pain, and chronic pain.

Recommendation 4.1.1.3
Integrate DoD and VHA definitions for pain, acute pain, and chronic pain into existing training, policies and regulations, and standards throughout DoD and VHA.

4.1.2 Standardized Pain Assessment Tool

Objective: Describe a common language DoD and VHA pain assessment tool with visual cues and a common set of measurement questions.

The most commonly used tool to measure pain in both civilian and military medicine settings is an 11-point, 0-10 Visual Analog Scale (VAS). During site visits, the TF received a great deal of negative feedback regarding the use and perceived value of the VAS Pain Scale. A majority of the doctors, nurses, physical therapists, medics and other clinicians who were interviewed reported similar negative feelings about the VAS Pain Scale, including:

- The VAS Pain Scale is inconsistently administered.
- The VAS Pain Scale is regarded as very subjective and had no functional anchors.
- The VAS Pain Scale assessments recorded in patient medical records are considered to have little value by clinicians at all levels.

These findings were of great concern to the Task Force. In the MEDCOM alone, there are approximately 42,000 outpatient visits per day, the majority of which include a pain assessment (Army Medicine Web site). These pain

assessments are subsequently recorded in the patients' medical records. TF findings indicate that because of the noted VAS Pain Scale failings, this information is of little value and represents a missed opportunity to capture useful, consistent, and actionable information about a patient's pain. When factoring in the impact of these shortcomings across the rest of DoD, the imperative to improve and standardize this pain assessment is clear.

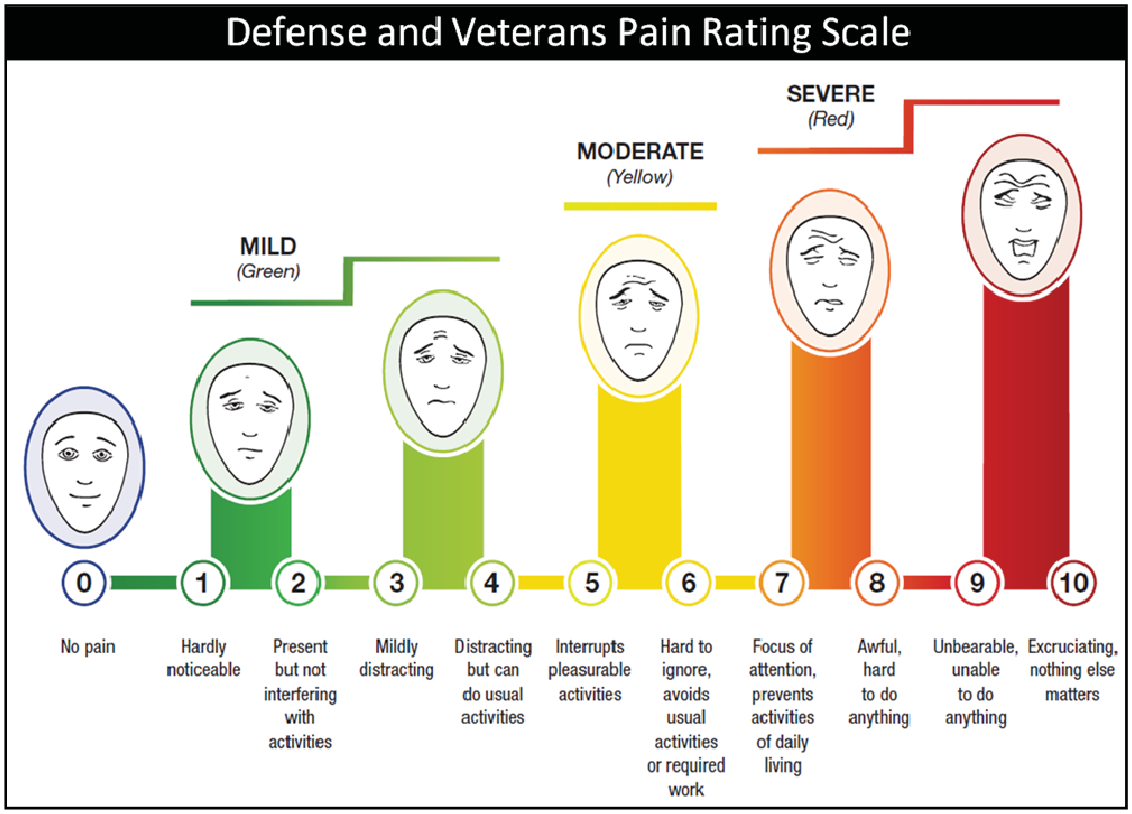
In the MEDCOM alone, there are approximately 42,000 outpatient visits per day, the majority of which include a pain assessment

The Pain Task Force determined that a new DoD and VHA Pain Assessment Tool was needed to obtain actionable information at every patient encounter across the MHS. The new Pain Assessment Tool must be:

1. Validated:
   A. Able to measure pain intensity, mood, stress, biopsychosocial impact, and functional impact;
2. Objective and useful in evaluating treatment effectiveness:
   A. Practical and adaptable to multiple clinical settings and scenarios throughout the continuum of care (e.g. battlefield, transport, combat support hospital, primary care, medical center, pain medicine specialty services);
   B. Easily adapted and integrated into DoD and VHA computer medical databases;
   C. Standardized into all levels of medical training across all roles of care (e.g. useful for the medic, the ward nurse, the primary care provider, the pain researcher, and the pain management specialist); and
3. Consistent with current validated pain research tools.

Using these attributes as a guide and pairing them with the best available pain scale research, the Task Force selected references and expert opinion, to develop a new Pain Assessment Tool for testing and refinement with the goal of achieving its widespread use in the DoD and VHA (Appendix B-2).

Figure 5: Defense and Veterans Pain Rating Scale



This new tool combines the validated 11-point pain scale used by clinical researchers with a simple green, yellow, and red scale suitable for combat medical conditions. Furthermore, this tool anchors each numeral on the 11-point scale with standardized '*experiential'* and '*functional'* language, greatly enhancing clarity for both patients and providers when discussing pain levels and treatment effectiveness throughout the care continuum.

The new Pain Assessment Tool requires additional resources, including:

- Linguistic and graphic support;
- AHLTA / VISTA / Essentris integration:
  - Enterprise-wide patient and provider re-education efforts in both DoD and VHA,
  - DoD and VHA multicenter research study to validate the tool (see Appendix B-2),
  - Establish metrics for training success and practice that are evaluated annually, driven by research from a central pain management advisory board, and used to update and continuously improve the Pain Assessment Tool.

The tool also includes four supplemental questions for clinicians at all levels to evaluate the biopsychosocial impact of pain. Questions include the impact of pain on general activity, mood, level of stress and sleep. These supplemental questions, when combined with the functionally anchored 11-point scale, will provide a potentially powerful clinical tool in evaluating a patient's pain, considering treatment goals, and establishing the most appropriate treatment plan.

Figure 6: Defense and Veterans Pain Supplemental Questions

Defense and Veterans Pain Supplemental Questions

For clinicians to evaluate the biopsychosocial impact of pain

1. Circle the one number that describes how, during the past 24 hours, pain has interfered with your General Activity:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

2. Circle the one number that describes how, during the past 24 hours, pain has affected your Mood:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

3. What is your Level Of Stress related to pain in the past 24 hours?

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

4. Circle the one number that describes how, during the past 24 hours, pain has affected your Sleep:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

The impact of this tool on patient care is likely to be very significant. By approving, validating, and implementing this tool, the DoD and VHA health care systems should improve both the quality and quantity of objective pain data in what is currently considered to be a mostly subjective and difficult to interpret part of medicine. This tool will impact every aspect of clinical medicine and increase the quality and consistency of pain evaluation and outcomes

measurement. The reduction in variability of pain evaluations should greatly enhance patient care and exceed the spirit and intent of the Joint Commission's 2001 pain standard.

The current lack of standardized pain assessments, pain data collection, and pain coding throughout DoD and VHA adversely impacts pain management along the entire care continuum and impedes the effort of military, VHA and civilian research to identify the most effective pain management strategies. As a result, DoD still does not possess large databases that would enable medicine, through large prospective blinded clinical trials, to test the effectiveness of many of the pain medicine interventions used routinely today, particularly the effectiveness of combined treatments. Without actionable data, it is more difficult to determine best practices or the most effective treatments for reducing specific types of acute and chronic pain. Any movement toward a common DoD and VHA pain strategy should begin with a common pain assessment and the eventual development of a de-identified data registry.

Recommendation 4.1.2.1
Review and approve the new DoD and VHA common Pain Assessment Tool validation plan.

Recommendation 4.1.2.2
Validate Pain Assessment Tool in DoD and VHA facilities.

Recommendation 4.1.2.3
Integrate the Pain Assessment Tool, upon validation, into training, clinical practice, and data collection of pain management in DoD and VHA.

4.1.3 Pain Management Survey

Objective: Establish a common baseline of pain care capabilities across DoD and VHA by creating a modified version of the 2009 VHA Pain Management Survey to distribute to all DoD MTFs.

It is very difficult to make accurate comparisons between MEDCOM MTF pain management capabilities. The MTF data call survey conducted by the Task Force at the start of its evaluation indicated that there was no common baseline for understanding pain management concepts, approaches, and capabilities. It is even more complicated to attempt to compare MTFs across DoD, and another level of complexity is added when making comparisons with the VHA. Collaborating on future pain management priorities and initiatives will require common assessments of pain management capabilities.

The VHA administered a pain management capability survey to 100% of its MTFs in 2009. The creation of a modified version of this survey for DoD facilities would leverage the data already collected by the VHA and standardize measurement across the DoD and VHA continuum, enabling the identification of best practices across care settings and identifying future research topics.

Representatives from each of the Services reviewed the VHA survey and assisted with revisions to make it more applicable to DoD, replacing VHA-specific data elements with DoD data elements. Each Service representative will be provided the opportunity to include Service-specific questions. This approach will help identify common capabilities across DoD and VHA and assist with the measurement of progress when implementing pain management strategies. Task Force-recommended definitions should be incorporated into the survey to ensure its future validity following implementation of TF recommendations on standardizing DoD and VHA orientation to pain.

Recommendation 4.1.3.1
Administer a modified VHA pain survey across DoD MTFs to establish a baseline of pain care capabilities.

Recommendation 4.1.3.2
Continue to periodically administer the survey to track improvements at DoD MTFs to ensure a standardized measurement of pain longitudinally and across organizations.

4.1.4 Nursing Role in Pain Management

Objective: Evaluate the utilization, potential roles, and certification requirements for Nurses in the DoD pain management strategy.

The American Nursing Association defines Nursing as: *"The protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations."*

Pain is the most frequently used nursing diagnosis in all delivery of care models

Nurses comprise the largest health care profession and have been the traditional bearers of the patient advocacy torch. Pain is the most frequently used nursing diagnosis in all delivery of care models, and the assessment and management of pain is significant to every professional registered nurse. Their unique qualifications and relationships with patients make nurses an essential component of any pain management strategy. Nurses provide hospitals and patients with a capable, professional workforce adept at measuring, monitoring, evaluating, and documenting pain interventions and outcomes.

Nursing staff interviewed during TF site visits included Registered Nurses, Licensed Practical Nurses, Nurse Practitioners, Advanced Practice Nurses, and Nursing Assistants. Their responses to the interview questions paralleled those from other health care professionals. The most common observation made by nurses concerned their inability to identify any rationale behind the variability in pain management practices among providers. Nurses are most often the ones responsible for assessing pain, administering pain medications, and communicating pain management issues to a patient's provider. They frequently expressed an inability to understand the underlying principles that would explain the lack of a standardized approach to pain care amongst providers. There were similar percentages of nurses concerned about the over- and under- medication of patients.

Pain is only one of many areas where the use of Nursing Case Management would be very appropriate and beneficial. Warrior Transition Unit (WTU) case managers have demonstrated their value in locations with integrated pain management teams. The Task Force recommendation to adapt a disease management approach to pain care will require a corresponding assessment of the impact on nursing education, staffing, and utilization. As with other advanced-practice nursing specialties, the scope of practice may be broadened to provide a wider approach to optimal care and outcomes in pain management, with increasing levels of education, certification, and licensure.

The MHS executes its health care mission with a combination of military and civilian nursing professionals, and they are present in virtually every patient care setting. A revision for the utilization of advanced-practice pain nurses, Clinical Nurse Specialists, Nurse Practitioners and in some cases, Certified Registered Nurse Anesthetists needs to be part of the DoD pain management strategy. The TF members concurred with the need to refer this issue to the Senior Nursing Executives in DoD and VHA for comments and recommendations on the expanded and redefined roles and utilization of nurses in pain management across the health care continuum. Additionally, these recommendations should be referred to the DoD multidisciplinary advisory board for evaluation and integration into the DoD pain management strategy.

Recommendation 4.1.4.1
Request that the Federal Nurse Advisory Board evaluate the impact of certified pain nurses on patient outcomes and satisfaction.

Recommendation 4.1.4.2
Request that the DoD and VHA Nurse Executives evaluate the role of certified pain nurses in patient care delivery (military and civilian).

Recommendation 4.1.4.3
Determine the future role and potential use of certified pain nurses across the care continuum.

Recommendation 4.1.4.4
Build the population of certified pain advanced-practice nurses (graduate education, board certification, short courses, and career field designation) to maximize the value and utilization of their critical skill sets.

Recommendation 4.1.4.5
Integrate approved TF recommendations into Core Nursing Competencies, Clinical Transition Program (CTP), and other Nursing training programs.

Recommendation 4.1.4.6
Utilize the DoD multidisciplinary pain management advisory board to evaluate and integrate recommendations from the Federal Nurse Advisory Board into the DoD pain management strategy.

4.1.5 Standardized Credentialing

Objective: Establish a process to standardize a Military Health System credentialing process for pain medicine.

The Task Force found that minimum training, certification, and skill requirements for providers delivering procedural pain care were not consistent between MTFs or across health care professions. Examples of procedural pain care include, but are not limited to, fluoroscopically-guided epidural steroid injections, fluoroscopically-guided invasive treatments of spinal arthritis, spinal manipulation, and acupuncture. The expansion of treatment modalities, to include integrative medicine approaches to pain management, necessitate an MHS-wide process for standardizing the credentialing for these modalities. Establishing MHS-wide credentialing guidance for these treatment modalities and providers would provide a uniform standard of quality across the MHS and eliminate the burden on local commands to develop these credentialing standards.

A credentialing document that features a three-tiered certification scheme is currently used in credentialing some physicians to match training and skill levels to the complexity and risk of approved procedures. This document or a system with similar detail should be used for all professionals offering procedural pain care, including physicians not currently credentialed under the tiered document. Training and skill of providers should be confirmed or measured.

Examples of measurement would include documented completion of an approved fellowship, Accreditation Council for Graduate Medical Education (ACGME) board certification, or experience and skill as confirmed by observation of a provider credentialed at that level or higher. Standards regarding minimum training, certification, skill requirements, and scope of practice for providers delivering procedural pain care should be consistent across the MHS and developed with assistance from both the physician and non-physician Subject Matter Experts (SMEs) for these areas, usually the Consultants to the Uniformed Service Surgeons General.

Support for the TF recommendations regarding expanded availability of multimodal and interdisciplinary pain care will require additional credentialing by MHS facilities. Standards need to be developed in order to ensure the growing number of acupuncturists, massage therapists, and other integrative medicine practitioners are safe, effective, and qualified to practice in hospitals and clinics.

It is impractical to place the burden on individual commands to develop credentialing criteria for this expanding number of integrative medicine practitioners and procedures. The MHS needs to develop standards for credentialing integrative medicine providers and procedures for use at local MTFs. This standardization would support the recommendations to decrease variation between MTFs and Services.

Recommendation 4.1.5.1
Use specialty consultants to determine procedures to standardize MHS pain credentialing.

Recommendation 4.1.5.2
Standardize minimum training, certification, skill requirements, and scope of practice requirements for providers delivering procedural pain care across MHS. Develop requirements with assistance from both physician and non-physician subject matter experts.

Recommendation 4.1.5.3
Consolidate specialty consultant recommendations into standard credentialing documents and approve DoD-wide.

4.1.6 Productivity Measures

Objective: Reexamine the use of productivity measures (Relative Value Units) in evaluating primary care.

A common contention among clinicians in the MHS is the perceived "disconnect" between what they are asked to do and how they are assessed on performance. Clinicians feel process-oriented measures of their "productivity" are not compatible with the highest quality of patient care espoused by leadership. In fact, the resource-based Relative Value Unit (RVU) is a reimbursement tool that does not consider outcomes. Clinicians are convinced that this process-based approach to productivity measurement is a barrier to the integrated, multimodal, interdisciplinary models that will yield the best outcomes in complex chronic diseases, such as chronic pain.

A common contention among clinicians in the MHS is the perceived "disconnect" between what they are asked to do and how they are assessed on performance

The barrier to quality presented by RVU-based productivity metrics is most visible in the primary care setting. RVU metrics reward high throughput of acute minor illnesses but punish the holistic approach needed to sort out the complex and nuanced needs of chronic disease patients, particularly chronic pain patients with biopsychosocial complexity, including comorbidities. The critical outcomes of quality chronic pain management – return to work; improved quality of life; satisfaction with care; decreased Emergency Room visits; decreased unscheduled admissions; decreased medication misuse, abuse, and diversion; decreased adverse domestic issues – play no role in assessing the quality and effectiveness of the MHS primary care practice. Moreover, an integrated team approach to chronic disease management in primary care that includes appropriately trained nurse case managers, behavioral health providers, and clinical pharmacologists generally fails to generate the RVUs necessary to justify their use of resources. For example, a group of clinicians acting as part of an integrated care team to evaluate a patient's treatment plan can only claim workload credit for one of the team members. This is a huge disincentive to providing integrated patient care.

Another area of RVU 'disconnect' is in pain medicine specialty practice. Selective integrated biopsychosocial rehabilitation, which has a comparatively strong evidence basis in terms of outcomes effectiveness amongst all treatments for chronic pain, is given little value, where as interventional procedures are accorded very high RVUs. Thus, pain medicine specialists and institutions are incentivized (consciously or unconsciously) to perform procedures while indirectly discouraged from using other effective clinical modalities. This will likely not change unless a greater emphasis is placed on outcomes.

One approach to fixing this issue is to de-emphasize the role of RVUs in favor of adopting outcomes-based metrics in assessing a clinical practice. Forward thinking commands within the MHS have already suspended the use of the RVU metric of productivity while transitioning to a patient-centered medical home model of delivering health care. Evidence-based models can be used to resource primary care practices and drive delivery of safe, integrated coordinated care to yield the best patient-oriented clinical outcomes.

The TF believes a patient-centric, outcome-based measure of productivity can decrease resource utilization and improve patient and provider satisfaction.

Recommendation 4.1.6.1
Establish patient-centric clinical outcome measures of productivity.

Recommendation 4.1.6.2
Modify the Relative Value Units metric to include a patient-centric outcome standard.

4.1.7 DoD and VHA Pain Care Standardization

Objective: Develop a patient-centric approach to recovery, rehabilitation, satisfaction, and pain control, with greater attention to opioid control and minimizing abuse.

Enhancing standardization of pain care between the DoD and VHA has the potential to revolutionize the way patients perceive and receive their health care. Pain permeates every discipline of medical care and is a complaint of many patients. There is currently a lack of coordination between DoD and VHA pain services at both the inpatient and outpatient levels of care. Better institutional patient coordination may lead to decreased medication use (particularly opioids) and transition to an effective pain treatment plan. The majority (>52%) of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) Service Members report experiencing a myriad of pain symptoms as they move between the DoD and VHA or retire into the VHA system for care (Office of Public Health and Environmental Hazards, 2010)

Presently there is no mechanism to communicate patient pain issues throughout the care continuum. An electronic pain record of care is essential to provide DoD and VHA providers with a common communication tool that would assist physicians in the care of patients during the transition from the DoD system into the VHA health care system. One possible solution in development is the Joint Regional Anesthesia and Analgesia Tracking System (JRAATS - see section 4.1.15). The JRAATS electronic pain record would provide DoD and VHA clinicians with a detailed pain management history of the patient while that patient was under the Federal health care system. This database would also provide a powerful tool to evaluate treatment trends and outcome measures.

One example of the existing disconnect involves DoD patients who have had to discontinue an effective regimen of acute regional anesthesia to maintain pain control prior to air evacuation to a VHA site. Instead of continuing the proven and effective treatment method, patients are often forced to rely on "as needed" IV morphine or short-acting oral opioids for the flight. It is difficult to gauge the onset of pain and the need for these medications during transfer.

Most patients end up taking higher doses of opioids than they need, when greater benefit would have been derived from continuing their peripheral pain catheters of local anesthetic.

Similarly, patients transitioning from one inpatient facility to another may be forced to change their oral medications because the new facility does not have the same medications available on formulary. This may cause an unnecessary wait time, resulting in an undue spike in pain. Then the patient must adapt to a different pain medication, resulting in pain, potential complications, and new side effects throughout the transition.

Finally, individuals transitioning from the outpatient DoD facility to the outpatient VHA upon retirement may have to wait for an examination prior to obtaining refills at the VHA. Once again, justification for a medication that is not on the VHA formulary may be required and the patient may experience unnecessary wait times, resulting in undue pain.

Differences in DoD and VHA formularies and pain management capabilities make the transition of these patients especially difficult from a pain perspective. Better discharge planning and care coordination would optimize the adjustment of pain medication regimens and outpatient recovery. An individual who has been medically retired from DoD may face special challenges, including inconsistencies in follow-ups, pain care coordination, management, transition, and prescription renewals.

Standardizing pain care between the DoD and VHA will require project management along with policy and process decisions coordinated through a central pain management advisory board, and must address:

- Coordinated discharge pain care planning for those patients with documented pain management issues, those with polypharmacy combinations requiring pharmacist consultation, and those identified as “at risk.” This is necessary for inpatient-to-inpatient transfers, inpatient-to-outpatient discharges, and outpatient-to-outpatient transfers. This will require case managers and better provider-to-provider communication.
- Establishing DoD and VHA joint formularies to maintain effective treatment plans during transitions to a new facility.
- Ensuring availability of successful therapies (physical therapy, occupational therapy, behavioral health, medication, regional anesthesia) at the new facility.
- Developing acute pain service capabilities at the Polytrauma VHA sites. This ensures that patients with effective regional pain control are able to air evacuate with their pain under control, enabling earlier transfers with significantly less patient anxiety.
- Establishing a pain medications transition policy for individuals on pain medications transitioning from Active Duty to Retired.

By implementing a standardized line of pain care for the DoD and VHA, patient rehabilitation, recovery, satisfaction, and pain control will likely be enhanced. Improved care standardization will lead to better opioid control and will minimize abuse. Improved care standardization will also lead to higher provider satisfaction.

Pilot projects should be established at DoD and VA facilities that share a high flow of Active Duty and Retirees, such as Tampa or Richmond and Walter Reed Army Medical Center (WRAMC), or Palo Alto and Balboa.

An outstanding example of policy changing to meet Warrior needs has already been developed. As a result of inadequate pain control during transfers, patients transitioning from inpatient DoD sites on the east coast to the Palo Alto VA Medical Center on the west coast now air evacuate through Travis Air Force Base. Based on patient and Family complaints about poor pain control throughout the transfer, and the difficulty regaining pain control upon arrival to the VHA, the patients are now required to spend the night at Travis AFB to regain and maintain pain control. These transfers are now coordinated via video teleconferences, phone calls, and emails. Since the change in policy, there have not been any serious complaints about pain care or management during transfer.

Recommendation 4.1.7.1
Establish a uniform DoD and VHA formulary.

Recommendation 4.1.7.2
Integrate specific pain management "at risk" criteria into existing discharge planning coordination for transitioning patients.

Recommendation 4.1.7.3
Establish similar pain care capabilities at DoD and VHA sites of similar size.

Recommendation 4.1.7.4
Conduct pain management pilots to measure improvements in transfers.

4.1.8 DoD and VHA Joint Formulary

Objective: Establish a joint formulary to facilitate smoother transitions and minimize pain throughout the continuum of care.

One specific area of standardization between the DoD and VHA is the formulary. About 90-95% of pain medications are formulary to both the military and VHA. Pain management issues arise with restricted drugs and those with criteria for approval. When pain regimens are properly titrated to the patient's satisfaction, the outcome is optimal. Sub-optimal care occurs when the regimens are changed and providers and systems do not communicate and coordinate, resulting in increased pain, dissatisfaction, poor continuity of care, increased opportunity for drug diversion, misuse or abuse, increased patient safety risk, and excessive costs.

Both the VHA and the DoD have formulary decision-making committees. They operate independently of each other and sometimes drugs approved for DoD will not be found on the VHA formulary for continued therapy. Both decision-making committees may have drugs in non-formulary status with criteria that must be approved prior to a patient receiving the drug. The problem has been that the criteria for approval was different in each system, which resulted in a Service Member who was already approved for the drug in the DoD system having a delay in continuing the drug in the VHA system because a subsequent approval in the VHA system was required.

Formulary findings identified during site visits:

- Service Members incurred at least a 2-3 month wait time between leaving the military and their first appointment within the VA medical system. As a result, Service Members and Veterans may run out of their maintenance pain medications. Military MTFs do not have consistent medication discharge planning practices nor do they communicate with VHA liaisons to create care transition plans.
- Service Members stabilized on pain medications within the military MTFs sometimes have their pain regimen changed due to formulary inconsistencies between the VHA and the military. The VHA has criteria for use of medications such as fentanyl, buprenorphine, sustained-action oxycodone, gabapentin, pregabalin, duloxetine and others.
- Service Members who have gone through the "medical necessity" or "prior authorization" approval requirement within the MTF system and are transferred to the VHA system are required to re-submit paperwork for the approval of the same drug or drugs (e.g., duloxetine and pregabalin).
- Service Members admitted to the VA Polytrauma Centers are discharged on pain medications that are non-formulary under the Uniform Formulary system. A Medical Necessity Form requesting continuation of the medication can be submitted to the MHS, but there are inconsistencies among MTFs. Service Members have had their pain regimen changed to conform to the formulary agent(s) available, medical necessity aside.

- Service Members have been transferred from military MTFs to VA medical centers on epidurals, PCAs or pain balls and have been unable to continue their pain regimen because of a lack of medications, staff education on the devices, and equipment.
- The lack of uniformity in pain practice exists throughout the DoD health care system and into the VHA. Pain plans established at one facility are often changed for no other reason than lack of familiarity with the pain medication or technology used at the transfer facility, resulting in unnecessary patient discomfort. This issue is exacerbated by the lack of a clear understanding of who is responsible for managing pain at each node of care. For example, it is very common for continuous peripheral nerve block catheters to be removed during evacuation because providers at the next treatment node are either unfamiliar with the technology or do not have personnel responsible for pain management.

There are several groups coordinating on DoD and VHA joint formulary issues:

- Pain Management Task Force
- DoD Pharmacoeconomic Center
- DoD Pharmacy & Therapeutics Committee
- Defense and Veterans Pain Management Institute (DVPMI)
- Healthcare Executive Committee (HEC) Pharmacy Workgroup
- VHA and DoD Chronic Opioid Therapy Clinical Practice Guidelines Panel
- VA Pharmacy Benefits Management (PBM)
- VA Medical Advisory Panel (VA MAP)
- VA National Formulary (VANF)

The TRICARE system allows Service Members with prior authorization or medical necessity approval to continue their pharmacy care wherever they go, in any of the three points of service – MTF, retail or mail order – enabling continuity of care. When patients transfer to the VA system, VA policy that stable pain regimens for military members should not be changed unless medically necessary.

Recommendation 4.1.8.1

Standardize pharmacy benefits between DoD and VHA, and make them reciprocal, without delay or challenge.

Recommendation 4.1.8.2

Evaluate the safety and effectiveness of prescriptions renewals process for Service Members transitioning to VHA care.

Recommendation 4.1.8.3

Establish a common DoD and VHA policy to support state of the art and science practices, such as the use of non-narcotic pain balls, PCA pumps, and epidurals, with associated common education content.

Infrastructure and Tools

Figure 7: A Summary of Categories for Infrastructure and Tools

Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management	
Infrastructure and Tools	• Pain Assessment and Outcome Registry • Battlefield Pain Care Continuum • Tele Pain • Joint Theater Trauma Registry • Electronic Pain Order Set • Standardized Medical Equipment and Personnel in the Deployed Setting • Joint Regional Anesthesia and Analgesia Tracking System • Standardize Identification of Substance Abuse Patients • Risk Management in Chronic Pain Medical Management

4.1.9 Pain Assessment and Outcome Registry

Objective: Adopt a clinical information data system that provides pain assessment screening with an outcomes registry to promote consistency in pain care delivery.

There is a lack of data within the United States health care system concerning the appropriateness and effectiveness of many pain management procedures and techniques. Additionally, the exceedingly complex nature of the pain disease process requires pain medicine providers to delve into all the biopsychosocial aspects of a patient's pain issues. This can be remarkably difficult in the limited time allotted for provider and patient interaction that is characteristic of modern medicine.

The lack of a DoD and VHA pain data screening and outcomes repository causes difficulty in making responsible decisions on the myriad of possible treatment modalities. This lack of pain data makes counseling patients on pain procedure efficacy a challenge. It also presents barriers to greater patient involvement in decisions about care, makes longitudinal comparison of changes in pain difficult, and may limit availability of optional pain management techniques and medications. This situation inhibits DoD and VHA pain specialists from providing outcomes- and evidence-based clinical pain medicine solutions to Warriors and Families. At its core, the lack of a shared interagency pain data repository impacts patient safety and pain care quality, and contributes to variability throughout the care continuum.

The Task Force has determined that the DoD and VHA health care systems require a Pain Assessment Screening Tool and Outcomes Registry (PASTOR) clinical information and data system. This information technology solution will gather information from patients and provide summaries for providers, leaders, and researchers to use for decision support. This information will be vital in minimizing clinical variation in pain care delivery among providers and medical treatment facilities.

The University of Washington (UW) health care system has developed a computer-based patient pain information and diagnostic system called "My Pain Profile" (MPP). The UW computer system guides pain patients through a series of questions concerning patient demographics, pain characteristics, medication use, substance abuse, and other pain variables. Information is provided by the patient prior to the clinical visit and is summarized for the

provider in a computerized form. Efficient for both patient and provider, the system generates information that can assist the provider in enhancing care by providing indicators of real or potential pain-related health problems. Traditionally, this level of patient information could only be obtained after a long series of clinical visits using inefficient paper-based surveys. MPP has also provided UW a unique tool for outcomes assessment, research, and program self-assessment. The UW solution will be one system that guides the development of the DoD and VHA PASTOR system.

PASTOR will incorporate military-specific demographic and diagnostic information to enhance the value of the information for Warrior and Beneficiary pain issues. The PASTOR system will also integrate with other Task Force recommendations, such as the DoD and VHA Pain Assessment Tool, Pain Centers of Excellence, and the establishment of a central pain management advisory board.

Additional resource requirements:

- A computer-based system that facilitates self-reported patient data entry from both the clinic and the patient's home using the Internet.
- Full integration with the Medical Home concept of care.
- Full-time IT personnel and equipment support.
- Full integration with existing and future DoD and VHA medical information systems (within a year, or an interim standalone system will be adopted).
- A central pain management advisory board to define and develop PASTOR content and maintain data repository.
- Large educational component for use by primary care providers and pain specialists throughout the DoD and VHA health care systems.

The DoD and VHA PASTOR will serve as the primary source and an international model for outcomes-driven pain research and resource allocation decision support. PASTOR will collect and provide the necessary data for determining best pain practices, determining DoD and VHA pain care standards, and enhancing patient pain care. The opportunities for population-based research on pain treatments and safety-related issues are enormous and hold great potential for improving pain medicine.

Recommendation 4.1.9.1

Jointly fund the development of a Pain Assessment Screening Tool and Outcome Registry under the direction of a central pain management advisory board.

Recommendation 4.1.9.2

Integrate and mandate a Pain Assessment Screening Tool and Outcome Registry with DoD and VHA IT systems.

Recommendation 4.1.9.3

Implement and mandate a Pain Assessment Screening Tool and Outcome Registry across DoD and VHA.

4.1.10 Battlefield Pain Care Continuum

Objective: Incorporate scientific advances in battlefield surgery and medical technology to improve the delivery of pain care across the continuum.

The TF did not conduct any interviews or site visits in Iraq or Afghanistan. The following findings and recommendations were developed with assistance from TF members with recent deployment experience, as well as from interviews with returning providers and clinicians from the current theater of operation.

Pain should be recognized as a disease process that, if poorly managed, adversely impacts every aspect of a Warrior's recovery and rehabilitation

While battlefield medicine has experienced significant advances and outcome improvements over the last 20 years, these have not always been accompanied by equivalent advances in battlefield pain management. The variation in practice and capabilities that is evident in the care provided in MTFs is mirrored, to some extent, on the battlefield. Many Warriors do not receive the most advanced pain care due to a lack of equipment and inadequate provider training in pain management. There is no "Theater Pain Management Practice Guideline," resulting in an overreliance on opioid-based pain solutions, from point of injury throughout the care continuum. This emphasis on opioid pain therapy at all levels has likely factored into the improper use of these medications among Wounded Warriors. Military medicine prides itself on investing in the prevention and treatment of many combat injuries, as well as disease and non-battle injury conditions. The recent increase in the number of behavioral health providers deployed to Iraq and Afghanistan was planned after an assessment by senior leadership indicated that behavioral health issues on the battlefield were better handled by specialty providers further forward. Similarly, pain should be recognized as a disease process that, if poorly managed, adversely impacts every aspect of a Warrior's recovery and rehabilitation. Successful pain management on the battlefield demands a pain medicine champion far forward.

Figure 8: Consequences of Unrelieved Pain (Joshi and Ogunnaike, 2005)

Organ Systems	Physiologic Responses
Cardiovascular	Increased heart rate, peripheral vascular resistance, arterial blood pressure, and myocardial contractility resulting in increased cardiac work, myocardial ischemia and infarction.
Pulmonary	Respiratory and abdominal muscle spasm (splinting), diaphragmatic dysfunction, decreased vital capacity, impaired ventilation and ability to cough, atelectasis, increased ventilation/perfusion mismatch, hypoventilation, hypoxemia, hypercarbia, increased postoperative pulmonary infection.
Gastrointestinal	Increased gastrointestinal secretions and smooth muscle sphincter tone, reduced intestinal motility, ileus, nausea, and vomiting.
Renal	Oliguria, increased urinary sphincter tone, urinary retention.
Coagulation	Increased platelet aggregation, venostasis, increased deep vein thrombosis, thromboembolism.
Immunologic	Impaired immune function, increased infection, tumor spread or recurrence.
Muscular	Muscle weakness, limitation of movement, muscle atrophy, fatigue.
Psychological	Anxiety, fear, anger, depression, reduced patient satisfaction.
Overall Recovery	Delayed recovery, increased need for hospitalization, delayed return to normal daily living, increased health care resource.

Additional resource requirements:

- A physician trained in pain management at all Level III facilities.
- Pain Equipment Set at all Level III facilities.
- Pain Nursing.
- Joint Theater Trauma Registry pain questions.
- Joint Theater Trauma System Clinical Practice Guideline for Pain Management (Appendix B-3).
- Renewed pre-deployment emphasis on pain management at all medical training levels.

Recommendation 4.1.10.1
Adopt the Joint Theater Trauma System Clinical Practice Guideline as policy for pain management.

Recommendation 4.1.10.2
Establish acute pain medicine services across the continuum of care, consisting of pain-trained providers who are responsible for pain consultation and management within the MTF.

Recommendation 4.1.10.3
Establish a DoD central pain management advisory board as the battlefield pain management proponent and consultant organization.

4.1.11 Tele Pain

Objective: Expand telemedicine capabilities to incorporate pain management initiatives.

Advanced pain management expertise is often limited on the battlefield and in remote MTFs. Patients being treated for chronic pain conditions often travel long distances to be seen, at a considerable expense. Many pain follow-up visits do not necessarily require the physician and the patient to be in the same physical space to check on treatment plan progress, answer patient questions or concerns, and plan for future physician-patient interactions.

Telecommunication technology is available and would enhance patient and health care provider access to pain consultation regardless of geographic location. Pain consults can be performed by pain management experts using video conferencing technology. With the establishment of Tele Pain clinics as part of Regional Pain Centers of Excellence (RPCoE – see section 4.4.4), distant sites within the TRICARE region would have routine access to specialty pain consultation.

Primary care physicians could conduct initial consultations without having to send the patient to the RPCoE, enhancing communication between primary care and pain specialists, increasing efficiency, and potentially reducing the number of unnecessary or improper patient specialty visits. From a personnel perspective, Active Duty pain patients using this service will be absent from their mission for shorter periods of time and travel costs should be less for the command.

Several VA hospitals have ongoing telemedicine initiatives to assist with the management of patients with chronic diseases. The VHA has been able to use technology to improve the remote management of patients with diabetes, hypertension, congestive heart failure, or chronic obstructive lung disease. The VA Medical Center (VAMC) in Salisbury, North Carolina uses telemonitors to monitor patient blood pressures and oxygen levels. Patients are also able to communicate how they are feeling or if they are having problems with medication via an electronic device. Without the patient having to come into the hospital, Primary care and specialty providers are often able to adjust patient appointments, alter treatments, and communicate with the patients. This technology has great potential for the management of chronic pain or complex acute pain.

Additional resources would be required:

- Establish RPCoEs within each TRICARE region and Pain Departments at medical centers throughout the DoD.
- Create Tele Pain sites within the RPCoE and participating MTFs.
- Resolve issues from Health Insurance Portability and Accountability Act (HIPAA).
- Leadership commitment to develop new policies governing primary care support and productivity metrics
- Reallocate personnel and resources.
- Commit information technology support and expand DoD Internet bandwidth infrastructure.
- Leverage existing DoD and VHA telemedicine infrastructure to include pain management programs.

This approach will likely improve pain consultant access, reduce physical patient clinic visits, reduce health care costs, and improve patient satisfaction.

Recommendation 4.1.11.1
Establish Tele Pain sites at Regional Pain Centers of Excellence and MTFs throughout DoD and VHA.

Recommendation 4.1.11.2
Develop an enterprise strategic communications plan on the availability and benefits of telemedicine.

Recommendation 4.1.11.3
Develop metrics to evaluate the effectiveness and costs of providing enhanced telemedicine for pain medicine.

Recommendation 4.1.11.4
Develop new telemedicine technology applications for pain management uses.

4.1.12 Joint Theater Trauma Registry

Objective: Add a Joint Theater Trauma Registry module to capture, define, and characterize Wounded Warrior pain issues throughout the care continuum, from the battlefield to MTFs.

The Joint Theater Trauma Registry (JTTR) is the primary military combat casualty care data collection repository. Currently, the registry does not collect any information on casualty pain. After eight years of conflict, this has been a tremendous missed opportunity to define and characterize Wounded Warrior pain issues throughout the care continuum.

Theater-specific and longitudinal information would improve the understanding of the pain care needs of Wounded Warriors. It would enable the measurement of treatment effectiveness across facilities and settings, the development of pain care policy, and the identification of pain care resource gaps, as well as offer the opportunity to establish pain research priorities.

The new DoD and VHA Pain Assessment Tool will provide a unique way of defining a patient's pain in terms of function. Combined with the four supplemental questions on activity, mood, stress, and sleep, the Pain Assessment Tool will provide a powerful research and outcomes measurement tool when incorporated into the JTTR system.

Additional resource requirements:

- Inclusion of the 11-point DoD and VHA Pain Assessment Tool into the JTTR database.
- A central pain management advisory board to be responsible for routine analysis and trend modeling.

This database will serve as the source for objective, population-based information on pain management outcomes and will guide pain management decision making and resource allocation for the battlefield and evacuation chain. The database will be important in evaluating the success of new pain medications, Task Force recommendations, and technologies deployed far forward.

Recommendation 4.1.12.1
Establish the Standardized Pain Assessment Tool as an integral part of the Joint Theater Trauma Registry database.

Recommendation 4.1.12.2
Maintain routine analysis, management, and reporting of pain data through a central pain management advisory board.

4.1.13 Electronic Pain Order Set

Objective: Develop an electronic pain order set to assist health care providers in selecting evidence-based, individually tailored pain management plans.

The majority of patient pain issues are handled by primary care providers. As discussed earlier, there is wide variability in health care provider pain management training based on the health care provider's specialty and experience, leading to variability in pain management. Because pain is not a main focus for the primary physician writing the orders, medications are often based on the physician's residency experience and not on the latest evidenced-based pain recommendations.

The DoD and VHA need to establish guidelines to assist health care providers in delivering a more consistent approach to pain management for their patients. The guidelines should be integrated into the DoD and VHA medical information systems. Such guidelines are not intended to prevent or replace physician judgment in developing patient pain orders, but rather to influence provider practice patterns with DoD- and VHA-wide guidance based on best current evidence on pain management.

Additional resource requirements:

- Development and inclusion of pain order sets in all DoD and VHA medical information systems (AHLTA, Essentris and VISTA).
- A central pain management advisory board to be responsible for development and maintenance of all pain order sets and policies.
- Annual review of pain guidelines.

Upon completion of the pain order set, the physician or prescriber will have created an effective plan for each patient that is consistent with the best DoD and VHA evidence-based data for pain treatment. While these recommendations do not preclude a provider from exercising his or her own clinical judgment, they do ensure that all prescribers of pain medications at least consider DoD and VHA recommendations for best pain prescribing. It is likely that this policy will result in a de-emphasis on opioids in pain management plans. Electronic pain order sets will also prompt primary care physicians when specialty pain management consultation is needed. Additionally, commanders should be able to monitor providers who consistently practicing outside of the recommended guidelines.

An example of pain medication orders developed for the WRAMC Essentris system is provided in Appendix B-4. Variations of this theme could be developed through a central pain management advisory board for all levels of MTFs within the DoD and VHA systems.

Recommendation 4.1.13.1
Establish DoD and VHA electronic pain order sets in all electronic medical records.

Recommendation 4.1.13.2
Conduct an annual review and update electronic pain guidelines.

4.1.14 Standardized Medical Equipment and Personnel in the Deployed Setting

Objective: Standardize medical equipment, personnel support, and training across the continuum of pain care.

There is no current standard equipment or personnel requirement for pain management throughout the continuum of care. Wounded Warriors are often not given advanced pain management technologies far forward due to unavailability of advanced pain management medications and equipment. Battlefield pain control is euphemistically discounted as a non-issue because pain management is considered to be everyone's responsibility. In actuality, responsibility for pain management is highly uncertain.

This issue is presently most conspicuous at OIF and OEF Level III facilities. Level III equipment lists do not include standard supplies needed for routine pain management procedures. Personnel are often willing and available to manage trauma pain but are ill equipped to do so unless the medical officer brings his or her own supply. Wounded Warrior care depends on who is present and what supplies are available at the Combat Support Hospital (CSH). Therefore, MEDCOM must deploy a uniform set of advanced pain management medications and equipment. A proposed CSH pain medication set is included in Appendix B-5.

Beyond having the appropriate supplies and equipment, successful pain management on the battlefield requires dedicated personnel assigned to the unit pain mission. A Level III facility, for example, would have a medical officer assigned the duty of pain consultation and management within the facility. This officer, usually an anesthesiologist, would coordinate pain management plans with assigned pain nurse representatives from each CSH ward. The number of personnel required for acute pain services will be dictated by the size and scope of a facility's health care mission.

The establishment of an acute pain service at every Level III facility and also throughout the care continuum will greatly enhance Warrior pain care. Pilot programs in Iraq and Afghanistan have demonstrated the success of Level III acute pain services.

Additional resources requirements:

- Development of acute pain services and inclusion of pain equipment sets in all Level III facilities.
- Adoption of the tier system of pain care throughout the care continuum that defines medical officer responsibilities, resource requirements, and equipment for pain management at all levels of care.
- Extensive education and training effort and policy generation at all levels of care.

Warrior and Beneficiary care will be positively influenced throughout the care continuum. A standardized equipment set is required to deliver uniform pain management throughout the care continuum.

Recommendation 4.1.14.1
Establish comprehensive acute pain services in the deployed setting.

Recommendation 4.1.14.2
Standardize equipment sets for the deployed setting.

Recommendation 4.1.14.3
Establish requirements and authorizations for pain management specialists across DoD to identify and implement best practices from the VHA.

Recommendation 4.1.14.4
Develop training program modules to support pain management in the deployed setting.

4.1.15 Joint Regional Anesthesia and Analgesia Tracking System

Objective: Leverage advances in regional anesthesia techniques by integrating the data through an existing, sanctioned joint tracking data system.

During the course of OEF and OIF, many Service Members have been severely wounded and their pain care has been a challenge. The military anesthesiology community developed regional anesthesia techniques and other advanced pain care technologies that have revolutionized pain management. Advanced pain care technologies, such as continuous peripheral nerve blocks, epidurals, patient-controlled analgesia, and ketamine infusions require close management at all times, whether the patient is in a hospital bed or in the evacuation system. Leadership quickly recognized that an electronic system for following patients and transmitting vital pain information to their accepting physicians was needed if these important techniques were to be used safely throughout the care continuum.

In response to this need, Army anesthesia specialists working through the DVPMI developed a Regional Anesthesia Tracking System (RATS) to monitor patients using advanced pain technologies as they traveled through the military health care system. RATS is a stand-alone information system that allows medical providers to document pain management notes on a central server and notify receiving providers about patients in transit with regional anesthesia. It does not connect to or share data with any of the MHS electronic health record systems, such as the Theater Medical Data Store (TMDS) or AHLTA. The military medical community has recognized the importance of the data collected in RATS and has requested that RATS functionality be incorporated into a MHS electronic health record system.

The Joint Regional Anesthesia and Analgesia Tracking System (JRAATS) is under development to meet this medical information requirement. Once integrated into the TMDS, this system will give pain medicine providers at all Levels of care a key communication tool for the safe and effective implementation of advanced pain care throughout the care continuum. The JRAATS Concept of Operations (CONOPS) document is provided in Appendix B-6.

Additional resource requirements:

- Complete integration of MEDCOM and TMDS with JRAATS.
- Adopt the JRAATS information system throughout the care continuum.
- Extensive education, training effort, and policy generation at all Levels of care.

This approach will maintain the advantages of RATS and focus on the three most important and basic sets of pain notes: procedure, clinical, and transfer. The integration of the JRAATS into the DoD sanctioned TMDS will improve the safety and pain care of Wounded Warriors. This approach will enhance opioid management across the pain care continuum to include the VHA system, and provide a tremendous data source for pain outcomes research.

Recommendation 4.1.15.1
Complete the Joint Regional Anesthesia and Analgesia Tracking System.

Recommendation 4.1.15.2
Implement the Joint Regional Anesthesia and Analgesia Tracking System.

Recommendation 4.1.15.3
Assign program, data, and content responsibility for the Joint Regional Anesthesia and Analgesia Tracking System to a central pain management advisory board.

4.1.16 Standardize Identification of Substance Abuse Patients

Objective: Identify substance abuse patients in Warrior Transition Units by embedding the necessary resources to develop and implement a coordinated care and monitoring plan.

Substance abuse disorders are not uncommon in society or the military. According to the Substance Abuse and Mental Health Services Administration (SAMSHA), an estimated 20.1 million Americans aged 12 or older were illicit drug users in 2008 (SAMSHA National Survey on Drug Use and Health Report, 2008). The National Institute of Drug Abuse 2008 study, "Monitoring the Future," found that 9.7% of 12th graders in the U.S. abused Vicodin in the past year and 4.7% abused Oxycontin. Drug abuse in the military has paralleled the civilian sector. The 2005 Pentagon Health Survey found that 15% of Service Members admitted to prescription drug abuse in the previous year, with 4% in the past month. The 2008 survey reported 22% admitting use in the previous year and 13% in the previous month.

Prescription drug abuse is increasing. The risk of opioid abuse and dependence increases for those who are receiving controlled substances for the treatment of chronic pain. Opioid dependence in chronic pain patients is often associated with poor outcomes, including occupational difficulties, disciplinary problems, social problems, disability, and death.

OIF and OEF have placed tremendous strains on military personnel and their Families. The number of prescriptions written for pain medications has increased and the correlation between suicide and prescription pain medication abuse is of deep concern to DoD. As such, a two-day meeting with the National Institute on Drug Abuse (NIDA) and VA was held in January 2009. The meeting focused on addressing substance abuse and associated mental health problems in military personnel, Veterans and their Families.

More than 20 years of research has identified many of the biological variables and social circumstances that foster or protect against drug abuse and addiction. NIDA is actively supporting research that strives to help people, across the lifespan, develop and apply the skills and resources they need to stop problem behaviors before and after they begin.

The issue is two-fold for military medicine. While there is an increased risk of addiction in pain patients who are receiving controlled substances for the management of pain (or not receiving controlled drugs and instead self-treating with illicit drugs), there is no routine or standardized screening for those at risk, nor is there a system to

share this information, when known, throughout the health care continuum. In other words, there is no reliable means of connecting the dots.

Many barriers make it difficult or impossible to share information among health care providers:

- Systems do not communicate.
- Within the military, there are intra- and inter-Service restrictions on the release of certain information.
- Under a new test program in select locations, soldiers can, without the commander's knowledge, self-refer to Army Substance Abuse Program (ASAP).
- Some Soldiers seek treatment outside of the military establishment and some deliberately seek to not disclose this information, making it difficult for health care providers to be fully informed.

For these reasons, screening is critical, as it represents a fail-safe way to identify those with, or at risk for, substance abuse disorders and initiate early intervention efforts.

Currently, the Drug and Alcohol Management Information System (DAMIS) tracks those enrolled in ASAP, but the system is closed to military medical providers. It is estimated that 45% of patients who are present for care are affected by substance abuse disorders that are routinely unrecognized by health care providers (Military Health System, 2009). It is imperative that addiction risk be assessed as early as possible, preferably at the very first encounter with the health care system, irrespective of whether controlled substances are being considered or not. This is the proverbial "golden time" for substance abuse prevention and/or detection.

Undoubtedly, the best approach to reducing substance abuse is prevention. Early and effective screening for substance abuse patients would save untold direct and indirect costs and suffering. It is a proven fact that research-based drug abuse prevention programs are cost-effective. Each dollar invested in prevention achieves a savings of up to $7 in areas such as substance abuse treatment and criminal justice system costs (NIDA, 2007), not to mention their wider impact on the trajectory of young lives and their Families. Each year, drug abuse and addiction cost taxpayers nearly $534 billion in preventable health care, law enforcement, crime, and other costs (NIDA, 2007). Early detection and intervention would reduce societal costs and prevent the adverse personal consequences of substance abuse.

The best approach to reducing substance abuse is prevention

WTU patients often have complex pain issues that require pain specialty consultation and close pharmacologic monitoring. Many have co-existing disorders, such as PTSD, TBI, depression, insomnia, and substance abuse. Obtaining an appropriate history and understanding the impact of these co-existing disorders is necessary to formulating an appropriate treatment plan. Evaluating these patients in close collaboration with the primary care physician allows for a coordinated care plan that can reduce the length of time a patient is held in the WTU, reduce the risks inherent in fragmented care, and facilitate the early detection of aberrant pain behavior in this high risk population.

The Task Force recommends that a tri-service and VHA working group, representing subject matter experts from primary care, behavioral health, and pain management, make a recommendation for a standardized substance abuse screening tool. The tool would monitor the development of problems for individuals and identify those individuals who are either with, or at risk for, substance abuse. This tool should allow for initial intake evaluation and periodic follow-up rescreening in both a paper form (that can be quickly implemented) and Web-based.

This tool, when added to pain assessment and outcome registry tool, would give providers a comprehensive view of the individual, including their proclivities. Knowing this information from the outset would enhance care and management. After analysis, the working group would make a recommendation that would then go to the VHA and the Service Surgeons General for final review.

A standardized screening tool for substance abuse along with a standardized informed consent that explains risks, benefits, and alternatives to chronic opioid therapy for the treatment of chronic pain conditions are necessary. Poor access to pain subspecialty care and lack of a widely accepted tiered or stepped model of pain care has resulted in an overreliance on opioid medication which contributes to the increase in opioid abuse and dependence.

Recommendation 4.1.16.1
Establish a tri-service and VHA working group that will recommend a paper form and Web-based interactive tool, designed for general medical settings, as the standardized tool to identify substance abuse patients.

Recommendation 4.1.16.2
Incorporate the screening tool into the Pain Assessment Screening Tool and Outcome Registry.

Recommendation 4.1.16.3
Implement use of the tool during the initial patient visit to obtain a baseline assessment.

Recommendation 4.1.16.4
Enhance the communication of the patient's plan of care among primary care, specialty care, and substance abuse providers.

Recommendation 4.1.16.5
Develop a strategic communications plan on the use of a standardized substance abuse screening tool.

4.1.17 Risk Management in Chronic Pain Medical Management

Objective: Mitigate the risk of prescription drug abuse and dependence in pain patients, with a focus on those receiving controlled substances for the treatment of chronic pain.

Current accepted treatment for opioid dependence includes both an abstinence-based approach and a pharmacologic approach. While an abstinence-based approach is clearly ideal, there is a significant relapse rate with the abstinence-based approach that is associated with increased morbidity and mortality. Early recognition of patients with risk factors for abuse and dependence will lead to closer monitoring and consultation with a pain specialist and behavioral health specialist when considering the use of opioids for the treatment of chronic pain. Once opioid dependence has been identified, appropriate treatment can be arranged.

There has been limited success with the use of naltrexone in patients who have completed detoxification, but the long term compliance rate is low, much as compliance with Antabuse is low among patients with alcohol dependence. Until the Drug Abuse Treatment Act of 2000 (DATA 2000), the only opioid agonist treatment available for opioid dependence was methadone. When used for opioid dependence, methadone can only be obtained from a licensed methadone clinic. Opioid agonist therapy is associated with increased compliance, reduced criminal behavior, increased social and occupational functioning, and reduced morbidity and mortality.

DATA 2000 allowed for office-based opioid agonist treatment using the medication buprenorphine/naltrexone (Suboxone) in a tightly regulated manner. Although buprenorphine/naltrexone is being used in the treatment of patients with opioid dependence within several military medical treatment centers and is prescribed for some patients receiving treatment in the network, buprenorphine/naltrexone is not a covered benefit under TRICARE. Thus, it is extremely difficult for patients to continue therapy following discharge from the network treatment facility. The patients referred to civilian inpatient treatment programs and started on buprenorphine/naltrexone are often the

patients with the most severe forms of opioid dependence and are at the highest risk of relapse. Failure to continue the therapy used to stabilize their opioid dependence increases their likelihood of relapse after discharge.

In addition, there are some high functioning patients who have been on opioids for the treatment of chronic pain for a long period of time but for whom the medication has ceased to provide benefit. Some of these patients have trouble stopping secondary to withdrawal symptoms that result in protracted discomfort, difficulty sleeping, difficulty with concentration, and irritability. These patients often have a stable home life, function well at work, do not experience disciplinary problems, and may not need a formal substance dependence treatment program. It is acceptable to treat these patients in an office-based setting with close monitoring and appropriate pain medicine, behavioral health, and primary care support. Over time, these patients may be successfully tapered off the opioid agonist therapy.

The TF recommends implementing standardized screening tools, using a stepped care approach to pain management, increasing access to specialized pain care, offering alternatives to chronic opioid therapy, and implementing pain education programs to address and reduce the reliance on opioid medications. For patients who have developed prescription opioid dependence, there should be ready referral for appropriate substance abuse treatment and the use of office-based opioid agonist treatment should be available as an option for selected patients who would benefit.

Recommendation 4.1.17.1
Implement a stepped care model for pain care.

Recommendation 4.1.17.2
Develop a strategic communications plan on DoD and VHA guidelines for chronic opioid therapy and the VHA Opioid Pain Care Agreement.

Recommendation 4.1.17.3
Educate providers and chronic pain patients on the signs and symptoms of opioid dependence, addiction treatment options, and stigma issues.

Recommendation 4.1.17.4
Ensure that appropriate treatment for opioid dependence, including the use of office-based opioid agonist therapy, is available for those patients who have developed an opioid dependence as a result of pain treatment.

Recommendation 4.1.17.5
Ensure that patients with chronic pain who demonstrate, or are deemed at risk for, aberrant behavior have access to structured pharmacy management programs that support opioid and medication pain management.

Research

Figure 9: A Summary of Categories for Research

Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management	
Research	• DoD and VHA Pain Research Strategy • Research Strategic Communications • Clinical Practice Guidelines for Pain Management

4.1.18 DoD and VHA Pain Research Strategy

Objective: Develop collaborative pain research strategies that advance Warrior pain care and rapidly translate effective findings into practice.

The theoretical criteria for selecting analgesics for pain procedures and other treatment include

- Efficacy
- Overall effectiveness
- Side effects and complications
- Onset of symptoms
- Drug interactions
- Abuse potential
- Practical issues such as cost and availability of the drug, as well as the severity and type of pain

Social and cultural issues, such as the time and location of the provider's training, mentor preferences, and the influence of pharmaceutical marketing and advertising also play a role. There are still other factors relating to prescribing medication, including availability of the compound and cost. At any given time, the order of choice in the decision-making process can change. Wide variation in the treatment of pain is the result.

Qualitative and quantitative evidence-based research is the best way to inform the pain management process and translate new information (e.g., techniques) into clinical practice. Data analysis yields the most unbiased results and informs the selection of future lines of research. This is the best way to advance pain care and standardize clinical variation, while minimizing patient pain and suffering. Research can inform pain treatment modalities, decrease cost, identify ways to prevent addiction, and ensure the research priorities match the actual need.

Currently, research information outcomes are not widely available and there are inadequate processes for the implementation of knowledge in the form of transfer to clinical practice. There is insufficient funding for pain Research, Development, Test & Evaluation (RDTE). Research productivity must be increased, with a goal of higher quality, improved patient care. Battlefield pain care drives the DVPMI agenda. The field of pain care would be advanced if the same need-based approach were adopted across the enterprise and sufficient resources provided.

It is critical to communicate issues of systematic evaluation and ongoing care of chronic or persistent pain, and provide information about the scientific basis of recommended procedures in order to eliminate variation and improve care. Research and guidelines could be expected to increase patient compliance, dispel miscommunications among providers and patients, manage reasonable patient expectations, and form the basis of a therapeutic partnership between the patient and the provider.

The MHS must leverage TF discoveries to ensure research in pain management addresses current medical knowledge and the technology needs of the MEDCENs and VA hospitals to care for Wounded Warriors. Pain management is one of the most costly medical care functions MEDCENs perform. Developing better medicines and techniques to manage pain more effectively has the potential to significantly decrease costs and result in better health care overall.

The Surgeon General's lead for conducting medical research and development under the Army's RDTE program, United States Army Medical Research and Materiel Command (MRMC), maintains organizations and core funding for pain management. In 2008, MRMC established the Clinical and Rehabilitative Medicine Research Program (CRMRP) to focus investments on Wounded Warrior care. Pain management RDTE is assigned to CRMRP.

CRMRP identifies objectives and priorities for pain management research through a joint, interdisciplinary clinical panel – the Pain Management Scientific Steering Committee (SSC) – of stakeholders from all Services, appropriate DoD elements, National Institute of Health (NIH), and VHA. The Pain Management SSC established research objectives and priorities in April 2009 but discoveries of the TF regarding technologies, techniques, and guidelines applied to pain management indicate a need to reexamine those issues and communicate revisions to CRMRP for incorporation into its RDTE strategic plan.

CRMRP accomplishes research objectives by leveraging other research programs, laboratories, and the global medical science base, including academia and industry. Once objectives and priorities are known, CRMRP issues solicitations. CRMRP uses an interdisciplinary team to review proposals from these solicitations for scientific merit, programmatic compliance, and affordability. Selections are then funded by CRMRP.

Pain management investments are seriously underrepresented in DoD's research investment strategy, given the high cost of pain management in Wounded Warriors, and the ubiquitous nature of acute and chronic pain in trauma patients

Beginning in Fiscal Year 2010, the RDTE Core Program includes funding for the DVPMI's science programs. This core funding establishes the first organization solely focused on pain management and enhances DoD's capability and capacity to conduct RDTE specifically for pain management. Pain Management RDTE competes with all other research and science needs for the medical care of Wounded Warriors. The Pain TF found that of all DoD Medical RDTE investments over the next 5 years, pain management research is programmed to receive < 2%, or $54.6M. However, in CRMRP's portfolio, pain management is presently ranked second, behind musculoskeletal injury rehabilitation.

Pain management investments are seriously underrepresented in DoD's research investment strategy, given the high cost of pain management in Wounded Warriors, and the ubiquitous nature of acute and chronic pain in trauma patients. Widespread patient dissatisfaction with pain control and other outcomes measures suggest an urgent need for a change in strategy.

The organization must leverage TF recommendations and the core RDTE organizations to validate pain management research objectives, recommend priorities, and reset as needed. The DVPMI is assembling the best pain management expertise available in the DoD and VHA. This body of expertise appears tailor-made to enable CRMRP to establish strategic objectives and priorities for pain management RDTE. Next, the organization must widely disseminate knowledge and technology objectives through the Research Strategic Communications initiative and resource the implementation of strategic communications (STRATCOM). CRMRP will evaluate risks in meeting critical pain management research outcomes and propose right-size funding for Fiscal Year 2012 and beyond. Pain management RDTE priorities are established at high levels within DoD and Army. Significantly increasing investments in pain management will require approval at the Assistant Secretary of Defense for Health Affairs and Assistant Secretary of the Army Acquisition, Logistics, and Technology level. Thus, a strong statement by the Services Surgeons General will be important in right-sizing investments in pain management RDTE.

Recommendation 4.1.18.1
Develop a pain medicine research strategy to ensure evidence-based medicine guides clinical decisions.

Recommendation 4.1.18.2
Ensure research in pain management incorporates emerging medical knowledge and technology needs to care for Wounded Warriors.

Recommendation 4.1.18.3
Implement proposed solutions to ensure pain management research objectives, priorities, and resources enable MRMC to satisfy current, validated medical technology and information needs.

4.1.19 Research Strategic Communications

Objective: Improve military pain research strategic communications.

The MHS can improve STRATCOM related to military pain research opportunities and research outcomes to improve translation of innovative pain management practices and technologies into clinical practice.

The DoD's research and development (R&D) businesses use a formal process (prescribed by Department of Defense Instruction 5000) to develop and then communicate and translate new materiel innovations into Table of Organization and Equipment (TO&E) (i.e., battlefield) military operations. DoD's Medical R&D businesses follow these same processes to translate new medicines and medical equipment onto the battlefield. Processes used to broadcast progress and outcomes (i.e., technologies and knowledge) to battlefield military medical users are managed by the United States Army Medical Department (AMEDD) Center and School or other Service Combat Developers and Logisticians.

Historically, medical R&D businesses within DoD have focused on battlefield technology development. In 2008, the MRMC established CRMRP to focus R&D specifically on "resetting" care for severely Wounded Warriors to enable their reintegration into society or reintroduction into service. CRMRP is responsible for developing new technologies, including pain management technologies, to treat Wounded Warriors. The CRMRP differs from other medical R&D programs by having, as its principal customers, clinicians within the Table of Distribution and Allowances (TDA) (i.e., sustainment base) MEDCENS and VHA, instead of those in TO&E MTFs. From a military medical R&D perspective, this difference is a game changer. Many of the established TO&E processes for preparing the users and then translating innovations into practice do not apply to the TDA base. Therefore, future pain management innovations that focus on MEDCEN and VHA care for Wounded Warriors may not reach the right audience(s) unless a new STRATCOM plan is developed and implemented.

New pain management knowledge and technologies are acquired by CRMRP using a formal process that includes an objectives definition, solicitation for proposals, and awarding funds to perform scientific work. To enable CRMRP to satisfy its objectives, pain management researchers must be aware both of the unmet needs (i.e., objectives) and of funding opportunities (i.e., solicitations). They must then have the ability and resources to prepare high quality proposals judged through a competitive, formal process. When solicitations fail to reach the best researchers, or if the best researchers are not able to prepare a high-quality proposal, then advancement of knowledge and technologies in pain management will falter.

Formal mechanisms for communicating pain-related research opportunities and outcomes (i.e., technologies and knowledge) to researchers, care providers, and policy-makers in the military health care sustaining base and in the VHA are needed. Mechanisms must be created that ensure awareness and action by MEDCEN and VHA care providers in defining requirements, assist in relevant research, and translate research innovations into practice.

Creating an Army and Joint Forces approval process for acquiring, translating, and sustaining new technologies for TDA use would greatly enhance opportunities for success.

Recommendation 4.1.19.1
Encourage collaboration among MRMC, CRMRP, and the AMEDD Center and School to institutionalize strategic communications and dissemination of innovation in pain management technologies and knowledge.

Recommendation 4.1.19.2
Secure funding to support the acquisition of information system technologies.

Recommendation 4.1.19.3
Secure funding for a central pain management advisory board.

Recommendation 4.1.19.4
Task MRMC and CRMRP to provide a central pain management advisory board access to shared information platforms acquired by MRMC to fill research information needs.

4.1.20 Clinical Practice Guidelines for Pain Management

Objective: Standardize the practice of pain medicine with pain management clinical practice and clinical management guidelines.

Clinical Practice Guidelines (CPGs) are documents developed to guide the diagnosis, treatment, and management of specific diseases and conditions. Based on best available evidence, CPGs are educational tools and can be used to align medical practice patterns with the available evidence. Many CPGs have been developed through collaborative efforts between DoD and VHA. Three out of the twenty-three CPGs available on the VHA Web site are pain-related CPGs (http://www.healthquality.va.gov/):

- Chronic Opioid Therapy
- Lower Pack Pain
- Post-Operative Pain

Providers interviewed during site visits consistently expressed a need for improved clinical guidelines for pain management. It was often explained that providers would be less likely to refer pain patients for specialty care if they felt more comfortable that they were doing the right thing for these patients in their respective clinics. Additionally, they further explained that it is difficult to determine what “right” looks like when evaluating the wide variance in treatment plans used by other providers across the medical continuum. There are pain management guidelines available for providers but the Task Force analysis indicated several variables limiting their influence and use within the current practice of pain management in the MHS and VHA:

- Lack of provider awareness of CPGs related to pain management.
- Current format of CPGs not easily used or integrated into provider practice.
- Need for new CPGs developed to specifically address requirement to standardize practice of pain medicine in DoD and VHA health care systems.

A majority of the providers interviewed were unaware of the existence of these CPGs. This is regrettable because these VA and DoD CPGs were developed through an extremely resource-intensive process involving multiple senior clinicians and researchers and a rigorous examination of the medical evidence. Additional efforts are required to expand their visibility and use throughout the MHS and VHA and should be a focus of the DoD comprehensive pain strategy.

Of the providers who stated that they were aware of CPGs, specifically the VHA and DoD CPGs, many felt that in their current format, they were too long, cumbersome, and difficult to integrate into their daily practice. For example, the length of the CPG for chronic opioid therapy is 111 pages for the full document, 32 pages for the summary, and 4 pages for the "pocket card." In addition to expanding provider awareness of CPGs, current and future CPGs should be evaluated for ease of use for providers. Where possible, they should be integrated into the computerized patient medical record to provide an automated decision support tool to providers and ultimately an increased standardization of pain management practice across the enterprise.

New CPGs should be developed to incorporate the best available medical evidence in pain medicine that will address the unique needs of military patients. The triad of comorbid pain, post-concussive syndrome (mTBI), and PTSD require additional clinical guidance and support for providers. A central pain management advisory board should develop a list of priorities for pain related CPG development. As stated earlier, these new CPGs should be developed in a format that encourages provider utilization and is integrated into the computerized medical record. All future CPGs should be developed as a part of the larger DoD comprehensive pain management strategy.

Recommendation 4.1.20.1

Incorporate Clinical Practice Guidelines into STRATCOM plan to ensure maximum awareness of pain related Clinical Practice Guidelines by DoD and VHA providers.

Recommendation 4.1.20.2

Integrate Clinical Practice Guidelines into computerized medical record.

Recommendation 4.1.20.3

Utilize a central pain management advisory board to develop priorities for future pain-related Clinical Practice Guideline development.

4.2 Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence

The second objective calls for building a full spectrum of best practices for the continuum of pain care, from acute to chronic, which is based on a foundation of the best available evidence. This can be accomplished through the adoption of an integrative and interdisciplinary approach to managing pain.

Despite the best intentions of clinicians, pain and symptom control is often sub-optimal because the entire health care system has been designed around cure of disease rather than palliation (Max, 1990). There have been many demonstrations of major improvements in pain treatment within health care organizations, but programs that institute such improvements must redesign many aspects of the way care is delivered (Jacox et al., 1994). Essential ingredients in such improved programs include the following:

- Physicians, nurses, patients, and Families must be educated about pain treatment, and materials to guide treatment must be readily available to assist clinicians in writing orders.
- The organization and all of its professionals must make themselves accountable to all of their patients – ranging from newborns to the elderly – for attentive treatment of pain.
- Pain must be made “visible” in the organization – routinely charted as a “fifth vital sign" so that unrelieved pain triggers a prompt response.
- Quality improvement activities should be used to encourage steady improvement in the treatment of pain in the organization.
- Expert consultants and “high technology" pain treatment interventions, such as patient-controlled analgesia and epidural catheters, must be available (either within the health care organization or by referral) for the minority of cases in which simpler measures do not suffice.
- Policies on reimbursement for health professionals, medications, and other palliative treatments (e.g., counseling, cognitive treatment for symptoms, and other supportive care), and controlled substance regulations must be designed so that they do not create barriers to symptom treatment.
- Patients' and Families' values and preferences regarding care must be respected.

Implementation of program components such as these will require an organizational commitment to identify opportunities for improvement and offer guidance to close organizational gaps across the enterprise, including deficiencies in:

- Interdisciplinary staffing, training, and education
- Space and workflow organization
- Coordination of care and support services
- Clinical practice standardization
- Technology
- Communication barriers to effective and efficient service

Such an organizational reset will require an examination of program capacity, effective non-traditional services, and resources needed for enhanced pain management services.

An Integrative and Interdisciplinary Approach

Figure 10: A Summary of Categories for an Integrative and Interdisciplinary Approach

Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence	
An Integrative and Interdisciplinary Approach	• Complementary and Integrative Pain Treatment Medicine • Osteopathic Manipulation • Primary Care Pain Management • Stepped Care Model • Musculoskeletal Action Plan

4.2.1 Complementary and Integrative Pain Treatment Medicine

Objective: Incorporate integrative and alternative therapeutic modalities into a patient centered plan of care.

The etiology of pain is multimodal and complicated, affecting every aspect of the individual: physical, emotional, and spiritual, as well the Family and community. There is no simple solution to this complex problem. Thus, the treatment needs to be interdisciplinary and multimodal in its approach. But more than that, it needs to incorporate all the aspects of the individual, Family, and community and not just focus on the etiology itself.

The patients become devoid of ownership of the condition when they are a passive participant in their own care

One way to achieve an interdisciplinary, multimodal and holistic approach to pain management is by incorporating complementary and alternative therapies into an individualized pain management plan of care. The current medical model is a provider-to-patient relationship. This is known as provider-based care where the team leader is the provider. This model is often one of "doing something to the patient" instead of having the patient participating in his or her own care. In the case of pain management, the patient presents a complaint of pain to the provider. Many times the treatment is a prescription for a medication and a brief description of precautions, limits, and possibly some exercises. Rarely does the patient do anything other than take the medication and return for a refill. The patients become devoid of ownership of the condition when they are a passive participant in their own care. This leads to recurrent cases of poor outcomes, problems with multiple prescriptions, and some patients' disillusion with the medical system.

Stress is a significant contributor to pain conditions. In fact, by definition, pain has an emotional component. Further, chronic pain leads to increased stress which leads to a vicious cycle. Therefore, pain cannot be managed without addressing its relationship to stress. Research is showing that our thoughts and perceptions influence our ability to heal. Mindfulness or the ability to be in the moment brings a greater awareness to the unconscious and its affect on emotional, physical, and spiritual health. Mindfulness focuses the mind's ability to heal the body. This interaction is often missed in the disease based treatment model.

The terms complementary medicine and alternative medicine are often used interchangeably, but they do in fact differ from each other. Complementary medicine is used together with conventional medicine. An example of a complementary therapy is using aromatherapy (the scent of essential oils from flowers, herbs or trees) to help lessen a patient's discomfort following surgery. Alternative medicine is used in place of conventional medicine. An example of an alternative therapy is using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by a conventional doctor.

The Integrative model emphasizes the patient-centered care model of treatment. In this model, the patient is the team leader with the providers acting as consultants and guides to the patient. Taking this a step further, Integrative Health and Healing teaches the importance of self: self-care, self-responsibility, and self-awareness. In February 2009, the Institute of Medicine (IOM) acknowledged patient-centered care as one of the five critical dimensions of high-quality care. Further, research shows that focusing the health care system around the patient can improve patients' satisfaction with care, as well as their clinical outcomes. Patient-centered care empowers the patient to be responsible and participatory in his or her health and healing process.

However, the change from the current model will require a significant paradigm shift. Over the past twenty years, patients have led this shift. They are seeking out “alternative medicine” to help address their individual needs. They often do this without the guidance of professionals. In fact, sometimes the patients withhold the fact they are using other treatments from their conventional health care providers. The medical community needs to be part of the patient’s journey, promoting each patient’s individual health goals. To best address the goal of patient-centered care, providers must work in partnership with patients and Families in providing health promotion options while maintaining efficacy and safety standards. This integration needs to be methodical, appropriate, and evaluated throughout the process to ensure the best potential outcomes.

Just as patients can be active or passive participants in their treatment, that treatment can be active or passive as well. The difficulty with all treatment, regardless of whether the treatment is conventional or integrative, is that it can allow the patient to remain a passive participant. For example, weekly acupuncture performed on a patient can allow the patient to return each week without taking ownership and responsibility for the pain. Thus, it is imperative that one of the end goals of any treatment is patient participation. Clearly a patient with significant diabetes needs medications for control; however, evidence shows that the patient also needs to maintain a proper diet, exercise regimen and self-care. If the patient only takes medications for the diabetes, the outcome will not be optimal. Likewise, teaching the patient the points for self-directed acupressure, while performing acupuncture for a pain condition, incorporates the patient into the treatment. This changes the treatment from passive to active and improves the outcome, decreases provider dependent care, and empowers the patient with a sense of control over his or her condition.

The Task Force site visits included an assessment of the scope of CAM modalities offered at each MTF. CAM experts, if they existed, were interviewed, as were providers and, where practical, patients and/or Family members. The literature on Complementary and Alternative Medicine was reviewed, along with the MHS policies and procedures. Various experts in the field of Mind Body and Complementary and Alternative Medicine were also visited or interviewed. Additionally, the Task Force consulted with the Samueli Institute, a non-profit research organization that supports the scientific investigation of healing and its role in medicine and health care. The Samueli Institute has been working on several research projects related to military and Veterans’ pain management.

In 2005 the DoD Survey of Health Related Behaviors among Active Duty Military included questions on CAM usage among Service Members. These data, reflecting 19 CAM types in the five recognized CAM treatment categories are reported in a manuscript currently under review for publication (Samueli communication). The CAM subgroup of the TF studied the issues surrounding credentialing and licensing of CAM providers.

The tiered structure represents a hierarchy of implementation based on current accepted literature supporting efficacy, safety, and widespread use or acceptability. Additionally, licensing and credentialing concerns were taken into consideration in the development of the recommendations. Within the tiers, active and passive treatments are identified to allow for an understanding of how passive treatments can become active treatments to avoid the pitfalls of passive patient participation. Most passive treatments require a provider to perform the treatment or guide the participant in the activity. On the other hand, active treatments typically require some level of patient education up front to ensure patients are using the modalities correctly and safely; only then should the treatment become patient self-directed. Some active treatments are portable with individualized equipment. The TF recommends adopting a tiered approach for the effective integration of Integrative Modalities to augment pain management.

Figure 11: Tier I Modalities

Modality	Passive	Active
Acupuncture	Clinic based Acupuncture	Self directed acupressure
Yoga / Yoga Nidra	Facility based yoga classes	Self directed with video, exercising
Non-allopathic Chiropractic Care	Clinic based manipulations	Self-correcting exercises
Therapeutic Medical Massage	Clinic based treatments	Partner or self treatment
Biofeedback	Clinic based biofeedback techniques	Self directed biofeedback with video, heart rate variability monitors, meditative practices
Mind-body Therapies (Meditation, Mindfulness)	Facility based classes	Self directed

Figure 12: Tier II Modalities

Modality	Passive	Active
Movement therapy (Qi Gong, Tai Chi, Marital Arts)	Facility based classes	Self directed with video, exercising
Art Therapy	Facility based classes	Self expression through journaling, art, dance, etc.
Music Therapy	Facility based classes	Self directed with iPods, etc.
Aroma Therapy	Facility based treatment	Self directed
Cold Laser	Facility based treatments	N/A
Monochromatic Near Infrared Energy (MIRE) Treatments	Clinic based treatments	Self directed with MIRE personal equipment
Cranial Electrical Stimulation	Clinic based treatments	Self directed with CES personal equipment

While scientific evidence exists regarding some CAM 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 whether they work for the purposes for which they are used. Medical science acknowledges that there are many accepted practices that are utilized without evidence from well-designed research and data in both complementary and traditional western medicine. CAM practices, in particular, are often debunked as ineffective or merely effective due to the placebo effect. Exciting research in neurobiological imaging is showing that the placebo effect is indeed a "real" one to be clinically exploited, given its efficacy and safety margin. Many of these gaps in evidence for CAM therapies remain since funded research on these therapies is one of the newest areas recognized by National Institutes for Health. The National Center for Complementary and Alternative Medicine (NCCAM) started as an Office of Alternative Medicine (OAM) in 1992 and expanded to a center in 1998 with a current budget of $122 million (NCCAM Web site).

Recommendation 4.2.1.1
Adopt a tiered approach for the effective integration of integrative modalities to augment pain management for military and Veteran populations.

Recommendation 4.2.1.2
Establish integrative pain medicine capabilities at RPCoE's and DoD sites (Army, Navy, and Air Force) to champion integrative pain care with a focus on the best clinical practices, education, and research.

Recommendation 4.2.1.3
Establish baseline data on the clinical integrative practices being used, along with provider and patient perspectives, through a comprehensive DoD survey, utilizing existing survey models (if appropriate).

Recommendation 4.2.1.4
Develop an advisory board, with scholarly leaders in various integrative medicine fields, to assist in the development of appropriate programs, ensure proper credentialing of providers, and establish necessary guidelines for outcome measures and uniformed quality of care.

Recommendation 4.2.1.5
Establish standardized and appropriate strategic communication plans on integrative health care methods for pain medicine.

Recommendation 4.2.1.6
Develop and fund pilot programs across DoD in the delivery of integrative pain.

Recommendation 4.2.1.7
Request Health Affairs undertake the evaluation of integrative medicine modalities in Tier I for inclusion as covered TRICARE benefits.

4.2.2 Osteopathic Manipulation

Objective: Leverage embedded osteopathic and physical therapy resources in the provision of manipulation therapies for musculoskeletal pain.

Manual medicine or manipulation is well accepted by patients, has proven successful for treating many musculoskeletal pain syndromes, and is well suited for integration into the primary care and physiatry workflows. The goal of manual medicine is to restore the entire body to a state of homeostasis. Manual medicine employs palpation using the providers' hands to detect sources of pain and dysfunction within the skin, fascia, muscles, ligaments, and tendons. Once these areas of dysfunction are identified, manual medicine should be used to decrease muscle spasms, neural facilitation, improve local circulation of blood and lymph, improve range of motion, and decrease pain.

There are several barriers to widespread adoption of manual therapies; however most of these barriers can be overcome with adequate command support:

- Inadequate clinic set up:
  - requires flat treatment tables, not lithotomy tables
  - preferably two rooms per provider to improve patient flow
  - inability of the RVUs (productivity metrics) to track success of manual therapies
  - inability to have flexible appointment lengths

The AMEDD has a significant number of Osteopathic physicians on staff and in Graduate Medical Education (GME) training programs. However, there is inconsistent application of osteopathic modalities and continuing training at the GME and Continuing Medical Education (CME) level. Physical therapists are also trained to perform manual therapies and could provide them under a structure similar to what the TF is suggesting for Osteopathic Manipulative Treatment (OMT).

The Army should take the initiative to use and continue training their embedded (wearing the uniform) resources. Many Active Duty Medical Corps Officers and Physical Therapist in the Medical Specialty Corps have been previously trained to provide manual medicine. These Active Duty assets are able to provide comprehensive medical care in addition to their manual manipulation skills. The TF recommends using these organic resources, rather than outsourcing and spending money, amongst other resources, on hiring chiropractors who are only trained to provide manipulation.

GME training and program implementation policies will be required to implement manual manipulation programs at the MTF level. A GME level training program must be developed and implemented. This will enable residents to continue using and improving upon the skills they learned in medical school and increase their efficiency with treatment. Once these residents become staff, they will be able to successfully incorporate manual medicine into their daily clinic flow. A GME OMT training program should include a GME Manipulation Clinic with staff oversight, an education series on OMT, and a "hands-on" review of manipulative therapies. For non-osteopathic residents and staff, the GME program will serve to teach them improved diagnostic skills, educate them on which patients are appropriate for referrals for manual medicine, and teach them hands-on manual medicine they can use in their own clinics. A GME manual medicine program will also enhance the comprehensive care that all participating physicians provide to their patients. Additionally, GME OMT clinics would need longer appointment slots to encourage education and oversight by staff physicians.

Staff physicians who have training in manual therapy will usually be able to see their patients in the course of their normal appointment slot lengths when indicated. On occasion, they may need to bring a patient back for a longer appointment slot to address more complicated and involved pathology. Staff physicians should be encouraged to use manual therapies as part of their comprehensive care process. Their success has the potential to be measured in patient satisfaction, decreased medications dispensed, decreased profiles written, improved return to duty, less referrals for musculoskeletal complaints, and decreased office visits for the same complaint. The main resource requirement for a staff physician to employ manual medicine skills is a flat exam table.

There are some relevant best practices within the Army and these should be studied as possible best practices to replicate in other facilities. There are scattered training programs with various successes across the AMEDD.

Figure 13: OMT Practices

Training Programs	Selected Best Practices
GME	• Ft. Belvoir Family Medicine Residency Program
Skill Sustainment	• Physical Medicine and Rehabilitation at Walter Reed Army Medical Center • Family Medicine at Grafenwoehr Army Health Clinic • Ft. Belvoir Family Medicine Clinic
Physical Therapy use of Manual Therapies	• AMEDD Center and School Physical Therapy Manipulation Residency Program at BAMC • Amputee Physical Therapy at Walter Reed
Continuing OMT Education	• Ft. Belvoir Family Medicine Residency Program • Walter Reed Physical Medicine and Rehabilitation Service

CME should be available at MTFs for providers who have been trained in manual medicine. The resource requirement for this is minimal. Essentially, any individual provider with manual therapy knowledge would be able to provide presentations and hands-on demonstrations and review of the manual therapy techniques. In addition to these presentations, a room in which to provide the training is necessary. Providers should be encouraged to attend annual CME training provided by professional organizations to enhance their knowledge and skill sets.

An example is a young Active Duty patient who has mid and low back pain who is seen for back pain after wearing gear and carrying large loads.

Figure 14: OMT Options for Active Duty Patients

Option 1	Option 2
The patient receives a profile, a referral to physical therapy, quarters or convalescent leave, medication, and possibly, consults for more invasive procedures. These all lead to decreased productivity for the military from this active duty patient (lost work days, decreased productivity when at work, potential interaction of medications with ability to work). In addition, resources are needed to track this patient's profile and medical care.	The patient has an appointment with a primary care provider for the back pain and receives OMT during his visit. The treatment takes less than twenty minutes. The patient then leaves and returns to duty, without a profile, no medications, and no referrals. This option costs less money initially and subsequently less money is lost in productivity and use of assets. When you look at the many brigades full of young active duty soldiers only experiencing back pain, using OMT to treat musculoskeletal conditions could result in a significant cost savings to the military in addition to improved satisfaction and function for the patients.

Resource requirements are minimal and include use of existing space for training clinics, two patient exam rooms per provider with OMT (simply flat or adjustable) tables. IT requirements include documentation and coding solutions (recommended AHLTA AIM forms, SOAP templates (Subjective, Objective, Assessment, Plan), Common Procedural Terminology (CPT) encounter templates, and Evaluation & Management (E&M) dispositions documentation) and training and use of MAPS (MEDCOM AHLTA Provider Satisfaction) tools (such as Dragon and As-U-Type). An extended list of OMT related issues can be found in Appendix B-7.

Potential research pilot projects might include:

- OMT Clinic (GME) which tracks the residents to see which residents continue to use OMT in their comprehensive practice once they are staff physician and tracks the number of residents.
- Survey of Osteopathic Physicians and Physical Therapists who are Active Duty to establish those who use manipulative therapies in clinic /hospital / deployed setting, what the barriers to use are, amount of CME in manipulative therapies available at their site, interest in participating in a clinic specific for manipulation with other providers or why they chose not to use their unique skill set.
- Auricular (battlefield) acupuncture pilot program in the WTU clinics.
- Improved clinic resources with an adapted workflow – to accommodate in-clinic OMT visits:
  - Two rooms per provider for patient flow.
  - Manipulation tables.
- AHLTA business processes.
- Qualitative and Quantitative examination of the impact of OMT on acute and chronic pain syndromes.
- Down range use of OMT down range to prevent chronic complications from acute problems.

It is ideal for the military to facilitate beneficiaries having their musculoskeletal concerns addressed by OMT during the course of an office visit. Referrals to other providers (either civilian network care or to other military providers) have their costs, such as time for providers and patients, lost patient work productivity in their military jobs, and availability of

appointment slots for other patients. By facilitating osteopathic manipulation in primary care clinics, some of these costs could be minimized and recouped (especially if the civilian network referrals are decreased).

Validation and measurement should focus on reduction of acute and chronic musculoskeletal pain, as measured on the 0-10 point Pain Assessment Screening Tool, and prevention of chronic pain syndromes through the routine application of osteopathic manipulative therapies. Patient satisfaction could be measured using the new Pain Assessment Tool and analyzing for trends, reduced medication utilization, prevention of chronic pain syndromes, and improvement in the provider utilization rate.

Reduction of acute and chronic musculoskeletal pain and prevention of chronic pain syndromes through the routine application of osteopathic manipulative therapies are achievable goals.

Recommendation 4.2.2.1
Support osteopathic manipulation in staff clinics.

Recommendation 4.2.2.2
Survey Active Duty Osteopathic Physicians and manually trained Physical Therapists to understand the uses, practices, and barriers of manual medicine.

Recommendation 4.2.2.3
Implement and support Osteopathic Manipulation Graduate Medical Education during primary care and physiatry residency programs to utilize and continue developing current Army resources.

Recommendation 4.2.2.4
Implement and encourage the use of osteopathic manipulation (or manual medicine) in theater.

Recommendation 4.2.2.5
Incorporate osteopathic manipulation therapy referrals into case management in WTUs.

Recommendation 4.2.2.6
Improve metrics, such as RVUs, which are used to measure the success of providers in treating patients but do not actually measure patient improvement.

4.2.3 Primary Care Pain Management

Objective: Integrate pain management into primary care, consistent with the Patient Centered Medical Home Model.

According to the American Academy of Pain Management (AAPM) Web site, pain is the number one reason patients seek medical care. One out of two Americans is in pain and one in four has persistent or chronic pain with the leading cause being low back pain. One hundred billion dollars is spent annually on pain care, yet very little progress has been made in treating pain and suffering. In managed organizations, pain affects more people than heart disease, hypertension, diabetes, or cancer.

The majority of pain care is delivered by primary care practitioners because they are often the first point of contact. Further, there are insufficient numbers of pain specialists to manage the millions of people suffering from chronic pain. Primary care providers are experienced in providing comfort and disease management for conditions that have no cure. Primary care providers have a strong, sustaining patient relationship. With the proper training and system support, primary care

providers are in the best position to longitudinally coordinate pain management from early intervention to long-term continuity of care, on to end-of-life care.

A patient-centered approach to pain management with an integrated pain team or clinic in primary care will impact the greatest number of patients. Utilizing both medications and non-drug therapies within a biopsychosocial model that emphasizes self-management will lead to the best results. Both chronic pain as a disease and the suffering of the patient must be addressed. Early education, early risk stratification, and early interventions to improve outcomes and safety will result in a greater relief from pain, a decrease in suffering, increased function, and safe prescribing of opioids for a greater number of patients. The goal is to prevent pain from becoming a disabling disease.

Pain is the number one reason patients seek medical care and there are insufficient numbers of pain specialists to manage the millions of people suffering from chronic pain

The demand for effective pain treatment is growing among patients in the United States. Despite advances in the treatment of pain, the quality of pain care remains far below the potential for optimal care. Fragmentation of pain care is perpetuated by the consecutive, and even concurrent, lack of integrated evaluation and management of complex pain disorders. Primary care often promotes fragmented care for patients with chronic pain conditions by utilizing a succession of referrals to specialists and subspecialists rather than implementing the biopsychosocial model of best-practice pain management. Multiple physicians may contribute to a patient's "pain management" with limited focus or goals, duplication of testing or unnecessary invasive testing, and with either limited interventions, or large variance of interventions available. This compartmentalized approach makes it difficult to identify a single provider to advocate for the patient's overall care by treating the patient as a whole human being with often multiple chronic conditions – all affecting each other.

The overall quality of treatment of pain is unacceptable for patients with acute and persistent pain leading to suffering, abuse, addiction and sometimes even more serious consequences. For example, abuse of prescription drugs is now the second leading cause of accidental death. Death caused by prescription pain drugs is higher than deaths caused by cocaine, heroin, and methamphetamine combined and health care costs are eight times higher for opioid abusers than non-abusers (SAMSHA, 2008).

Clinicians are faced with a dilemma – how to safely incorporate opioids into treatment plans that maximize the possibility of successful pain control while minimizing the risk of misuse or abuse. The dilemma is heightened for primary care providers who shoulder most of the burden of pain management, despite having received little specific training in pain medicine or substance abuse, and generally being constrained to brief visits for evaluating and managing complex problems. Opioids are not the only answer to treatment of moderate or severe pain, but in the current system, often this is all that is offered. Providers find it much quicker to write a prescription than to manage the pain appropriately. The opposite may also occur, as pain may be undertreated due to provider's discomfort, or even fear, of using opioids because of possible legal sanctions. Also of concern is the practice of providing opioids for chronic pain without following standard practice guidelines regarding assessment and monitoring, which can lead to negative outcomes. There are other barriers for providers to practice good pain care:

- Lack of training for primary care providers to manage pain
- The wide variance of provider beliefs about pain treatment
- Lack of timely access to comprehensive pain medicine consultation
- Poor monitoring of care for patients with chronic pain, who may receive treatment from multiple providers, without a coordinated care plan, including multiple prescribers of opioids

Providers who prescribe opioids to treat pain are often caught between their professional obligation to relieve suffering and their desire to avoid contributing to the public health problem of non-medical consumption of controlled substances (i.e., prescription drug abuse). The challenge is to curtail the abuse and diversion of prescription opioids while ensuring their availability for patients who benefit from their use. The key to managing a patient's opioid intake lies in screening for abuse potential and carefully monitoring the progress of treatment. In the mobile military

population, strategies for optimizing pain management need to address military medicine's challenges with continuity of care, oversight of medication, enhanced physical functioning, and promotion of return to duty (see section 4.3.1).

The solution to this issue begins with a health care organization that is designed to provide a comprehensive, integrated, patient-centric approach to the full spectrum of primary care, including – and most especially – care of patients with chronic disease, such as chronic pain. In addition to the Primary Care Manager and appropriate support staff, it seems clear that a successful organizational design will include, at a minimum, organic behavioral health providers and clinical pharmacologists, with additional assets based on population needs. The MHS is currently piloting the Patient Centered Medical Home (PCMH), which provides a comprehensive, integrated approach to primary care. PCMH 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 personal physicians, and when appropriate, the patient's Family. These principles, adapted from Patient Centered Primary Care Collaborative (PCPCC), can be found in Appendix B-8.

Interdisciplinary pain clinics have the strongest evidence for improved pain outcomes. This is best implemented into pain management by developing a pain team or clinic integrated into primary care that is accessible and provides face-to-face coordination and communication with the primary care managers. Interdisciplinary pain team members may include:

- Primary Care Provider
- Medical Director
- Mental Health Clinicians (psychologists, social workers, chemical dependency)
- Rehabilitation Clinicians (physical therapists, occupational therapists, exercise physiologists)
- Nurses
- Case Manager
- Pain Educator
- Vocational Rehabilitation Counselors
- Pharmacist Consultant, and access to consultant specialty physicians in pain medicine and other specialties as indicated (neurology, physiatry, psychiatry, addiction medicine)

This primary care pain clinic would benefit all involved, especially the patient.

The goals of the clinic:

- Reduced pain intensity and suffering
- Enhanced physical functioning
- Improved access to pain treatment
- Controlled medication usage (safe use)
- Improved psychological functioning
- Pain education for patient and Family
- Promotion of meaningful life such as return to work

Most patients with chronic pain should have a clinical evaluation that would include establishing their functional status, identifying comorbid conditions, evaluating psychosocial factors, setting goals, developing a goal-oriented management plan, and determining when to consult or refer. Before initiating long-term opioid therapy, a psychological evaluation should also be completed, which would include an opioid risk assessment, screening for potential drug abuse or addiction, identification of comorbid mental health issues, and determination of the patient's readiness to engage in self-care behaviors. The benefits of increased integration and coordination between the pain clinic and primary care will enhance patient and provider satisfaction, improve patient outcomes, and decrease health care costs. It would also provide an opportunity to identify and intervene in many problems to prevent development of significant pathology.

Using the chronic care model as a framework, optimal pain care requires an interdisciplinary pain care clinic integrated in primary care with a stepped-care pain treatment approach similar to the VHA program (see section 4.2.4). In an integrated pain clinic the patient will feel like someone is listening to him, his symptoms are explainable and controllable, and someone cares. The primary care model will provide timely and appropriate access to pain management services for all Beneficiaries. The clinic will provide early intervention, including educational programs that may reduce the likelihood of disability, improve the under-treatment of pain, provide individual tailoring of treatment plans, and serve as a liaison for patients transfers between MTFs or VA facilities. It will also provide access to pain-trained medical expertise and deliver a safe, effective, and evidence-based continuum of care.

The MHS should move forward briskly with implementing a Patient Centered Medical Home, fully resourced with adequate support staff and IT, with embedded Behavioral Health and Clinical Pharmacology. The MHS should simultaneously move to outcomes-based performance metrics that recognize and capture the quality and safety benefits of a holistic, patient-centric approach to health care. The next step is to establish interdisciplinary pain care clinics, integrated in primary care, with a stepped-care pain treatment approach similar to the VHA program.

Recommendation 4.2.3.1
Implement a fully resourced Patient Centered Medical Home.

Recommendation 4.2.3.2
Develop outcomes-based performance metrics that recognize and capture the quality and safety benefits of a holistic, patient-centric approach to health care.

Recommendation 4.2.3.3
Identify a workgroup from DoD and VHA to ensure that DoD interdisciplinary pain care clinics, integrated with primary care, correctly adopt a stepped care pain treatment approach.

4.2.4 Stepped Care Model

Objective: Adopt the VHA Stepped Care Model to ensure timely access to collaborative care, reduce pain and suffering, and improve quality of life for Warriors and their Families.

A continuum of effective pain care for Warriors, from the moment of injury on the battlefield or the onset of disease, to recovery or chronic pain management back home, is a core principle of the military's pain management strategy. Effective implementation of this strategy presumes competent care at every level of need, regardless of the setting, whether emergency management far forward on the battlefield and during transport, definitive treatment at military medical facilities, or an open-ended commitment to provide continuity of care in military and VA facilities back home as Service Members and Veterans reintegrate with their Families and communities.

Establishing competency of care at each level of need in this continuum and in each setting presents the following organizational challenges for the MHS and VA:

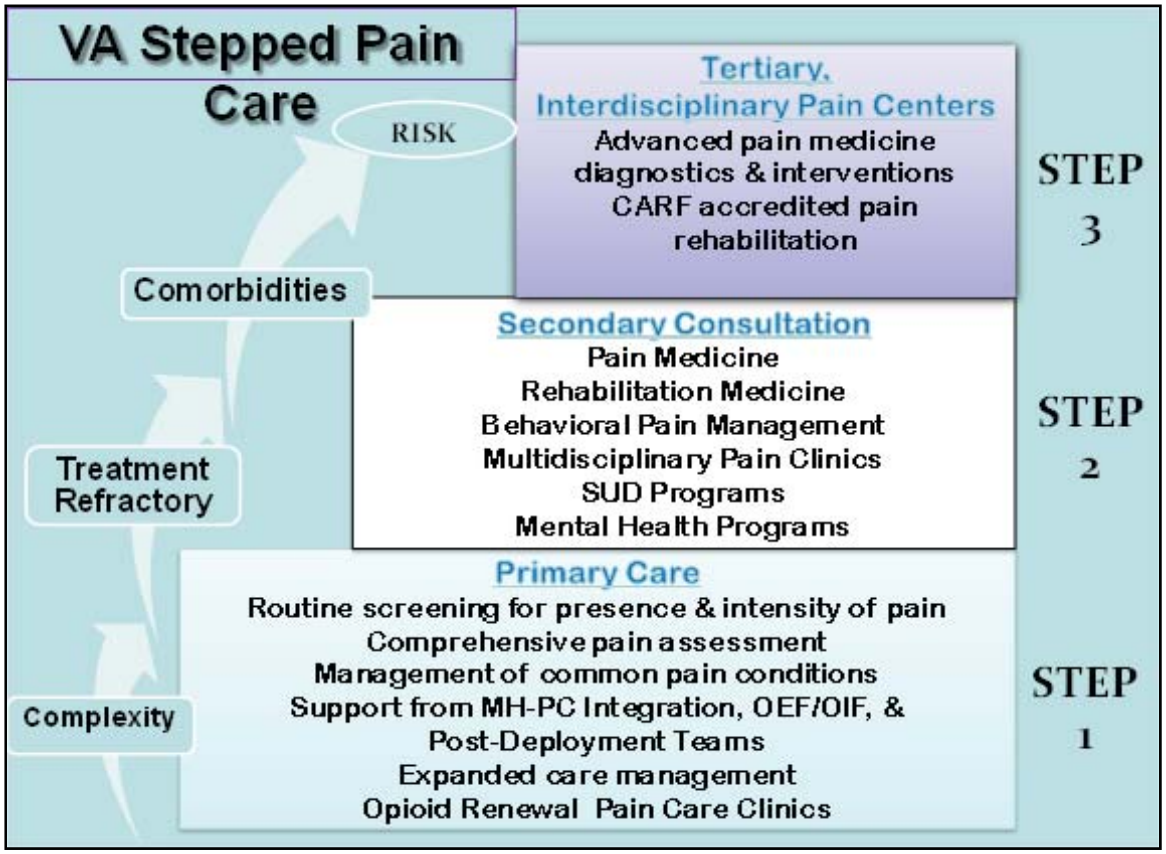
- Establishing an organized and systematic process of care with clearly delineated responsibilities and a chain of command
- Assuring a systematic method of monitoring and continuously improving quality of care through outcomes measurement and patient feedback
- Providing appropriate staffing at each level with adequately trained and skilled personnel to meet the needs of Service Members, Veterans and their Families

Lessons can be learned from organizational models in both civilian and Veterans' health systems. As previously discussed, the Veterans Health Administration initiated a National Pain Management Strategy in 1998 to establish Pain Management as a priority in the VHA's national health system.

The overall objective of the national strategy was to develop a comprehensive, multicultural, integrated, system-wide approach to pain management that reduces pain and suffering and improves quality of life for Veterans experiencing acute and chronic pain associated with a wide range of injuries and illnesses, including terminal illness. Quality of life is now accepted by the medical field as a standard outcome measure of effectiveness of treatment, including treatment of pain, and includes such factors as level of physical and psychosocial functioning (e.g., in roles at work and home) and treatment satisfaction. However, implementing such a strategy to improve pain management in a large health system proved challenging due to the way health care is organized to manage pain.

A new model for the VHA was proposed that emphasizes early, evidence-based biopsychosocial treatment in primary care, supported by pain medicine specialty treatment and community support (Gallagher, 2008; Gallagher, 1999). Support for implementing such a model increased with documentation of the high rates of pain in returning OIF and OEF veterans entering the VHA (43% in 2007; 52% in 2009); the increasing rates of chronic pain (>50%) and increasing pain-related costs and disability in older Veterans' cohorts, as they accrue risk for diseases and conditions causing chronic pain; and the high rates of comorbidities, such as PTSD, depression, substance abuse and persistent post-concussive syndrome (Kang et al., 2007; Gironda et al., 2006; Schneiderman et al., 2008; Clark et al., 2007; Kerns et al., 2003; Lew et al., 2009).

Figure 15: VHA Stepped Pain Care Model

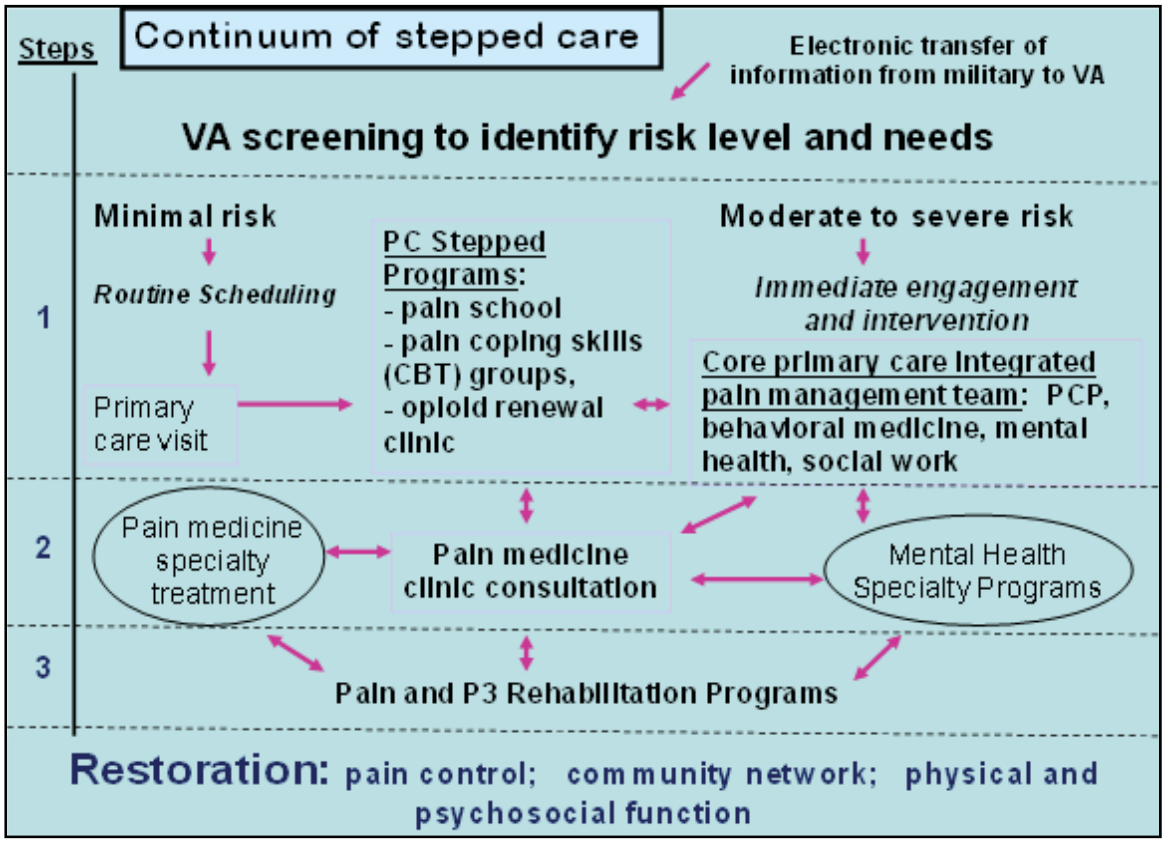


On October 28, 2009, the VHA published a Directive (VHA DIRECTIVE 2009-053; Appendix B-9), which directs the medical treatment facilities and Veterans Integrated Service Network (VISNs - regional health systems) of the VHA to establish an integrated, biopsychosocial Stepped Care Model of Pain Management that provides for the care of most pain conditions in the primary care setting. The Biopsychosocial Model in pain takes the position 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 (Engel, 1980; Gallagher, 2004). Effective treatment planning accounts for the salience of these factors in the precipitation and perpetuation of illness and illness-related disability (Gallagher, 1999).

This model includes, and is supported by, timely access to secondary consultation and collaborative care from pain medicine and when indicated, mental health, physical medicine and rehabilitation, and other specialties (Dubois, 2009). Access to palliative care may ultimately be needed; access to tertiary care advanced diagnostic, medical management and rehabilitation services might also be required for complex cases involving comorbidities, such as mental health disorders and traumatic brain injury (Lew et al., 2009).

The Pain Task Force believes the principles of Stepped Care apply to the military's pain management challenges, beginning in the field. Evidence from studies of trauma indicates that early and aggressive pain intervention in animal models and in emergency room patients reduces the incidence and morbidity of chronic pain (Gallagher, 2006; Castillo et al., 2005), and experience in the current OIF and OEF conflict indicates that aggressive pain management in the theatre, after injury, lessens care burden and stress (Stojadinovic et al., 2008, Buckenmaier et al., 2009). Thus, the military should implement a Stepped Care model that incorporates field-based management added to the primary care and secondary and tertiary care consultation model in the medical home.

Figure 16: VHA Continuum of Stepped Care



Stepped Care is instituted as a strategy to provide a continuum of effective treatment to a population of patients suffering from acute pain caused by injuries or diseases to longitudinal management of 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 (Dubois, 2009). Components of Stepped Care have been implemented in VA settings for several populations in primary care including chronic low back pain with and without depression and patients with chronic pain at risk for substance abuse (Dobscha et al, 2008; Dobscha et al, 2009; Ang et al., 2009; Kroenke et al., 2009; Wiedemer et al., 2007; Meghani et al., 2009; Trafton et al., 2010). The challenge for any health care system, including the military and VHA, is the development of standardized, cost-effective care through a competent provider workforce and effective health care system support.

The First Step in implementing an adapted model of Stepped Care in the MEDCOM and MHS is appropriate Emergency Care and primary care. This calls for embedding the resources to provide pain care far forward in the war zone and potentially remote sites where military personnel are operating, and transport to medical facilities appropriate for the level of need is contingent. The care destination might be a field hospital or clinic, and in some cases a tertiary care facility in the Unites States. This requires:

1. The development of competent field-based emergency care (including behavioral health and primary care provider workforce to manage injuries and common pain conditions);
2. Consultation with pain medicine with competency in managing complexity, severity and risk, as well as other specialties as needed; and
3. Advanced pain medicine diagnostics and procedures and severe comorbidities requiring interdisciplinary, intensive pain rehabilitation services, including inpatient settings as required.

Recommendation 4.2.4.1
Implement the VHA Stepped Pain Care model.

Recommendation 4.2.4.2
Leverage the VHA Directive Action Plan as a template for better coordination between MEDCOM and MHS.

4.2.5 Musculoskeletal Action Plan

Objective: Integrate the prevention, early identification, and treatment of injuries as a component of the comprehensive pain management strategy.

Effective pain management will require efforts across the vast and complex pain continuum. The importance of injury prevention and early intervention efforts to minimize the adverse effects of pain on the Armed Forces is difficult to overstate. The TF recognizes the Musculoskeletal Action Plan (MAP) as another critical piece of a comprehensive pain management strategy.

In 2008, there were 2,697,597 medical encounters, including hospitalizations and outpatient visits but excluding any visits to the Battalion Aid Stations. Of those, injuries accounted for 30.6% of all medical encounters (n=825,429), more than twice as many encounters as the second leading cause, mental disorders (n=370,233 or 10.8%). Furthermore, injuries affected 242,478 Soldiers (21.7%), over two times more individuals than the second leading diagnosis group, ill-defined signs and symptoms (n=121, 078) (OTSG Decision Support Cell).

According to the Brigade Combat Team Physical Therapy Guide, six of the top ten reasons for a medical evaluation board are musculoskeletal, with the top one being degenerative arthritis. In a deployed setting, musculoskeletal non-battle injuries account for 87% of all combat injuries. Non-combat related musculoskeletal injuries are estimated to occur 6.5 to 7 times more frequently than combat related injuries. More than 75% of all medical evacuations from the

OIF and OEF Theater of operations were due to non-combat musculoskeletal injuries associated with back, knee, foot, ankle, shoulder, hand, wrist, and neck pain. The typical Soldier medically evacuated from OIF and OEF was a 29-year-old Soldier in need of additional musculoskeletal care, resulting in a negative impact on operational capabilities.

Injuries not only place an enormous drain on the medical system, but adversely impact the operational readiness of the force. Without an increased emphasis on prevention, early identification and management, and proper rehabilitation and reintegration, the Army and DoD will continue to expend enormous amounts of money on Service Members with acute and chronic musculoskeletal injuries and related pain.

Without an increased emphasis on prevention, early identification and management, and proper rehabilitation and reintegration, the Army and DoD will continue to expend enormous amounts of money on Service Members with acute and chronic musculoskeletal injuries and related pain

Leadership within PR&R at OTSG, in collaboration with partners inside and outside of DoD, developed the Musculoskeletal Action Plan (MAP). The MAP consists of three initiatives: injury prevention, early identification & management, and rehabilitation & reintegration. Over the course of the last year, the MAP working group developed several products to mitigate the impact of injury on Soldiers. In a move very similar to that seen with behavioral health providers, the Army has decided to move physical therapists into the brigade combat teams in order to ensure that injury prevention and treatment capabilities are forward on the battlefield. To support the Brigade Combat Team Physical Therapists (BCT PT), the group developed the Building the Soldier Athlete (BSA) program, as well as a reconditioning program designed for Soldiers on profile. In addition, the group developed a BCT PT short course that provides information on how to conduct injury prevention, along with human performance optimization programs and information on how to collect meaningful metrics or outcomes that commanders can use to assess the fitness level of their unit.

Other products include development of a functional capacity evaluation that better correlates to the Soldier's military occupational specialty. This is an ongoing project between PR&R and those involved with the disability system. The ongoing Aquatic Pilot program standardizes aquatic rehabilitation and Warrior exercise and will provide valuable feedback on pain and function of Soldiers enrolled in these programs as part of their rehabilitation and recovery from injury. The outcome of this program evaluation will determine the funding required for these programs across the enterprise.

Future initiatives include a project with Training and Doctrine Command (TRADOC) on the best utilization of either athletic trainers or the Musculoskeletal Action Team (MAT) to decrease injuries, optimize performance, and ultimately decrease attrition in initial military training. Another initiative between Forces Command (FORSCOM) and MEDCOM looks at how augmenting the BCT PT with a MAT impacts readiness and deployability by decreasing injuries and optimizing performance in garrison, and how that carries over into the deployed environment.

The paradigm shift from a disease model health care system to one centered on wellness and prevention is no small matter. It requires hard work and proper resourcing.

Recommendation 4.2.5.1
Develop an education and STRATCOM program focused on musculoskeletal injury prevention and human performance optimization, early identification, and management, rehabilitation, and reintegration.

Recommendation 4.2.5.2
Integrate the Musculoskeletal Action Plan education program and concepts into the pain education and training program.

Recommendation 4.2.5.3
Create an organizational structure, culture, and climate for awareness and execution of the Musculoskeletal Action Plan by collaborating with DoD and stakeholders within the Army (includes FORSCOM, TRADOC, MEDCOM, USUHS, AMEDD C&S, etc).

Recommendation 4.2.5.4
Resource prevention and treatment programs that emphasize evidence-based practices. Capture relevant and available data to identify trends, cost, and return on investment. Utilize data to assist in the prioritization of resources.

4.3 Focus on the Warrior and Family - Sustaining the Force

The third objective requires a renewed emphasis on sustaining the Force by focusing on Warrior and Family Member pain care and management. This is at the heart of the wartime medical mission and it must be a primary objective to which all necessary resources are applied. In fact, it's understood in all the other objectives that taking care of the Warrior is the primary mission of military medicine. The organization must serve Active Duty military, their Beneficiaries, and Veterans with acute and chronic pain due to injury through state of the art clinical care, innovative clinical research initiatives, and educational programs.

It is easy to make the connection between improving care to Warriors and sustaining the force. However, the connection between improving care for Families and sustaining the force is not as universally understood. Family Members with significant pain management issues can be a constant source of stress and distraction for a Soldier and can interfere with duty performance while at home station or while deployed. Providing improved care to Family Members can be the difference between a Service Member deciding to separate from the military or to reenlist.

Healthcare professionals need to monitor and assess each patient for opioid compliance to ensure the safety and efficacy of the pain treatment. The focus should be on pain relief and improving physical function and quality of life.

Regional pain centers of excellence, a standardized pain care approach throughout DoD, and educational programs will improve pain care to Soldiers, Sailors, Airmen, and Marines. Those in the WTU often have complex medical issues, are taking multiple medications, and experience pain management challenges. Embedding or co-locating pain management specialty care and support services and collaborating with the Warrior Transition Command should be priorities. Pain management plans should be incorporated into the Comprehensive Transition Plans.

Warrior and Family Care

Figure 17: A Summary of Categories for Warrior and Family Care

Focus on the Warrior and Family - Sustaining the Force	
Warrior and Family Care	• The Safe Use of Opioids • Embed Pain and Pharmacy Resources • WTC Pain Survey Collaboration

4.3.1 The Safe Use of Opioids

Objective: Implement a drug abuse assessment strategy to ensure the efficacy of pain treatment and reduce aberrant behavior, abuse and addiction with opioids.

In the early 1980's opioids began to be used in the treatment of nonmalignant chronic pain, not just cancer pain. By the 2000's, increased prescribing, the availability of new opioids, and the failure to teach about chronic pain and addiction, along with a zeal to do good, created a backdrop for the growing problem of prescription drug abuse. The increase in the illegal diversion of prescription pain medication is a threat to public and personal health that must not be ignored. It is necessary to take any and all steps to help block the flow of opioid painkillers into the hands of nonmedical users, many of whom are young people and first-time abusers.

Trauma-induced anxiety, whether conscious or unconscious, is a powerful stimulus to seek relief from disturbing memories and often may lead to abuse of drugs and alcohol. The highest risk patients for unsafe behaviors have a "trio diagnosis" of psychiatric disease, substance abuse, and pain. These factors are interrelated and mutually reinforcing. This often describes many of our Soldiers returning from Iraq and Afghanistan. In some studies, the prevalence of comorbid PTSD, TBI and pain exceeds 40% in the VA (Clinical Practice Guideline for Management of Opioid Therapy for Chronic Pain, 2010). When a trio diagnosis is present, all three conditions must be treated simultaneously. These patients are complex and need multidisciplinary evaluations.

People living with chronic pain have increased rates of attempted and completed suicides, especially during times of stress and loss. Patients receiving higher doses of prescribed opioids are at increased risk for overdose, which underscores the need for close supervision of these patients (Unintentional and undetermined poisoning deaths, 2004). Often patients, especially with a history of impulsivity or medication misuse, will choose to use lethal medication as a means of suicide. Suicides may be caused by poorly treated severe pain, intentional or unintentional overdose of opioids usually in combination with alcohol, benzodiazepines, or other pain medications.

Misuse of opioids may be classified as aberrant behavior, abuse or addiction:

1. A behavior is considered aberrant if it deviates from the accepted medical treatment plan. Forty percent of the general population may exhibit aberrant behaviors (Webster and Dove, 2007).
2. Abuse is the use of any substance for a non-therapeutic purpose or the use of medication for purposes other than those for which the agent is prescribed. Approximately 50% of patients with at least one aberrant behavior can be classified as abusers (Webster and Dove, 2007).
3. Addiction is a primary chronic neurobiologic disease influenced by genetic, psychosocial and environmental factors. The development of addiction requires a predetermined genetic framework with repeated exposures. This leads to impaired control over drug use, compulsive drug use, and continued drug use despite harm and because of craving. Only 1-2% of patients who abuse opioids are addicted to the drug and will engage in multiple aberrant behaviors (Webster and Dove, 2007). Failure to treat addiction when it is present can encourage a person to continue destructive and potentially deadly behavior. Abuse can usually be managed and addiction can usually be predicted.

The early recognition and treatment of mental disease are vital to the prevention of prescription opioid abuse

Knowing in advance whether a patient possesses these risk factors can assist a clinician in monitoring the progress of treatment and prevent abuse. The early recognition and treatment of mental disease are vital to the prevention of prescription opioid abuse. However, physicians, nurses, psychologists and others frequently report that they had little formal teaching about pain and even less teaching about addiction. Training on pain and addiction is almost non-existent. Medical providers need two sets of skills to use opioids safely and effectively - prescribing opioids and minimizing the risk of abuse.

Most problematic opioid use does not stem from the disease of addiction but from several other causes including uncontrolled pain, fear of withdrawal symptoms, an untreated mental disorder, or recreational use to achieve a 'high.'

Figure 18: Risk Factors for Misuse

Biological	Psychiatric	Social
• Age ≤ 45 years • Male gender • Family history of prescriptions • Cigarette smoking	• Substance disorder • Preadolescent sexual abuse (in women) • Major psychiatric disorder (e.g., personality disorder, anxiety or depressive disorder, bipolar)	• Prior legal problems • History of motor vehicle accidents • Poor Family support • Involvement in a problematic subculture

Healthcare professionals need the tools to assess their patients for opioid compliance to ensure the efficacy of pain treatment and to diagnose and treat any possible complicating disorders. Each patient must be monitored and reassessed at each visit for his or her response to opioid treatment, including meeting goals that are personal to the patient. The focus should be on:

- Physical function
- Pain relief
- Quality of life

A full list of safety proposals can be found in Appendix B-10.

Figure 19: Increasing the Safe Use of Opioids

Early Intervention	Appropriate early intervention in the treatment of acute pain, such as physical therapy, will help decrease the need for narcotics. Utilizing physical therapy in troop medical clinics, primary care clinics, and the emergency room will improve the treatment of acute pain and decrease its translation to chronic pain. Research is needed to determine the risk factors that influence this transition from acute to chronic pain, such as genetics, environment and behaviors.
Screening	Complete an assessment of drug-abuse risk in all patients on chronic opioids or preferably before initiating opioids. Knowing in advance whether a patient possesses risk factors can assist a clinician in monitoring the progress of treatment. Awareness will result in better clinical outcomes and fewer instances of drug abuse. The goal is not to deny pain treatment to any patient but to set and maintain a level for monitoring that is proportionate to the individual's risk.
Recognize and Treat Substance-use Disorders	Currently, the poor continuity of care is a barrier to identification of problematic drug use. The visibility of patients with aberrant behaviors or previous history needs to be documented longitudinally. The number and persistence of aberrant behaviors is likely to be indicative of greater problems with managing opioid intake. If pain treatment with opioids is to be successful, prescription misuses must be managed. To accomplish this, it is necessary to monitor, chart over time, and address a patent's aberrant drug-related behaviors.
Prescription Monitoring Programs	Approximately seventy percent of DoD prescriptions are now filled in the civilian community (Joint Forces Pharmacy Seminar, 2009). Military Medical Facilities and VAs should utilize state prescription monitoring programs for additional safety monitoring. DoD needs to encourage states to provide this information to practitioners to help identify high-risk patients, "doctor shopping," and compliance.
Urine Drug Screening	Urine drug testing is part of the effort to monitor the clinical efficacy of treatment, determine compliance, evidence of unsafe illicit drug use, and to serve as a deterrent to inappropriate drug taking. An abuser of street drugs is at increased risk for abusing prescription medications. As a clinical monitoring tool, urine drug screenings confer significant benefits as long as the limitations in interpreting results are well understood. Screening is recommended when aberrant behavior is suspected or confirmed, when changes in treatment are being made, and when pain persists despite aggressive treatment.

Recommendation 4.3.1.1
Implement a drug abuse assessment strategy in primary care as part of routine practice to set a level of monitoring proportionate to the individual's risk.

Recommendation 4.3.1.2
Use a written opioid treatment agreement that outlines patients' rights, expectations, and specifies the consequences of noncompliance, and informed consent for all chronic opioid patients.

Recommendation 4.3.1.3
Mandate that only one provider and his or her surrogate may prescribe for patients on chronic daily opioids and that the program is supported by the pharmacy department (Sole Provider Program).

Recommendation 4.3.1.4
Mandate that all MTFs and VA Hospitals become active in the state prescription-monitoring programs to facilitate medication reconciliation and the safe prescribing of opioids (standard of care).

Recommendation 4.3.1.5
Educate providers on pain and addiction, contraindications to opioid therapy, and the goals of a treatment plan.

4.3.2 Embed Pain and Pharmacy Resources

Objective: Provide appropriate pain management and clinical pharmacy oversight in Warrior Transition Units.

Pain management is a primary issue for the Warrior Transition Unit patient population. WTU patients often have complex pain issues that require pain specialty consultation and close pharmacologic monitoring. Many of these patients have co-existing disorders, such as PTSD, TBI, depression, insomnia, and substance abuse. Obtaining an appropriate history and understanding the impact of these co-existing disorders is critical to formulating an appropriate treatment plan.

Evaluating these patients in close collaboration with the primary care physician allows for a coordinated care plan that can reduce the length of time that a patient is held in the WTU, reduce the risks inherent in fragmented care, and facilitate the early detection of aberrant pain behavior in this high risk population. Embedding pain and pharmacy resources in the WTU on a periodic basis will also lead to improved pain management skills among primary care physicians in the WTU as a result of close collaboration over time. Pain patients who would benefit from interventional pain management or other techniques can be referred directly for that care by the embedded pain physician.

WTU patients, especially those with other co-existing disorders (PTSD, TBI, etc), are at higher-than-average risk for adverse outcomes, including accidental overdose and death

WTU patients, especially those with other co-existing disorders (PTSD, TBI, etc), are at higher-than-average risk for adverse outcomes, including accidental overdose and death. Pain is the primary issue for many patients in the WTU. It is critically important to address pain issues quickly, which can in turn facilitate return to duty or transition to the VHA system for care. Embedding pain and pharmacy resources can be expected to result in faster delivery of pain care, early identification of aberrant pain behavior, and reduced length of stay in the WTU. Pharmacists' value to the health care delivery team is evidenced throughout the literature by the wide variety of innovative Medication Therapy Management Services (MTMS) currently being delivered at both local and regional levels. It has been demonstrated that MTMS, appropriately employed, can lead to a reduction in overall health care expenditures through optimizing therapeutic outcomes, reducing adverse medication events and reducing emergency room visits and hospital stays. Medication Therapy Management (MTM) is a partnership of the pharmacist, the patient or their caregiver, and other

health professionals that promotes the safe and effective use of medications and helps patients achieve the targeted outcomes from medication therapy.

If a pain physician and a pharmacist were embedded in the WTU on a periodic basis they could see patients referred by primary care physicians. The schedule frequency of working in the WTU would be determined by the number and complexity of patients to be seen. Patients with urgent pain issues that could not wait until the next scheduled WTU pain clinic would be seen in the regular pain clinic. For facilities that do not have a pain medicine subspecialty trained physician, a primary care physician or other specialist with an interest in pain and additional training in evaluating pain patients may serve this purpose. That physician should have readily available consultation from a Regional Pain Center of Excellence.

MTM encompasses a broad range of professional activities and responsibilities within the licensed pharmacist's scope of practice. These services include, but are not limited to, the following, according to the individual needs of the patient:

- Performing or obtaining necessary assessments of the patient's health status
- Formulating a medication treatment plan
- Selecting, initiating, modifying, or administering medication therapy
- Monitoring and evaluating the patient's response to therapy, including safety and effectiveness
- Performing a comprehensive medication review to identify, resolve, and prevent medication-related problems, including adverse drug events
- Documenting the care delivered and communicating essential information to the patient's other primary care providers
- Providing verbal education and training designed to enhance patient understanding and appropriate use of their medications
- Providing information, support services and resources designed to enhance patient adherence with their therapeutic regimens
- Coordinating and integrating medication therapy management services within the broader health care-management services being provided to the patient

Recommendation 4.3.2.1
Provide access to a Pain Management Provider at all WTU clinics.

Recommendation 4.3.2.2
Provide a clinical pharmacist capability to all WTUs based on each WTU's individual need for clinical consultation and medication reconciliation.

4.3.3 WTC Pain Survey Collaboration

Objective: Collaborate with the Warrior Transition Command to revise the satisfaction survey to incorporate pain metrics.

The Army's Medical Holdover (MHO) Satisfaction Survey Program began in August 2006. In February 2007, issues at WRAMC resulted in a modification and expansion of this survey instrument. In June 2007, the MHO survey transitioned to the WTU Survey, with the goal of providing current, actionable data to leadership. The survey included questions about the Case Manager, Provider and Platoon Sergeant, as well as detailed questions about Medical Care, the Medical Evaluation Boards (MEB) and Physical Evaluation Boards (PEB) process, and living quarters. One of the trends in these surveys has been relatively low satisfaction among the WTs with their "pain control." No other details about pain control or pain management were available from these surveys.

The WTC is revising the WTU survey. Task Force members met with representatives from the WTC and developed some additional questions regarding pain management. These additional questions (Appendix B-11) will provide WTC leadership and MEDCOM with an increased amount of actionable information to improve delivery of pain management services to the Warrior population and will assist the TF with measuring impact of implementation of Task Force recommendations.

Recommendation 4.3.3.1

Incorporate recommended Task Force pain questions into the WTU Satisfaction Survey.

4.4 Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention

The organization must synchronize a culture of pain awareness, education, and proactive intervention. This requires a unified approach to content, education, and training, as well as leadership and organizational adaption on issues of pain management into the future. Patients and providers do not typically stay in one place for their careers. In the course of receiving their medical care, patients are treated in a variety of clinics and hospitals that cross regional, Service, and network boundaries. Likewise, many providers are as mobile as their patients. To the extent possible, the military should aim to standardize the orientation to and understanding of pain and pain management in order to manage the expectations of patients, providers, and leaders.

The resources involved in synchronizing the pain orientation of providers and patients will likely be significant. Realigning existing efforts into one larger and more effective education program under a STRATCOM plan is a logical first step in this process. The likelihood that this would transform the DoD and VHA into a model organization for pain management that influences the practice of medicine, decreases unnecessary suffering, and improves overall readiness makes this a worthy investment.

Strong leadership is required to develop a new vision of organizational pain management with new goals. The organization must examine all viable options for improving acute and chronic pain care, implement proven treatment modalities and process changes, measure results – learning from both successes and failures – and communicate the mission's new priorities through the chain of command across the enterprise. A major organizational reset with regards to acute and chronic pain care will require the following:

- Standardization of pain management capabilities at every level, as well as care from medical education to pain care delivery
- High level integration and prioritization of pain management recommendations that complement issues identified in other Task Force reports and initiatives
- Development of an interagency pain management educational campaign that comprehensively addresses pain care issues among a wide variety of stakeholders
- Establishment of integrated, interdisciplinary and appropriately resourced pain medicine departments across the enterprise
- Standardization of requirements for Pain Medicine Consultants to the Surgeons General at the highest level
- Creation of a DoD and VHA central pain management advisory board to drive policy and curricula development, analyze data and coordinate research, as well as inform practice and establish future lines of inquiry to advance the field of pain medicine.

The importance of this last recommendation – creation of a central pain management advisory board – cannot be understated. An evidence-based, analytical approach to measuring treatment efficacy that leverages standardized pain assessment tools, patient registries and a wealth of longitudinal patient data, holds the potential to advance pain research and unify pain care well into the 21st century.

A Unified Approach to Content, Education, and Training

Figure 20: A Summary of Categories for a Unified Approach to Content, Education, and Training

Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention	
A Unified Approach to Content, Education, and Training	• Pain Curriculum Transformation • Integration of Pain Management Recommendations • Pain Education Campaign Plan

4.4.1 Pain Curriculum Transformation

Objective: Transform the pain curriculum at all levels of medical education and care delivery.

Pain management receives very little attention and is inadequately developed in the curricula of many U.S. medical and allied health professions schools. TF members met with Dr. (b) (6) Director of Pain Education, Johns Hopkins University School of Medicine, to discuss current trends in medical school pain curricula. Dr. (b) (6) stated that the typical medical school may provide four hours of pain content on the topics of basic pain physiology, opioids, non-opioid therapies, and back pain. While some of the components necessary for an adequate pain curriculum are available, the content is seldom organized in a manner that makes it possible for students to successfully integrate the knowledge acquired in a classroom into clinical practice. There is little evidence that medical schools have specific mechanisms to foster competence in providing comprehensive care for patients, which includes clinical skills, such as assessing a patient's emotional state. The lack of a congruent approach to pain management education results in a variation in pain management understanding and practice that is evident in all of the medical professions. The military medical training programs consistently mirror these deficiencies.

Health care professional programs at most major medical educational and training sites do not include a dedicated pain management curriculum. Many health care professionals have little or no training in pain management and are unable to effectively respond to patients' reports of pain. Undertreated pain, failure to prevent development of chronic pain, and unsafe use of opioids may lead to:

- Unnecessary suffering
- Duplicative or ineffective treatments
- Increased economic costs or loss of productivity
- Poor quality of life
- Development of comorbid disease such as depression
- Increased caregiver burden
- Increased physician visits
- Costly health care utilization in the form of Emergency Room visits, specialty care, and prolonged hospital stays
- Unintentional death

New methods of teaching health care professionals about pain care are required to provide the most effective acute pain, chronic pain, and end-of-life pain care to patients. Currently, most clinicians' knowledge about pain assessment and management is derived from clinical experience rather than medical schooling, but effective and standardized treatment requires that pain medicine become part of a core curriculum on chronic disease.

This requires leadership, including deans of medical and other health professional schools, directors of residency training programs in specialties and subspecialties that provide primary care, professional societies, and other stakeholders to ensure every trainee and health practitioner has the skills to assess and treat pain effectively, including chronic pain.

Pain permeates many aspects of patient care and every medical discipline including medics, nurses, anesthesiologists, neurologists, emergency physicians, physiatrists, pediatric and adult primary care providers, pharmacists, psychologists, physical therapists, social workers and others. As health professionals graduate and treat patients of their own, they should know how to assess, diagnose, triage, and treat pain. This education should start in the health professionals' schools and continue through their post-graduate training (residencies and fellowships) into clinical practice with ongoing, staff educational opportunities.

Pain permeates many aspects of patient care and every medical discipline including medics, nurses, anesthesiologists, neurologists, emergency physicians, physiatrists, pediatric and adult primary care providers, pharmacists, psychologists, physical therapists, social workers and others

The DoD and VHA are involved in the medical training of many of those providing the patient care in DoD and VHA medical facilities. The Uniformed Services University of Health Sciences (USUHS), AMEDD Center and School, and DoD GME programs are responsible for training everyone from combat medics to battlefield surgeons. Upon completion in 2011, the Medical Education and Training Campus (METC) led by tri-service leadership will centralize all Army, Navy and Air Force basic and specialty enlisted medical training. The VHA trains health professionals in many different specialties, both at undergraduate and post-graduate (GME) levels. These trainees may end up in the VHA, DoD, or civilian sectors as employees. In addition, the VHA routinely develops educational CME programs to advance the medical and clinical knowledge of their providers.

The TF determined that existing DoD-controlled education and training programs lacked a consistent approach and orientation to teaching our providers about pain. The education curricula fell short in structuring the didactic content in a manner that allowed the students to integrate a comprehensive understanding of pain into their clinical practice. One exception noted by the TF was the U.S. Army-Baylor University Doctoral Program in Physical Therapy. This program's curricula exemplified several of the concepts recommended by the TF. The Army-Baylor PT program successfully relates the pain-related content in its didactic training (e.g. pathophysiology, anatomy, and pharmacology) to its clinical practicums. In addition to "connecting the dots" for in their pain-related curriculum, the PT doctoral program placed a special emphasis on patient involvement in the effective management of pain.

Synchronizing the pain education and training within DoD- and VHA-managed institutions is an essential step in implementing a comprehensive pain management strategy. The pain-related curricula for all of the DoD and VHA education and training programs should be structured to create an enterprise-wide group of providers and staff with a similar vision, orientation, and understanding of pain. This common orientation should be reinforced at every level of medical training and at every point on the vast continuum of medical care managed by the military and the Veterans Administration.

Recommendation 4.4.1.1

Establish a core curriculum specific to pain management to be integrated into all DoD graduate medical education and advanced medical training programs.

Recommendation 4.4.1.2

Integrate core pain education and training content into AMEDD training courses (68W, Office Basic Course, Combat Casualty Care Course).

4.4.2 Integration of Pain Management Recommendations

Objective: Integrate TF recommendations and STRATCOM with other related DoD and VHA programs.

The Pain Task Force is only one of the many programs or initiatives undertaken to improve quality of life and maintain readiness of the Armed Forces. Examples of the programs and initiatives that appear to share a common interest with the Pain TF are:

- Comprehensive Soldier Fitness
- Behavioral Health Task Force
- Army Suicide Prevention Task Force
- Traumatic Brain Injury Task Force
- Behavioral Health Campaign Plan
- Musculoskeletal Action Plan
- Patient Centered Medical Home

The Pain TF invited representatives from these initiatives to its working meetings and/or consulted with their representatives when developing recommendations. Continued collaboration and coordination between these very complementary processes are paramount to reducing duplication of effort, minimizing conflicting messages, and maximizing effectiveness of the Pain TF recommendations.

The Pain TF recognizes the synergy involved in synchronizing related messages across a continuum of programs. For example, the Army's Comprehensive Soldier Fitness (CSF) program's mission is to "develop and institute a holistic fitness program for Soldiers, Families, and Army civilians in order to enhance performance and build resilience." The Pain TF evaluated pain management along a continuum of care from prevention to early identification and treatment to resolution. Resilience certainly plays a role in successful pain management, therefore the prevention components in the education and training plans developed for the comprehensive pain management strategy should echo the messages from CSF. The effort to "connect the dots" between programs with similar interests should lead to more effective and efficient communication of the respective program messages.

Recommendation 4.4.2.1
Develop pain management STRATCOM in collaboration with DoD and VHA programs with related interests.

4.4.3 Pain Education Campaign Plan

Objective: Develop a pain management education plan that addresses the full spectrum of stakeholders and issues.

The sweeping changes recommended in this report will require the MHS and VHA to undertake an extensive re-education and training initiative for medical staff, patients, leaders, and Family Members. The current variation in orientation, understanding, and practice of pain management throughout DoD and VHA will not easily be corrected. In fact, the TF members have described the required action as essentially performing a massive "re-boot" on the military and VHA health care system's orientation to pain management. While certainly a challenge, it is well within the capabilities of these organizations to make this happen.

The first step in this process will require the Uniformed Services and VHA to agree on a series of common core approaches, standards, and messages that will become the key to standardization across DoD and VHA. Ideally, the Task Force recommendations will be the template for this strategy. The starting point is the Task Force's goal of

providing a standardized DoD and VHA vision and approach to pain management to optimize the care for Warriors and their Families.

The core components of the pain management strategy should support, reinforce, and complement the existing pain-related strategies and initiatives in DoD and VHA (e.g., Comprehensive Soldier Fitness and Army Suicide Prevention Task Force). This will require a complex series of continuing coordination and staffing among the Uniformed Services and VHA. Careful attention should be made to ensuring proper "handoffs" and continuity of messages and strategies that are related but external to medical commands (e.g. resilience, safety, addiction). Conversely, these non-medical but related initiatives should complement and reinforce the core messages from the pain strategy. Standardizing the core messages and organizational orientation to pain management across DoD and VHA will not only better manage the expectations of patients and staff, but also drive improvements in satisfaction and outcomes.

Because of the overwhelming amount of variance in the understanding, approach, and practice of pain management across DoD and VHA, the "re-boot" necessitates an aggressive and highly visible campaign and education plan. This will require resource-intensive STRATCOM, marketing, and education efforts that cross all organizations. Again, while efforts are undertaken to reorient and educate medical staff to this strategy and approach, a simultaneous effort must occur to educate patients, Families and leaders. This will involve more than dissemination of new policies or presentations and should be given the attention and emphasis commensurate with the seriousness of the issue to DoD and VHA.

As organizations implement this new strategy, it will need to be supported and sustained by a robust education and training program. Under the guidance of a central pain management advisory board, a curriculum should be developed that addresses the full scope of pain-related education and training needs of patients, staff, Family Members, and leaders. The minimal requirements for the Pain curriculum are outlined in Figure 21 and a detailed curriculum can be found in Appendix B-12.

Figure 21: Notional Pain Management Curriculum

100 - General Information about Pain / Pain Management	
101:	Introduction to Pain Management (Audience: General Military Population)
102:	Pain Management for Leaders/Supervisors (Audience: Military Leaders)
103:	Understanding a Family Member with Pain Management Issues (Audience: Family Member of those with pain management issues)
104:	Patients with pain and co-existing disorders of TBI, PTSD, Depression, Substance Abuse, etc. (Audience: All of the above)

200 - Pain Management for Healthcare Staff	
201:	Introduction to Pain Management for Healthcare Personnel (Audience: All health care personnel)
202:	Pain Management in Primary Care (Audience: Primary Care Providers)
203:	Pain Management in the WTU (Audience: Providers and Staff in Warrior Transition Units)
204:	Pain Management for Pharmacist (Audience: Pharmacists)

(continued on next page)

300 - Deployed / Battlefield Pain Management	
301:	Medic Management of Battlefield Pain (Audience: Medics, Hospital Corpsmen, Airmen)
302:	Pain Management at Level III (Audience: Deploying health care personnel)
303:	Evacuation Pain Medicine (Audience: Deploying health care personnel)
304:	Acute Pain Medicine Service (Audience: Pain medicine physicians (anesthesiologists) and nurses)

400 - Pain Care by Specialty	
401:	Pain Medicine Specialty Care (Audience: Pain Medicine Specialists)
402:	Perioperative pain management (Audience: Surgical personnel)

Recommendation 4.4.3.1
Further educate all DoD and VHA medical personnel on the disease process of pain and its management.

Recommendation 4.4.3.2
Provide standard curriculum of pain education that is formed on the best available medical evidence.

Pain Management and Leadership

Figure 22: A Summary of Categories for Pain Management and Leadership

Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention	
Pain Management and Leadership	• Standardize Pain Management Capabilities • Interdisciplinary Pain Management Departments • Pain Medicine Consultants to Military Leadership • Central Pain Management Advisory Board for DoD and VHA

4.4.4 Standardize Pain Management Capabilities

Objective: Establish enterprise-wide tiered pain management requirements to standardize patient care services.

While there is variability in pain services between the DoD and VHA health care systems, there is also no consistency in pain management from MTF to MTF. This lack of consistency results in considerable patient and provider frustration and a disruption of pain care plans as the highly mobile patient population moves from facility to facility. MTF commanders are given no guidance on what pain services they should be providing or what resources they should be obtaining. Many pain providers believe this lack of a consistent approach to pain care at all levels within the DoD and VHA systems has negatively impacted many Soldier health issues, such as opioid abuse and misuse, patient suicide, PTSD, and TBI, among others.

A consistent approach to pain management throughout the continuum of care is vital to the health and safety of the Beneficiary population. This pain policy must start at point of injury, continue throughout the levels of care, and persist at all Contiguous United States (CONUS) MTFs. The policy must also extend into the VHA and community health systems to enable continuity of care as patients move outside the MHS.

To begin the process of developing this consistent approach, issues in battlefield pain management should be prioritized. Next, CONUS MTFs should implement a tiered system of pain medicine. In support of the proposed tiered system, each TRICARE region will have at least one Regional Pain Center of Excellence (RPCoE) to serve as the pain consultation center for the region. Each RPCoE will work with the central pain management advisory board on coordination of pain care policy among TRICARE regions. RPCoE services are outlined in Appendix B-13.

Many pain providers believe this lack of a consistent approach to pain care at all levels within the DoD and VHA systems has negatively impacted many Soldier health issues, such as opioid abuse and misuse, patient suicide, PTSD, and TBI, among others

The creation of pain departments in MEDCENs will support a coordinated system of pain management services, including most of the RPCoE services except the Pain Rehabilitation Center. Tier I and II services are outlined in Figure 23. The Tier System corresponds to the VHA Stepped Care Model (see section 4.2.4), which conceptualizes the process of care based upon patient need for intensity and additional expertise. By providing a consistent structure linked to the VHA Stepped Care Model, the tiered system will ensure consistent delivery of pain medicine services throughout the DoD and serve as a model for integrated pain care in the nation.

Figure 23: Tier System of Pain Care

Tier	MTF	Pain Services
I	Outpatient health clinics and troop medical clinics. MTFs with no routine surgical capability.	Pain Champion and initial pain education
II	Small MTF or large multidisciplinary clinics with routine surgical capability	On site behavioral health support plus a combination of pain pharmacology, other pain management modalities and case management
III	Large MTF or community hospital	Acute and chronic interdisciplinary pain services
IV	Medical Center	Pain Department
V	TRICARE Region Pain Consultation Center	Regional Pain Center of Excellence

Additional resource requirements:

- Adoption of the pain tier system.
- Adoption of related Pain Task Force recommendations, including a central pain management advisory board, battlefield pain recommendations, and creation of an interdisciplinary pain management department.
- Extensive re-training effort and policy generation at all Levels of care.
- Fundamental change in organizational attitudes and policies towards the disease process of pain.

This issue is central to the success of all other Task Force recommendations. Change of this magnitude will be difficult but DoD and VHA commitment to and leadership in this endeavor will likely be the benchmark for pain management in the United States for the rest of this century.

Recommendation 4.4.4.1
Adopt the tiered system of pain care.

4.4.5 Interdisciplinary Pain Management Departments

Objective: Establish interdisciplinary pain management services to oversee optimum patient-centered, integrated pain care.

The field of pain medicine encompasses patients with acute, chronic, cancer-related, and other forms of pain. Pain treatment services are provided by clinicians from various specialties including primary care physicians, anesthesiologists, physical medicine and rehabilitation physicians, pain medicine subspecialists, neurologists, psychiatrists, psychologists, pharmacists, physical therapists, occupational therapists, complementary and alternative medicine practitioners, and other allied pain-related specialties. The body of medical knowledge representing the field of pain medicine is beyond the focus of any one of these contributing specialties alone. Fragmentation of pain care is common without interdisciplinary collaboration and care coordination, and was a common theme reported to the Pain Task Force during site surveys.

Many sites were attempting to address pain needs in a subset of pain patients through a multidisciplinary pain committee. Such committees typically meet periodically to review care plans for high risk patients who came to command attention as a result of difficult-to-treat pain, high utilization of health care resources, and/or high risk pain-related behavior. These multidisciplinary committees serve an important function by identifying and tracking high risk patients and making a concerted effort to treat and refer them appropriately. Many members of these multidisciplinary committees expressed disappointment with the quality of pain care resources available for referrals within their respective TRICARE region. Only a small minority of sites had co-located pain care clinicians providing interdisciplinary pain care.

MEDCENs are tertiary referral medical centers resourced to provide advanced medical services above the services provided at the MTF level. Effective pain management within the MEDCEN requires an interdisciplinary Pain Medicine Service that draws from multiple specialties but is philosophically independent and works collaboratively to provide integrated pain care. Co-location of these services in an Interdisciplinary Pain Center facilitates better communication and provides optimum patient-centered, integrated pain care.

Poorly integrated pain services and fragmentation of care was a primary and consistent finding of the Pain Task Force. The risks inherent in not having pain providers co-located include the following:

- Delays in establishing treatment plans
- Increased risk that aberrant pain behavior will not be detected in a timely manner
- Increased risk of losing patients to follow-up
- Unnecessary variation in care provided
- Decreased efficiency of pain specialists

Individually and collectively, these risks lead to a decreased total number of pain patients treated within the MEDCEN and an increased overall cost to the MHS.

Command leadership must be responsible for ensuring that the Interdisciplinary Pain Medicine Service is appropriately resourced to meet its vital mission. This requires balancing inter-specialty competition for resources that may arise as the MEDCEN is tasked to meet the dual tertiary medical care and operational medical missions inherent in the MHS. The integration afforded by this consolidation and co-location of pain assets will allow for improved outcomes-based metrics for determining best practices. Development of a consistent pain clinical structure will reduce variability between DoD facilities and improve patient transitions into the VHA or community health systems. This approach will improve provider satisfaction, expand outcomes data collection, enhance patient safety and, most importantly, improve patient care and satisfaction. Failure to appropriately address and resource these requirements will increase fragmentation of pain care and risk of adverse outcomes in patients.

The TDA for each MTF should recognize the need for pain care appropriate to facility size, with each MEDCEN resourced for an Interdisciplinary Pain Medicine Service. One medical center in each TRICARE region should be designated a TRICARE Regional Pain Center of Excellence (RPCoE). The RPCoE will represent the fullest expression of the Interdisciplinary Pain Medicine Service concept (including co-location of pain care specialists into an Interdisciplinary Pain Medicine Center), serve as the regional pain consulting activity (Appendix B-13), and provide telemedicine pain support for the entire TRICARE region. Each RPCoE will coordinate with the central pain management advisory board on DoD- and VHA-wide pain issues and research activities.

Additional resource requirements:

- Creation of a new Interdisciplinary Pain Medicine Service within each MEDCEN.
- Designation of one Interdisciplinary Pain Medicine Service within each TRICARE Region as the RPCoE.
- Establishing an interdisciplinary pain committee at each MTF and establishing a telemedicine link to the RPCoE for that TRICARE region.
- Standardized credentialing.
- Updated productivity metrics that support the integrated model for delivery of pain care.
- Reallocation of personnel and resources to staff pain RPCoE.

Recommendation 4.4.5.1
Establish TRICARE Regional Pain Centers of Excellence networked to every MTF in that region.

Recommendation 4.4.5.2
Establish an Interdisciplinary Pain Medicine Service at each major DoD MEDCEN.

Recommendation 4.4.5.3
Define local capability requirements in establishing the tiered system of pain care delivery.

4.4.6 Pain Medicine Consultants to Military Leadership

Objective: Develop requirements for Service pain consultants to reflect an interdisciplinary, integrative approach to pain management.

Army, Navy, and Air Force Surgeons General have consultants from the wide spectrum of medical specialties to assist them in making informed decisions. MTF commanders rely on subject matter experts within their commands for advice. Most recently, Army and Navy have added the position of Pain Consultant to their respective Surgeons General and the Air Force is considering a similar addition to their group of Surgeons General Consultants. The current Army and Navy Pain Consultants are Anesthesiologists and graduates of pain medicine fellowships. The TF recommends transforming pain management in the MEDCOM and MHS into an interdisciplinary and integrated specialty. It is essential to transform the current selection criterion of the Service pain consultants to reflect this expanded perspective of pain management. This recommendation should not be interpreted as an attempt to dilute the qualifications of this essential consultant position.

Pain Medicine is currently a recognized medical subspecialty with board certification through the American Board of Medical Specialties (ABMS). Board certification requires successful completion of an Accreditation Council for Graduate Medical Education (ACGME) interdisciplinary pain medicine fellowship, demonstrated expertise in the evaluation and treatment of acute, chronic, and cancer pain, and the achievement of a passing score on the board examination. Although the intellectual background and clinical practice of pain medicine is derived from several traditional specialties (e.g., anesthesiology, neurology, psychiatry, Physical Medicine and Rehabilitation (PM&R), and neurosurgery), entrance into pain fellowships was initially restricted to anesthesiologists. As a result, these

fellowships have traditionally been focused on training in pain procedures and the vast majority of fellowship-trained specialists are anesthesiologists.

The American Board of Pain Medicine (ABPM) was formed in 1993 to provide a standardized credential, and has credentialed more than 2,000 physicians who now practice pain medicine. The standardized credential for pain medicine specialists with ABMS board certification from these other specialties was based on a broader examination that was more representative of the practice of comprehensive pain medicine. Beginning in 2001, ACGME fellowships began opening to Neurologists, Psychiatrists, and Physiatrists. More recently, in recognition of the weaknesses of the current training emphasis on procedures, fellowships have attempted to become even more comprehensive and integrated in their approach to pain medicine, despite the limitations of a one-year experience.

Recently, at an American Medical Association-sponsored Summit on Pain Medicine Practice and Training, representatives from all medical specialties reached the consensus that training was inadequate and that in order to provide more uniform standards in pain medicine care, training needed to be lengthened to at least two years with eventual development of separate residency training as a specialty.

Pain Medicine Consultants should represent the integration concepts identified by the TF as critical to the success of pain management. The Pain Medicine Consultant should:

- Practice comprehensive pain care
- Have up-to-date knowledge of the expansive field of pain medicine
- Be involved in and/or knowledgeable about current pain research
- Have experience leading an interdisciplinary pain team

Completion of a Pain Fellowship is a significant accomplishment in the field of pain medicine, but it should not be the sole discriminator for pain consultant selection. The Pain Medicine Consultant should be Board Certified in their primary medical specialty and be the most qualified person for that position.

The VHA has established a National Program Director for Pain Management, and a Deputy National Program Director for Pain Management, in the VHA National Pain Management Program Office at the VA's Central Office (similar to the Service Surgeons Generals Offices). Illustrating the diverse nature of the field of pain medicine, the National Program Director is a clinical Psychologist (PhD) and the Deputy National Program Director is a certified Pain Medicine Specialist by both the ABMS and the ABPM from a background of primary care and Psychiatry (MD).

The American Academy of Pain Medicine, American Pain Society, and the International Association for the Study of Pain are all examples of large professional organizations dedicated to the practice, education, and research of interdisciplinary pain medicine. All of these organizations choose their leadership from a variety of the disciplines involved in comprehensive pain medicine.

The formation of a Pain Medicine Department (as discussed in Section 4.4.5) will ensure that the comprehensive and interdisciplinary nature of Pain Medicine maintains the ultimate goal of effective patient care. It will encourage Pain Medicine specialists to focus on goals of the Pain Medicine Department and not be obligated to the departmental needs of their individual parent specialties. The Chief of each medical facility's Pain Medicine Department will not be from the same specialty, but will be a strong leader in the field of pain medicine. This variability is secondary to the diverse field of pain medicine but also to the diverse nature of the military. Given the tiered structure of military medical facilities, not every facility will have the same specialties represented. For example, the Chief at one facility might be a fellowship trained interventionalist while at another facility the Chief might be from Behavioral Health.

Recommendation 4.4.6.1

Develop pain medicine consultant selection criteria to identify the candidates who best represent the integrative and comprehensive nature of pain medicine.

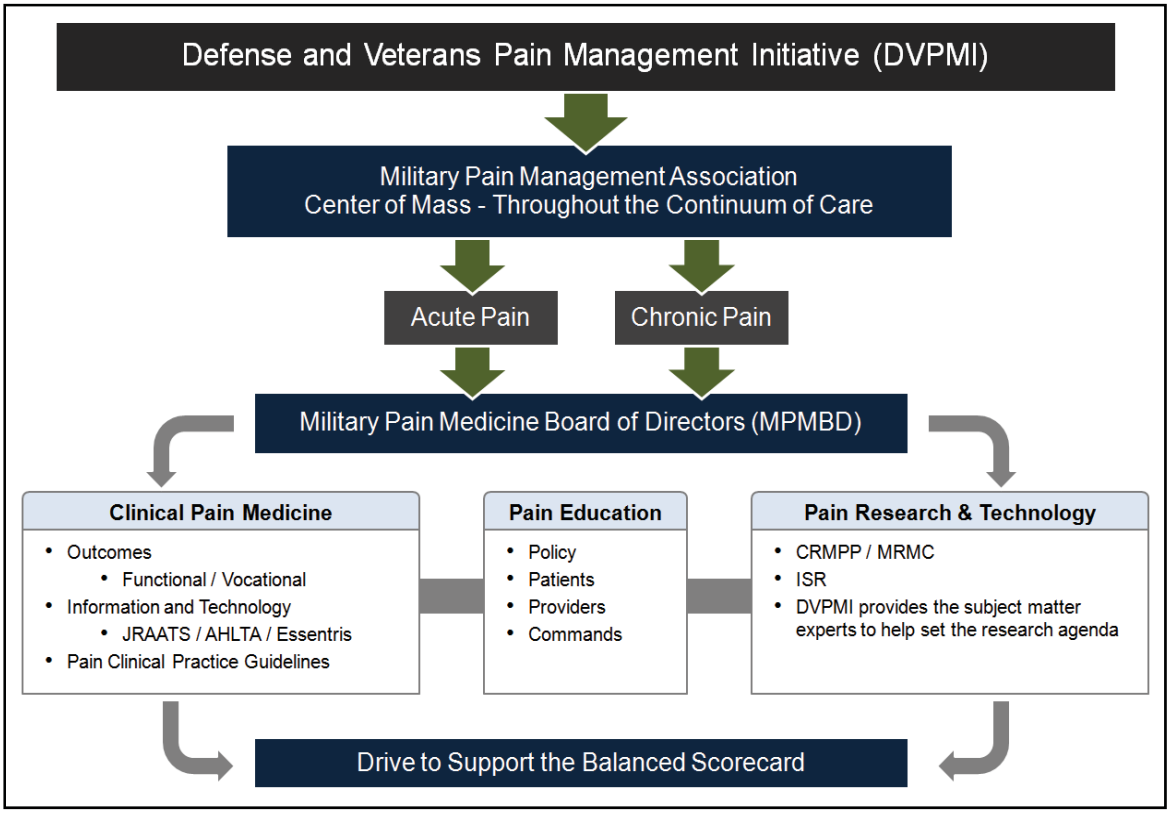
4.4.7 Central Pain Management Advisory Board for DoD and VHA

Objective: Establish an effective pain management advisory board for DoD and VHA.

The scope and magnitude of changes recommended by the DoD Pain Task Force require a central pain management advisory board to ensure effective implementation and stewardship of all pain care improvements throughout the care continuum. The TF identified numerous critical tasks that should be managed by a central pain management advisory board (see Figure 25). The board will provide the necessary policy development, research, and curriculum development to move pain care for all DoD and VHA Beneficiaries forward to a new, more patient-centric level. It will also establish a pain continuum of care from onset of pain (battlefield or at home) through DoD health care centers to VHA centers and the community.

The central pain management advisory board will operate as a center of excellence and will provide a "central point of contact" for establishing and maintaining pain care clinical standards, managing pain provider education programs, and providing recommendations for pain research priorities. No current DoD program is tasked with this responsibility despite the correlation of pain with PTSD, suicide, and other mental and physical health issues identified in virtually every task force report since the beginning of OIF and OEF.

Figure 24: Proposed Central Pain Management Advisory Board Structure



The Defense and Veterans Pain Management Initiative (DVPMI) currently exists as a Congressionally-sponsored program that has historically focused on battlefield anesthesiology-related acute pain issues. Formally known as the Military Advanced Regional Anesthesia & Analgesia (MARAA) program, DVPMI has functioned as a tri-service collaborative group of anesthesia providers focused on battlefield pain management. They have spearheaded many recent battlefield advances in pain care, such as the military pain infusion pump, epidurals and continuous peripheral

nerve blocks in theater and on military evacuation aircraft, as well as the use of novel battlefield pain infusions such as ketamine.

The Pain Task Force recommends that the DVPMI, after expanding its membership to reflect the interdisciplinary and integrated nature of pain medicine, becomes the DoD and VHA central pain management advisory board. Based on recommendations of the Task Force, the DVPMI will have a greatly expanded mission for the Services and the VHA in representing all medical specialties involved in acute and chronic pain management for Warriors and other DoD Beneficiaries.

Figure 25: Responsibilities of a Central Pain Management Advisory Board

Establish metrics for training success and practice impact that are evaluated annually and used to update and continuously improve the Pain Assessment Tool, driven by research
Validate the Pain Assessment Tool
Make policy and process decisions for Standardizing Pain Care
Develop PASTOR content and maintain data repository
Serve as the Battlefield pain management proponent and consultant organization
Maintain responsibility for routine analysis, trend modeling, and the management and reporting of the Joint Theater Trauma Registry (JTTR)
Develop and maintain all electronic pain order sets and policies
Develop variations of the pain medication orders for all levels of MTFs within the DoD and VHA systems
Maintain responsibility for program, data, and content responsibility for the Joint Regional Anesthesia and Analgesia Tracking System (JRAATS)
Fill research information needs by using shared information platforms from MRMC and CRMRP
Develop priorities for future pain-related Clinical Practice Guideline development
Ensure that any recommendations complement existing initiatives and collaborate with all relevant organizations and initiatives on development of future recommendations
Develop a curriculum that addresses the full scope of pain-related education and training needs of patients, staff, Family Members, and leaders
Coordinate with the RCPoE on DoD- and VHA-wide pain issues and research activities
Ensure effective implementation and stewardship of all pain care improvements throughout the care continuum
Provide the necessary policy development, research, and curriculum development to move pain care for all DoD and VHA Beneficiaries forward to a new, more patient-centric level
Ensure that clinical interventions are well-aimed and based upon proven methodology, and that current research findings can be rapidly translated into clinical practice
Implement, monitor, measure outcomes, and sustain Pain Research STRATCOM initiative as part of its Operations and Maintenance responsibilities
Review and update all electronic pain guidelines annually

The reorganized DVPMI will serve as clinical advisor on the best integrated pain medicine practice, the foremost pain medicine educational resource, and the DoD and VHA pain research and outcomes evaluation focal point. As the Defense Pain Center of Excellence (DPCoE), the DVPMI will be responsible for assessing the effectiveness and safety of pain care. This initiative will seek to improve pain care communication among health care providers throughout the care continuum, particularly as it relates to the control of opioid use and prevention of abuse.

The DVPMI will provide a research foundation to study how current and future pain care technologies and medications impact Soldiers from battlefield injury to evacuation and throughout recovery and rehabilitation. The interdisciplinary program will examine the influence of pain on PTSD, Soldier suicide, social re-integration, trauma rehabilitation, disease progression, and other interrelated issues. The DVPMI will provide an administrative structure for a Military Pain Medicine Board of Directors (MPMBD) consisting of Air Force, Army, Navy and VHA senior expert clinicians and researchers experienced in the management of acute and chronic pain. The proposed DVPMI charter is provided in Appendix B-14.

Additional resource requirements:

- The DVPMI will require an annual budget to support its DoD-wide clinical, educational, and research mission. Personnel requirements for the DVPMI are outlined in the DVPMI Charter. DVPMI goals are consistent with established goals of the DCoE.
- The strategic pain mission of the DVPMI, which encompasses both the DoD and VHA health care systems, necessitates placement of the DVPMI at the level of the MHS. The Services Surgeons General would have to recommend placement of the DVPMI through the Senior Military Medical Advisory Council.
- Possible “homes” for the DVPMI include: Uniformed Services University; Defense Centers of Excellence, Institute for Surgical Research.

Establishing the updated DVPMI will greatly enhance pain care throughout the continuum and help break down inconsistencies in pain care delivery between the Services and MTFs. Partnership with the VHA in pain management will contribute to a seamless transition of patients from DoD facilities to VA hospitals and back into their community. The DVPMI will reinforce the DoD Medical Services’ leadership role in clinical pain management, education, and research and will ensure that Pain Task Force recommendations result in lasting improvements in pain care. The DVPMI will continue to advance the care that DoD Beneficiaries are receiving, ensuring adoption of the latest and best pain management techniques and modalities from military and VHA health care facilities. This effort will positively impact all aspects of a patient’s care, recovery, rehabilitation and return to a productive life.

Recommendation 4.4.7.1

Establish the Defense and Veterans Pain Management Initiative (DVPMI) as the DoD and VHA central pain management advisory board for pain medicine issues.

Recommendation 4.4.7.2

Task the DVPMI with the responsibility to establish pain care clinical standards, manage pain provider education programs, and provide recommendations for pain research priorities.

V. THE WAY AHEAD

Pain management has essentially changed very little since the discovery of morphine in 1805. Morphine remains the battlefield pain management standard, despite identification of significant side effects in the most advanced medical setting, much less a field environment. The military should continue to focus on improving the delivery of pain medicine by increasing the support and investment in research and technology efforts.

It is imperative to minimize the current variation in pain management structure, practice, and orientation across the MEDCOM, MHS, and VHA. Overcoming these challenges will require a significant reorganization, education, and training effort that will be most effective if pursued as a part of a DoD and VHA partnership.

Pain management has essentially changed very little since the discovery of morphine in 1805, and morphine remains the battlefield pain management standard, despite identification of significant side effects in the most advanced medical setting, much less a field environment

The Uniformed Services boast an impressive group of pain medicine physicians who received training in a variety of pain fellowships and training programs, both inside and outside of the military. These pain subject matter experts have been integral in ensuring that military pain medicine keeps pace with advances in practice and technology. Unfortunately, there are relatively small numbers of these specialists in the MHS therefore demand for their services will likely continue to exceed supply. In addition to ensuring there are continued efforts to grow and retain pain medicine specialists, the MHS must develop a supporting team of clinicians and staff to assist specialists in addressing the pain management needs of their patients and staff.

Pain medicine should be managed by integrated care teams which employ a biopsychosocial model of care. The standard of care should have objectives to decrease overreliance on medication driven solutions and create an interdisciplinary approach that encourages collaboration among providers from differing specialties. Efforts should be undertaken to eliminate stove-piping of pain care.

The DoD should continue to responsibly explore safe and effective use of advanced and non-traditional approaches to pain management, conduct ongoing research, and provide ongoing education for providers and patients. Once integrative medicine approaches to pain have been piloted and documented as safe, effective, and cost efficient, they should become covered benefits for beneficiaries.

There has been a systemic failure to establish pain as a priority beyond the narrow scope of the JC 2001 directive. The MHS and VHA are in a position to exceed the standard. Leadership must establish pain as a priority, with an urgency that leads to practice changes. The lack of a common understanding of, and orientation to, pain among providers and medical staff prevents a unity of effort, resulting in suboptimal care as well as lost synergies and missed savings.

The focus should be on prevention, followed by prompt and appropriate treatment that seeks to relieve acute pain and eliminate progression to chronic pain when possible. The MHS can never keep up with the demand for specialty pain care unless it optimizes the pain management in primary care.

Although there are many recommendations specifically targeting pain, the TF is convinced that one of most effective ways to improve pain management care and outcomes would be to improve health care delivery in the primary care setting. The medical home model allows for improvements in primary care, diagnosis and treatment management, early identification of injuries and disease, rapid and appropriate follow up, and specialty referrals. The VHA Stepped Care model should be adapted for use in DoD.

Finally, the TF believes multiple synergies can be realized with the incorporation of a joint DoD and VHA strategy. Warriors and Beneficiaries need and deserve a unity of effort across MHS and VHA. A synergistic approach provides for practice improvement and outcome management research, which uses data to inform best practices and create the next generation of clinical practice guidelines. With this approach, there is no Army, Navy, or Air Force pain.

Including the VHA in this strategy is essential and obvious. In addition to the number of MHS patients who eventually qualify and elect to receive care at VA facilities, there are many active duty Service Members who are in and out of the VHA system prior to separating from the military. The two organizations should cooperate and share common educational materials, venues, protocols, and formularies. A common standard would demonstrate the power of a unified effort and expedite achievement of the common goal: *providing a standardized DoD and VHA vision and approach to pain management to optimize the care for Warriors and their Families*. This goal can be realized.

APPENDICES

Appendix A: Task Force Recommendations

4.1 Provide Tools and Infrastructure that Support and Encourage Research Advancements in Pain Management

Standards and System Improvements

4.1.1 Standardized Pain Taxonomy	
Establish common pain taxonomy across the DoD and VHA.	
4.1.1.1	Establish a uniform understanding and use of key pain-related terms in the vocabulary of the DoD and VHA health care systems.
4.1.1.2	Identify a process to Review, Revise, and Approve DoD and VHA definitions for pain, acute pain, and chronic pain.
4.1.1.3	Integrate DoD and VHA definitions for pain, acute pain, and chronic pain into existing training, policies and regulations, and standards throughout DoD and VHA.

4.1.2 Standardized Pain Assessment Tool	
Describe a common language DoD and VHA pain assessment tool with visual cues and a common set of measurement questions.	
4.1.2.1	Review and approve the new DoD and VHA common Pain Assessment Tool validation plan.
4.1.2.2	Validate Pain Assessment Tool in DoD and VHA facilities.
4.1.2.3	Integrate the Pain Assessment Tool, upon validation, into training, clinical practice, and data collection of pain management in DoD and VHA.

4.1.3 Pain Management Survey	
Establish a common baseline of pain care capabilities across DoD and VHA by creating a modified version of the 2009 VHA Pain Management Survey to distribute to all DoD MTFs.	
4.1.3.1	Administer a modified VHA pain survey across DoD MTFs to establish a baseline of pain care capabilities.
4.1.3.2	Continue to periodically administer the survey to track improvements at DoD MTFs to ensure a standardized measurement of pain longitudinally and across organizations.

4.1.4 Nursing Role in Pain Management	
Evaluate the utilization, potential roles, and certification requirements for Nurses in the DoD pain management strategy.	
4.1.4.1	Request that the Federal Nurse Advisory Board evaluate the impact of certified pain nurses on patient outcomes and satisfaction.
4.1.4.2	Request that the DoD and VHA Nurse Executives evaluate the role of certified pain nurses in patient care delivery (military and civilian).
4.1.4.3	Determine the future role and potential use of certified pain nurses across the care continuum.
4.1.4.4	Build the population of certified pain advanced-practice nurses (graduate education, board certification, short courses, and career field designation) to maximize the value and utilization of their critical skill sets.
4.1.4.5	Integrate approved TF recommendations into Core Nursing Competencies, Clinical Transition Program (CTP), and other Nursing training programs.
4.1.4.6	Utilize the DoD multidisciplinary pain management advisory board to evaluate and integrate recommendations from the Federal Nurse Advisory Board into the DoD pain management strategy.

4.1.5 Standardized Credentialing	
Establish a process to standardize a Military Health System credentialing process for pain medicine.	
4.1.5.1	Use specialty consultants to determine procedures to standardize MHS pain credentialing.
4.1.5.2	Standardize minimum training, certification, skill requirements, and scope of practice requirements for providers delivering procedural pain care across MHS. Develop requirements with assistance from both physician and non-physician subject matter experts.
4.1.5.3	Consolidate specialty consultant recommendations into standard credentialing documents and approve DoD-wide.

4.1.6 Productivity Measures	
Reexamine the use of productivity measures (Relative Value Units) in evaluating primary care.	
4.1.6.1	Establish patient-centric clinical outcome measures of productivity.
4.1.6.2	Modify the Relative Value Units metric to include a patient-centric outcome standard.

4.1.7 DoD and VHA Pain Care Standardization	
Develop a patient-centric approach to recovery, rehabilitation, satisfaction, and pain control, with greater attention to opioid control and minimizing abuse.	
4.1.7.1	Establish a uniform DoD and VHA formulary.
4.1.7.2	Integrate specific pain management "at risk" criteria into existing discharge planning coordination for transitioning patients.
4.1.7.3	Establish similar pain care capabilities at DoD and VHA sites of similar size.
4.1.7.4	Conduct pain management pilots to measure improvements in transfers.

4.1.8 DoD and VHA Joint Formulary	
Establish a joint formulary to facilitate smoother transitions and minimize pain throughout the continuum of care.	
4.1.8.1	Standardize pharmacy benefits between DoD and VHA, and make them reciprocal, without delay or challenge.
4.1.8.2	Evaluate the safety and effectiveness of prescriptions renewals process for Service Members transitioning to VHA care.
4.1.8.3	Establish a common DoD and VHA policy to support state of the art and science practices, such as the use of non-narcotic pain balls, PCA pumps, and epidurals, with associated common education content.

Infrastructure and Tools

4.1.9 Pain Assessment and Outcome Registry	
Adopt a clinical information data system that provides pain assessment screening with an outcomes registry to promote consistency in pain care delivery.	
4.1.9.1	Jointly fund the development of a Pain Assessment Screening Tool and Outcome Registry under the direction of a central pain management advisory board.
4.1.9.2	Integrate and mandate a Pain Assessment Screening Tool and Outcome Registry with DoD and VHA IT systems.
4.1.9.3	Implement and mandate a Pain Assessment Screening Tool and Outcome Registry across DoD and VHA.

4.1.10 Battlefield Pain Care Continuum	
Incorporate scientific advances in battlefield surgery and medical technology to improve the delivery of pain care across the continuum.	
4.1.10.1	Adopt the Joint Theater Trauma System Clinical Practice Guideline as policy for pain management.
4.1.10.2	Establish acute pain medicine services across the continuum of care, consisting of pain-trained providers who are responsible for pain consultation and management within the MTF.
4.1.10.3	Establish a DoD central pain management advisory board as the battlefield pain management proponent and consultant organization.

4.1.11 Tele Pain	
Expand telemedicine capabilities to incorporate pain management initiatives.	
4.1.11.1	Establish Tele Pain sites at Regional Pain Centers of Excellence and MTFs throughout DoD and VHA.
4.1.11.2	Develop an enterprise strategic communications plan on the availability and benefits of telemedicine.
4.1.11.3	Develop metrics to evaluate the effectiveness and costs of providing enhanced telemedicine for pain medicine.
4.1.11.4	Develop new telemedicine technology applications for pain management uses.

4.1.12 Joint Theater Trauma Registry	
Add a Joint Theater Trauma Registry module to capture, define, and characterize Wounded Warrior pain issues throughout the care continuum, from the battlefield to MTFs.	
4.1.12.1	Establish the Standardized Pain Assessment Tool as an integral part of the Joint Theater Trauma Registry database.
4.1.12.2	Maintain routine analysis, management, and reporting of pain data through a central pain management advisory board.

4.1.13 Electronic Pain Order Set	
Develop an electronic pain order set to assist health care providers in selecting evidence-based, individually tailored pain management plans.	
4.1.13.1	Establish DoD and VHA electronic pain order sets in all electronic medical records.
4.1.13.2	Conduct an annual review and update electronic pain guidelines.

4.1.14 Standardized Medical Equipment and Personnel in the Deployed Setting	
Standardize medical equipment, personnel support, and training across the continuum of pain care.	
4.1.14.1	Establish comprehensive acute pain services in the deployed setting.
4.1.14.2	Standardize equipment sets for the deployed setting.
4.1.14.3	Establish requirements and authorizations for pain management specialists across DoD to identify and implement best practices from the VHA.
4.1.14.4	Develop training program modules to support pain management in the deployed setting.

4.1.15 Joint Regional Anesthesia and Analgesia Tracking System	
Leverage advances in regional anesthesia techniques by integrating the data through an existing, sanctioned joint tracking data system.	
4.1.15.1	Complete the Joint Regional Anesthesia and Analgesia Tracking System.
4.1.15.2	Implement the Joint Regional Anesthesia and Analgesia Tracking System.
4.1.15.3	Assign program, data, and content responsibility for the Joint Regional Anesthesia and Analgesia Tracking System to a central pain management advisory board.

4.1.16 Standardize Identification of Substance Abuse Patients	
Identify substance abuse patients in Warrior Transition Units by embedding the necessary resources to develop and implement a coordinated care and monitoring plan.	
4.1.16.1	Establish a tri-service and VHA working group that will recommend a paper form and web-based interactive tool, designed for general medical settings, as the standardized tool to identify substance abuse patients.
4.1.16.2	Incorporate the screening tool into the Pain Assessment Screening Tool and Outcome Registry.
4.1.16.3	Implement use of the tool during the initial patient visit to obtain a baseline assessment.
4.1.16.4	Enhance the communication of the patient's plan of care among primary care, specialty care, and substance abuse providers.
4.1.16.5	Develop a strategic communications plan on the use of a standardized substance abuse screening tool.

4.1.17 Risk Management in Chronic Pain Medical Management	
Mitigate the risk of prescription drug abuse and dependence in pain patients, with a focus on those receiving controlled substances for the treatment of chronic pain.	
4.1.17.1	Implement a stepped care model for pain care.
4.1.17.2	Develop a strategic communications plan on DoD and VHA guidelines for chronic opioid therapy and the VHA Opioid Pain Care Agreement.
4.1.17.3	Educate providers and chronic pain patients on the signs and symptoms of opioid dependence, addiction treatment options, and stigma issues.
4.1.17.4	Ensure that appropriate treatment for opioid dependence, including the use of office-based opioid agonist therapy, is available for those patients who have developed an opioid dependence as a result of pain treatment.
4.1.17.5	Ensure that patients with chronic pain who demonstrate, or are deemed at risk for, aberrant behavior have access to structured pharmacy management programs that support opioid and medication pain management.

Research

4.1.18 DoD and VHA Pain Research Strategy	
Develop collaborative pain research strategies that advance Warrior pain care and rapidly translate effective findings into practice.	
4.1.18.1	Develop a pain medicine research strategy to ensure evidence-based medicine guides clinical decisions.
4.1.18.2	Ensure research in pain management incorporates emerging medical knowledge and technology needs to care for Wounded Warriors.
4.1.18.3	Implement proposed solutions to ensure pain management research objectives, priorities, and resources enable MRMC to satisfy current, validated medical technology and information needs.

4.1.19 Research Strategic Communications	
Improve military pain research strategic communications.	
4.1.19.1	Encourage collaboration among MRMC, CRMRP, and the AMEDD Center and School to institutionalize strategic communications and dissemination of innovation in pain management technologies and knowledge.
4.1.19.2	Secure funding to support the acquisition of information system technologies.
4.1.19.3	Secure funding for a central pain management advisory board.
4.1.19.4	Task MRMC and CRMRP to provide a central pain management advisory board access to shared information platforms acquired by MRMC to fill research information needs.

4.1.20 Clinical Practice Guidelines for Pain Management	
Standardize the practice of pain medicine with pain management clinical practice and clinical management guidelines.	
4.1.20.1	Incorporate Clinical Practice Guidelines into STRATCOM plan to ensure maximum awareness of pain related Clinical Practice Guidelines by DoD and VHA providers.
4.1.20.2	Integrate Clinical Practice Guidelines into computerized medical record.
4.1.20.3	Utilize a central pain management advisory board to develop priorities for future pain-related Clinical Practice Guideline development.

4.2 Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain, Based on a Foundation of Best Available Evidence

An Integrative and Interdisciplinary Approach

4.2.1 Complementary and Integrative Pain Treatment Medicine	
Incorporate integrative and alternative therapeutic modalities into a patient centered plan of care.	
4.2.1.1	Adopt a tiered approach for the effective integration of integrative modalities to augment pain management for military and Veteran populations.
4.2.1.2	Establish integrative pain medicine capabilities at RPCoE's and DoD sites (Army, Navy, and Air Force) to champion integrative pain care with a focus on the best clinical practices, education, and research.
4.2.1.3	Establish baseline data on the clinical integrative practices being used, along with provider and patient perspectives, through a comprehensive DoD survey, utilizing existing survey models (if appropriate).
4.2.1.4	Develop an advisory board, with scholarly leaders in various integrative medicine fields, to assist in the development of appropriate programs, ensure proper credentialing of providers, and establish necessary guidelines for outcome measures and uniformed quality of care.
4.2.1.5	Establish standardized and appropriate strategic communication plans on integrative health care methods for pain medicine.
4.2.1.6	Develop and fund pilot programs across DoD in the delivery of integrative pain.
4.2.1.7	Request Health Affairs undertake the evaluation of integrative medicine modalities in Tier I for inclusion as covered TRICARE benefits.

4.2.2 Osteopathic Manipulation	
Leverage embedded osteopathic and physical therapy resources in the provision of manipulation therapies for musculoskeletal pain.	
4.2.2.1	Support osteopathic manipulation in staff clinics.
4.2.2.2	Survey Active Duty Osteopathic Physicians and manually trained Physical Therapists to understand the uses, practices, and barriers of manual medicine.
4.2.2.3	Implement and support Osteopathic Manipulation Graduate Medical Education during primary care and physiatry residency programs to utilize and continue developing current Army resources.
4.2.2.4	Implement and encourage the use of osteopathic manipulation (or manual medicine) in theater.
4.2.2.5	Incorporate osteopathic manipulation therapy referrals into case management in WTUs.
4.2.2.6	Improve metrics, such as RVUs, which are used to measure the success of providers in treating patients but do not actually measure patient improvement.

4.2.3 Primary Care Pain Management	
Integrate pain management into primary care, consistent with the Patient Centered Medical Home Model.	
4.2.3.1	Implement a fully resourced Patient Centered Medical Home.
4.2.3.2	Develop outcomes-based performance metrics that recognize and capture the quality and safety benefits of a holistic, patient-centric approach to health care.
4.2.3.3	Identify a workgroup from DoD and VHA to ensure that DoD interdisciplinary pain care clinics, integrated with primary care, correctly adopt a stepped care pain treatment approach.

4.2.4 Stepped Care Model	
Adopt the VHA Stepped Care Model to ensure timely access to collaborative care, reduce pain and suffering, and improve quality of life for Warriors and their Families.	
4.2.4.1	Implement the VHA Stepped Pain Care model.
4.2.4.2	Leverage the VHA Directive Action Plan as a template for better coordination between MEDCOM and MHS.

4.2.5 Musculoskeletal Action Plan	
Integrate the prevention, early identification, and treatment of injuries as a component of the comprehensive pain management strategy.	
4.2.5.1	Develop an education and STRATCOM program focused on musculoskeletal injury prevention and human performance optimization, early identification, and management, rehabilitation, and reintegration.
4.2.5.2	Integrate the Musculoskeletal Action Plan education program and concepts into the pain education and training program.
4.2.5.3	Create an organizational structure, culture, and climate for awareness and execution of the Musculoskeletal Action Plan by collaborating with DoD and stakeholders within the Army (includes FORSCOM, TRADOC, MEDCOM, USUHS, AMEDD C&S, etc).
4.2.5.4	Resource prevention and treatment programs that emphasize evidence-based practices. Capture relevant and available data to identify trends, cost, and return on investment. Utilize data to assist in the prioritization of resources.

4.3 Focus on the Warrior and Family - Sustaining the Force

Warrior and Family Care

4.3.1 The Safe Use of Opioids	
Implement a drug abuse assessment strategy to ensure the efficacy of pain treatment and reduce aberrant behavior, abuse and addiction with opioids.	
4.3.1.1	Implement a drug abuse assessment strategy in primary care as part of routine practice to set a level of monitoring proportionate to the individual's risk.
4.3.1.2	Use a written opioid treatment agreement that outlines patients' rights, expectations, and specifies the consequences of noncompliance, and informed consent for all chronic opioid patients.
4.3.1.3	Mandate that only one provider and his or her surrogate may prescribe for patients on chronic daily opioids and that the program is supported by the pharmacy department (Sole Provider Program).
4.3.1.4	Mandate that all MTFs and VA Hospitals become active in the state prescription-monitoring programs to facilitate medication reconciliation and the safe prescribing of opioids (standard of care).
4.3.1.5	Educate providers on pain and addiction, contraindications to opioid therapy, and the goals of a treatment plan.

4.3.2 Embed Pain and Pharmacy Resources	
Provide appropriate pain management and clinical pharmacy oversight in Warrior Transition Units.	
4.3.2.1	Provide access to a Pain Management Provider at all WTU clinics.
4.3.2.2	Provide a clinical pharmacist capability to all WTUs based on each WTU's individual need for clinical consultation and medication reconciliation.

4.3.3 WTC Pain Survey Collaboration	
Collaborate with the Warrior Transition Command to revise the satisfaction survey to incorporate pain metrics.	
4.3.3.1	Incorporate recommended Task Force pain questions into the WTU Satisfaction Survey.

4.4 Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention

A Unified Approach to Content, Education, and Training

4.4.1 Pain Curriculum Transformation	
Transform the pain curriculum at all levels of medical education and care delivery.	
4.4.1.1	Establish a core curriculum specific to pain management to be integrated into all DoD graduate medical education and advanced medical training programs.
4.4.1.2	Integrate core pain education and training content into AMEDD training courses (68W, Office Basic Course, Combat Casualty Care Course).

4.4.2 Integration of Pain Management Recommendations	
Integrate TF recommendations and STRATCOM with other related DoD and VHA programs.	
4.4.2.1	Develop pain management STRATCOM in collaboration with DoD and VHA programs with related interests.

4.4.3 Pain Education Campaign Plan	
Develop a pain management education plan that addresses the full spectrum of stakeholders and issues.	
4.4.3.1	Further educate all DoD and VHA medical personnel on the disease process of pain and its management.
4.4.3.2	Provide standard curriculum of pain education that is formed on the best available medical evidence.

Pain Management and Leadership

4.4.4 Standardize Pain Management Capabilities	
Establish enterprise-wide tiered pain management requirements to standardize patient care services.	
4.4.4.1	Adopt the tiered system of pain care.

4.4.5 Interdisciplinary Pain Management Departments	
Establish interdisciplinary pain management services to oversee optimum patient-centered, integrated pain care.	
4.4.5.1	Establish TRICARE Regional Pain Center of Excellence networked to every MTF in that region.
4.4.5.2	Establish an Interdisciplinary Pain Medicine Service at each major DoD MEDCEN.
4.4.5.3	Define local capability requirements in establishing the tiered system of pain care delivery.

4.4.6 Pain Medicine Consultants to Military Leadership	
Develop requirements for Service pain consultants to reflect an interdisciplinary, integrative approach to pain management.	
4.4.6.1	Develop pain medicine consultant selection criteria to identify the candidates who best represent the integrative and comprehensive nature of pain medicine.

4.4.7 Central Pain Management Advisory Board for DoD and VHA	
Establish an effective pain management advisory board for DoD and VHA.	
4.4.7.1	Establish the Defense and Veterans Pain Management Initiative (DVPMI) as the DoD and VHA central pain management advisory board for pain medicine issues.
4.4.7.2	Task the DVPMI with the responsibility to establish pain care clinical standards, manage pain provider education programs, and provide recommendations for pain research priorities.

Appendix B: Supplement to Findings and Recommendations

B-1 Standardized Pain Taxonomy

Figure B-1.1: Pain Definitions

Pain	Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. Pain is always subjective. Pain can be acute or chronic.
Acute Pain	Acute pain is a normal physiologic response, usually time-limited, to a noxious stimulus that enhances survival by warning the individual of impending or potential injury or progression of disease. If the noxious stimulus persists, changes in the peripheral tissues and both the central and peripheral nervous systems can lead to sensitization that worsens and prolongs the pain from noxious stimulation. Appropriate management of acute pain may prevent the onset of the pathophysiologic processes that change the spinal cord and brain and lead to chronic pain.
Chronic Pain	Chronic pain continues beyond the normal time expected for healing and is associated with the onset of pathophysiologic changes in the central nervous system that may adversely affect an individual's emotional and physical well-being, cognition, level of function, and quality of life. Chronic pain serves no apparent useful purpose for the individual and may be diagnostically and therapeutically approached as a chronic disease process.

Figure B-1.2: Extended Taxonomy List

Addiction	Addiction in the context of pain treatment with opioids is characterized by a persistent pattern of dysfunctional opioid use that may involve any or all of the following: • Loss of control over the use of opioids. • Preoccupation with obtaining opioids, despite the presence of adequate analgesia. • Continued use despite physical, psychological, or social adverse consequences.
Central	Central pain is a result of a primary lesion or dysfunction in the central nervous system (brain or spinal cord). Examples include pain from stroke, spinal cord injury, multiple sclerosis, or fibromyalgia.
Dependence	Physical dependence on an opioid is a physiologic state in which abrupt cessation of the opioid, rapid tapering (e.g. when a patient forgets to take the medication), or administration of an opioid antagonist results in a withdrawal syndrome. Physical dependency on opioids is an expected occurrence in all individuals in the presence of continuous use of opioids for therapeutic or for non-therapeutic purposes. It does not, in and of itself, imply addiction.
Neuropathic	Neuropathic pain is a result of a primary lesion or dysfunction in the peripheral and/or central nervous system(s). Symptoms may include numbness, tingling, burning, sharp, shooting, and/or aching.

(continued on next page)

Peripheral	Peripheral pain is a result of a primary lesion or dysfunction in the peripheral nervous system (peripheral nerves – nerves outside the brain or spinal cord). Examples include direct nerve trauma, post herpetic neuralgia, carpal tunnel syndrome, or diabetic neuropathy.
Phantom	Phantom pain may be categorized as phantom pain or phantom sensations. Phantom pain is experienced as pain, tingling, itching, or numbness in the place where the amputated part used to be. Phantom sensation is the feeling that the amputated part is still there, but the sensations felt in the amputated part are not uncomfortable or painful for the individual.
Pseudoaddiction	Pseudoaddiction describes patient behaviors that may occur when pain is undertreated. Patients with unrelieved pain may become focused on obtaining medications, may "clock watch," and may otherwise seem inappropriately "drug seeking." Even behaviors, such as illicit drug use and deception, can occur in the patient's efforts to obtain relief. In contrast to true addiction, in pseudoaddiction, the behaviors resolve when the pain is effectively treated. Misunderstanding of this phenomenon may lead the clinician to inappropriately stigmatize the patient with the label 'addict.' In the setting of unrelieved pain, the request for increases in drug dose requires careful assessment, renewed efforts to manage pain, and avoidance of stigmatizing labels.
Pseudotolerance	Pseudotolerance is defined as a need to increase dosage due to factors other than tolerance (a diagnosis of exclusion), such as disease progression, new disease process, increased physical activity, lack of compliance, change in medication, drug interaction, or deviant behavior.
Radicular	Radicular pain is radiating pain and paresthesias (neuropathic pain) in the distribution of a specific nerve root. It may be associated with sensory loss or motor dysfunction in the distribution of the same nerve and paraspinal muscle spasms.
Referred	Referred pain is pain that is felt at a location different than that of the injured or diseased part. The area where the pain is felt is usually innervated from the same spinal segment as that of the injured or diseased structure. Examples include angina (felt as left shoulder, arm, or jaw) or gallbladder (felt as right shoulder pain).
Somatic	Somatic pain is a well localized pain (“pin point”) which results from activation of nociceptors located in the skin, deep soft tissues, muscles, bones, and joints. This pain is often described as aching or nagging and examples include pain associated with bruises, fractures, or wounds.
Tolerance	Tolerance is a form of neuroadaptation to the effects of chronically administered opioids (or other medications), which is manifested by the need for increasing or more frequent doses of the medication to achieve the initial effects of the drug. Tolerance may occur both to the analgesic effects of opioids and to some of the unwanted adverse effects, such as respiratory depression, sedation, or nausea. The appearance of tolerance is variable in occurrence, but it does not, in and of itself, imply addiction.
Visceral	Visceral pain is a poorly localized pain which results from activation of nociceptors located in the thoracic, abdominal, or pelvic viscera. This pain is usually poorly localized aching or cramping, which may be referred to cutaneous sites, increasing the difficulty of localization.

Sources

The Pain TF collaborated on the definitions listed above and used the following sources during the discussion:

- American Chronic Pain Association
- American Pain Society
- Braddom Physical Medicine and Rehabilitation
- Dorland's Medical Dictionary for Health Consumers
- Gale Encyclopedia of Medicine
- Heathline
- Institute for Clinical Systems Improvement
- International Association for the Study of Pain
- McGraw-Hill Concise Dictionary of Modern Medicine
- Medicine Net
- Medline - U.S. National Library of Medicine
- Mosby's Medical Dictionary
- National Pain Foundation
- National VA Pain Outcomes Working Group
- The American Heritage Medical Dictionary
- The British Pain Society
- VA and DoD Clinical Practice Guideline for the Management of Chronic Opioid Therapy (COT)
- Web MD

B-2 Standardized Pain Assessment Tool

Figure B-2.1: Defense and Veterans Pain Rating Scale

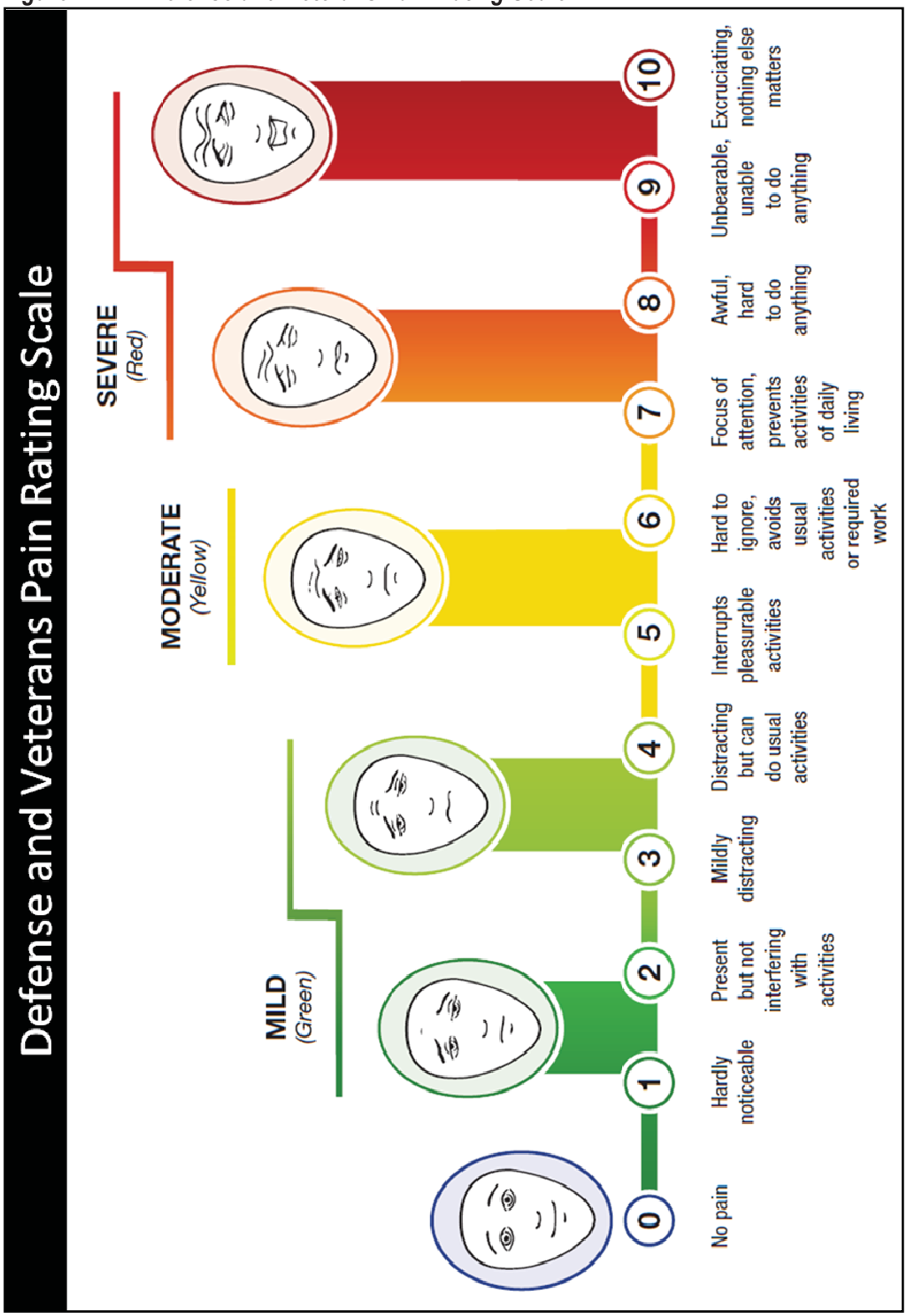


Figure B-2.2: Defense and Veterans Pain Supplemental Questions

Defense and Veterans Pain Supplemental Questions

For clinicians to evaluate the biopsychosocial impact of pain

1. Circle the one number that describes how, during the past 24 hours, pain has interfered with your **General Activity**:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

2. Circle the one number that describes how, during the past 24 hours, pain has affected your **Mood**:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

3. What is your **Level Of Stress** related to pain in the past 24 hours?

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

4. Circle the one number that describes how, during the past 24 hours, pain has affected your **Sleep**:

0 — 1 — 2 — 3 — 4 — 5 — 6 — 7 — 8 — 9 — 10

Does not interfere — Completely interferes

Summary for Internal Validation of the Standardized Pain Assessment Tool

1. **Sample**
   A total of 400 patients would be a good target. Eligibility criteria should include: 1) ability to read and understand English, 2) newly combat injured Soldiers, 3) older Veterans who have military-related injuries or other pain issues (e.g., chronic nonmalignant pain including a range of conditions [e.g., peripheral neuropathies, lower extremity arthritis, non-specific LBP], cancer-related pain, post-surgical pain, and other acute pain), 4) inpatients, and 5) outpatients. The sample should include a balance of those with acute pain and chronic pain and inpatient and outpatients. Of these patients, every 10th patient should be asked to participate in the descriptor validation (need about 40).

2. **Setting**
   Walter Reed Army Medical Center and selected VA Medical Centers (if willing to participate).

3. **Design**
   Cross sectional, one-time pain assessment. Patients will be asked to complete the DoD and VHA Pain Assessment Tool and the Brief Pain Inventory (BPI) 7 interference items. Items 1, 2, and 4 are duplicative of the BPI. Written instructions on completing the tools should be provided to participants. Every 10th patient (forms should be numbered) should be given the DoD and VHA pain intensity scale without the descriptors and be asked to select the number corresponding to their pain, and then match scrambled descriptors to the numbers.

4. **Demographic Data**
   Age, gender, ethnicity, war veteran (e.g., OIF / OEF, Gulf War, Korean War, WWII), military status (e.g., active duty, retried, honorable discharge), type of pain (acute, chronic), cancer-related pain, inpatient vs. outpatient, length of hospitalization at the time of the interview, and duration of pain, as well as occupational status and marital status.

5. **Statistical Analyses**
   Measures of central tendency (mean, median and mode) will be calculated for subgroups (e.g., acute pain, chronic nonmalignant pain, cancer-related pain, newly injured OIF and OEF, inpatient vs. outpatient. Correlational statistics will be used to demonstrate the magnitude of the relation between the mean BPI interference subscale score and pain intensity for the entire sample and selected variables. Independent rater content validation methods (qualitative analysis) will be used to validate the ability for respondents to correctly match the intensity descriptors to the pain intensity rating or Adult Faces Rating Scale.

B-3 Joint Theater Trauma System Clinical Practice Guideline

1. Goal

Provide standardization of pain care for Wounded Warriors evacuating from Level III facilities. Establishment of a physician pain consultant at all Level III facilities in Theater.

2. Background

The physiologic response to battlefield trauma and surgery involves a "sympathetic surge" or stress response. The stress response involves a well-established sequence of physiologic and molecular events that include fever, tachycardia, tachypnea, hypertension, gastrointestinal ileus, hypercoagulability, protein catabolism, and immunosuppression, among other undesirable consequences that delay or prevent a Wounded Warrior's full rehabilitation and recovery.

Effective pain management requires coordination of all medical providers throughout the evacuation system to provide a multimodal approach to analgesia. The multimodal approach to analgesia involves using several different drug mechanisms of action and pain technologies which facilitates dose reductions of all pain medications used and therefore increases patient safety.[3] This approach to pain care requires the establishment of an Acute Pain Service (APS) at all Level III (and above) health care facilities directed by a physician trained in pain management.

3. Evaluation and Treatment

A. The Level III facility Commander will appoint a physician (usually an anesthesiologist) to head the facility APS who is trained in pain management. This officer is responsible for managing APS activities, delegation of APS responsibilities, and maintenance of APS equipment. The APS physician will serve as the Commander's consultant on all facility issues related to pain management.

B. All patients should have their pain assessed upon arrival and reassessed frequently using the DoD and VHA Pain Assessment Screen Tool.

C. All patients should have a pain care plan established as part of their routine care.

D. The patient's primary physician should consult the guidelines when developing a pharmacologic plan for managing pain.

E. The patient's primary physician should consult the APS for complex pain issues or when advanced pain care technology or procedures are indicated (e.g. continuous peripheral nerve block, epidurals, pain drug infusions).

F. Pain nursing is a vital component of every APS. Each health care facility patient ward will assign a member of the nursing staff to service as the ward pain nurse. The ward pain nurse will coordinate with the APS physician on all ward pain related issues.

G. Effective pain management using multimodal techniques should not inhibit the timely diagnosis of compartment syndrome. In the case of combat trauma patients, if the surgeon is concerned about the possibility of compartment syndrome complicating a wound, the compartment should be surgically opened. The APS will work with the patient's primary physician to develop a pain management plan that facilitates early recognition of compartment syndrome. There is no evidence that supports the exclusion of any pain management technique due to concerns of compartment syndrome.

H. Use of advanced pain management techniques should be encouraged, including, but not limited to, continuous peripheral nerve block, epidurals, pain medication infusions, and patient controlled analgesia. The APS physician is responsible for coordinating patient pain care issues and plans with the evacuation flight surgeon and receiving APS physician at the next receiving health care facility. Documentation of all advanced patient pain care techniques into the patient's electronic medical record is mandatory.

I. The Military Advanced Regional Anesthesia and Analgesia handbook will serve as the APS reference text for pain care standards and issues (www.bordeninstitute.army.mil or www.DVPMI.org).

J. Tri-service policies for pain management can be found at www.DVPMI.org. Strategic issues on evacuation pain management should be referred by the health care facility APS physician to the Defense and Veterans Pain Management Initiative organization (www.DVPMI.org).

4. Responsibilities

The health care facility Commander is responsible for establishing the APS and effective patient pain care services.

B-4 Electronic Pain Order Set

Pain Medication Orders

1. PURPOSE

To provide established guidelines for the safe and effective administration of pain medications at WRAMC and to educate and remind physicians and nurses of the appropriate pharmacological interventions to best manage the different types and levels of pain. Upon completion of the order set, the physician will have created an effective plan for each individual and particular patient. This appendix is meant to accompany and not override any previous guidelines on medication administration and does not preclude the use of clinical judgment when ordering pain medications.

2. APPLICABILITY

This is applicable to all providers ordering and administering medications at WRAMC.

3. RESPONSIBILITIES

A. Physician:
   1) Identify candidates for Pain Medications. Responsibility lies with the attending physician.
   2) Complete orders.
   3) Evaluate orders every 72 hours to determine if changes are necessary.
   4) Counsel patient and family or significant others on the purpose of the medication.

B. Registered Nurses:
   1) Provide patient education for selected patients using established patient teaching guidelines and document accordingly.
   2) Initiate, maintain, change, and discontinue the medication therapy according to physician orders.

C. Pharmacy Service:
   3) Provide educational resources for patients, Families, and health care providers.
   4) Ensure proper accountability, procurement, and wastage of pain medications, including providing a mechanism to restrict medications for individuals designated as using pain medications inappropriately.
   5) Alert physicians and providers to potential drug-drug and drug-food interactions.
   6) Ensure appropriate analgesics, including opioids, are maintained on nursing units/wards, as required.
   7) Monitor physician orders to ensure that only one long-acting or delayed release opioid is prescribed at one time and the use of meperidine (Demerol) is limited and appropriate (precautions about meperidine are necessary due to the toxic central nervous system effects of its active metabolite, normeperidine).

4. PROCEDURE

A. Opioids

Orders for Surgical or Injury Site Pain / Breakthrough Pain Orders

Physicians should consider these recommendations for the initial pain management for all routine inpatients. For the purposes of this document, mild pain is considered to be a visual analogue scale (VAS – zero = no pain; 10 = worst pain imagined) score of 1-4, moderate pain is a VAS of 5-7, and severe pain is a VAS of 8-10. This does not preclude the use of clinical judgment when ordering pain medications.

FOR MILD TO MODERATE POST SURGICAL PAIN
Consider Non-Steroidal Anti-Inflammatories (Listed Below)

_____ **VicodIn (5 mg hydocodone 500 mg acetaminophen) 1-2 tabs Q 6hrs prn**
_____ Percocet (5 mg oxycodone, 325 mg acetaminophen) 1-2 tabs oral q4hrs prn for VAS 7 or less
OR
_____ OxyIR (oxycodone immediate release)___mg oral q4hrs prn for VAS 7 or less (5 mg tab) **- USE IF PATIENT IS ON TYLENOL)**
_____ **Dilaudid (2mg tab) 1-2 q4 hrs prn for VAS 7 or less**

FOR MODERATE-SEVERE PAIN CONTINOUS PAIN

_____ Morphine sulfate PCA (use standard PCA order set)
OR
_____ Dilaudid PCA (hydromorphone – use standard PCA order set)

FOR MODERATE-SEVERE PAIN INCIDENTAL OR BREAKTHROUGH PAIN

_____ Morphine sulfate___mg IV bolus q2hrs prn for VAS >5
OR
_____ Dilaudid (hydromorphone) ___mg IV bolus q3-6 hrs prn for VAS >5

B. **Non-Steroidal Anti-Inflammatories –** Consider use in all patients to augment opioid based therapies or for mild to moderate pain.

_____ Celebrex (celecoxib)___mg oral q12hrs (100, 200mg cap)
OR
_____ Motrin (ibuprofen)___mg oral q8hrs (400, 600, 800mg tab)
OR
_____ Toradol (ketorolac) 30 mg IV q6hrs, end date_____(max 5 days)
_____ Tylenol (acetaminophen)___mg oral q6hrs, end date_____(max 5 days) (325 mg tab, max 4000 mg/day - **Account for Tylenol dose if ordering Percocet)**
_____ **Naprosen/Aleve (Naproxen)___mg oral q12 hrs prn(250,375,500 mg tab)**

C. **Opioid Orders for Opioid Tolerant Patients –** Physicians should consider these long-acting opioids in patients requiring prolonged pain management.

_____ Methadone___mg oral q8hrs (5 mg tab – mild NMDA receptor antagonism)
OR
_____ MS Contin (sustained release morphine)___mg oral q8hrs (15, 30, 60, 100 mg tab)
OR
_____ Oxycontin (sustained release oxycodone)___mg oral q12hrs (10, 20, 40, mg tab)
OR
_____ Duragesic Patch (sustained release Fentanyl)___mcg Transdermal (25, 50 75 0r 100 mcg patch) change every 72 hours, allow 24 hors to work when applying the first patch**.**

D. **Anticonvulsants (Membrane stabilizers) –** Physicians should consider these medications in patients at increased risk for neuropathic pain such as crush/amputation trauma patients.

_____ Neurontin (gabapentin)___mg oral q8hrs (300, 400, 600, 800 mg tab)
_____ Lyrica (pregabalin)___mg oral q12hrs (25, 50, 100, 150, 225 mg cap – SPP required!

E. **Antidepressants –** Physicians should consider these medications for chronic pain, neuropathic pain, and sleep/mood disorders.

_____ Pamelor (nortriptyline)___mg oral qhs (10, 25, 50 mg cap)
OR
_____ Elavil (amitriptyline)___mg oral qhs (10, 25, 50, 75 mg tab)

OR

_____ Cymbalta (duloxetine)___mg oral daily (20,30,60 mg) SPP required!

F. Sleep Meds – Physicians should consider these medications for sleep disorders.

_____ Ambien (zolpidem)___mg oral qhs prn (5-10 mg)

_____ Seroquel (quetiapine)___mg oral qhs prn for nightmares (25-50 mg)

G. Bowel Regimen – Physicians should consider in all patients subjected to long-term opioid therapy.

_____ Colace (docusate sodium) 100 mg oral BID

_____ Senna (8.6 mg tab) 1-2 tabs oral qhs as needed for patient complaint of constipation

_____ Miralax (polyethylene glycol) 17 g (one cap) oral daily, adjust for bowel movement

OR

_____ Milk of Magnesia 30 ml as needed for patient complaint of constipation

H. Other Adjuncts – Physicians should consider for management of specific symptoms.

_____ Benadryl (diphenhydramine)___mg oral q6hrs as needed patient complaint of difficulty sleeping or pruritus (25, 50 mg cap)

_____ Zofran (ondansetron) 8 mg oral q12hrs as needed patient complaint of nausea/pruritus (4, 8 mg tab)

_____ Clonidine patch___mg/24hr, for neuropathic or phantom pain, apply to skin, change q week (0.1, 0.2, 0.3 mg/day patch)

_____ Ativan (lorazepam)___mg oral q12hrs anxiety (1, 2 mg tab)

_____ Ativan (lorazepam)___mg IV q4hrs as needed for patient complaint of anxiety

_____ Lidoderm 5% patch. Apply topically to painful area for 12 hours on 12 hours off

_____ Intranasal Calcitonin __200 Units QD X 2 Weeks

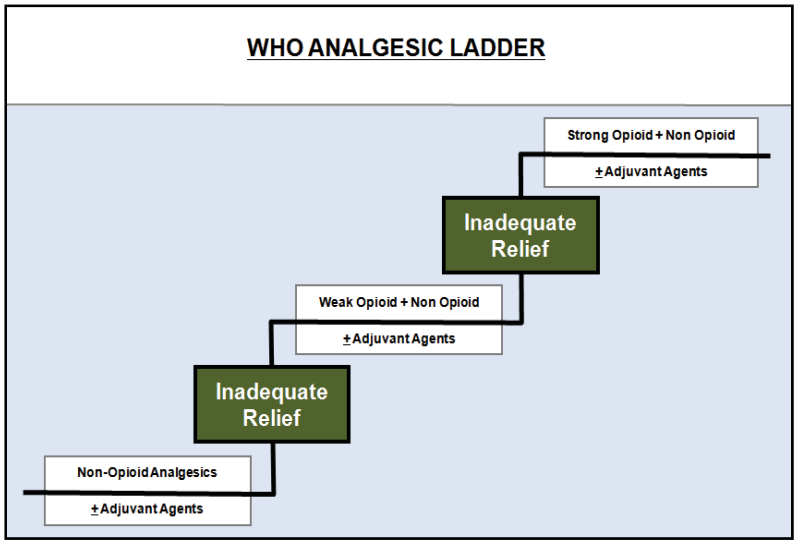
_____ Clonodine 0.1 mg __ QD

Acute Pain Medicine Consult

Physicians should consider consulting the Acute Pain Service when standard treatments fail or for complicated acute pain issues that may require more advanced technology.

_____ ESSENTRIS Acute Pain Consult (please call the acute pain service beeper at #108-6876)

Figure B-4.1: World Health Organization Analgesic Ladder



B-5 Standardized Medical Equipment and Personnel in the Deployed Setting

Figure B-5.1: Medical Equipment Template

FSC	NIIN	NOMEN LONG	UI	AAC	N435 PAIN	Allowance	COMMENTS	CB6 EXCESS	ITEM	UI	QTY	ESTIMATED PRICE
6510	001229372	ADHESIVE LIQUID SURGICAL AEROSOL SPRAY 6 OZ 4S	PG	L	1	1		CB6	3158007730	BX	1	$ 63.00
6510	016070223	ADHESIVE TAPE SURGICAL 360X1INCH COLORLESS PLASTIC CL	PG	L	1	1		CB6	4509015271	BX	1	$ 11.12
6510	012211495	ADHESIVE TAPE SURGICAL SILK OVERALL 360X.50INCHES WHITE	PG	L	1	1		CB6	4509015380	BX	1	$ 8.20
6515	015626762	ADMINISTRATION SET IV FLUIDS VENTEDNONVENTED 115" 20 DR	PG	L	1	1		CB6	341442518E	CS	1	$ 600.48
6515	015623926	ANESTHESIA SET EPIDURAL CONTIPLEX CONTINOUS NERVE BL	PG	L	1	1		CB6	3584331691	CS	1	$ 472.95
6515	015621212	ANESTHESIA SET EPIDURAL TUOHY CONT NER E BLOCK SET 18	PG	L	1	1		N/A	3584331693	CS	1	$ 397.72
6515	015620921	ANESTHESIA SET EPIDURAL TUOHY CONTINUOUS NERVE BLK 1	PG	L	1	1		CB6	3584331694	CS	1	$ 441.96
6515	015621726	ANESTHESIA SET REGIONAL NERVE BLOCK SUPPORT TRAY 10	PG	L	1	1		CB6	3584332105	CS	1	$ 264.34
6515	015010545	ANESTHESIA SET SPINAL TRAY 7 COMPONENTS 10S	PG	Y	1	1	no longer avail, need sub/maj griffith emailed 3-16					$ 236.13
6515	015620685	ANESTHESIA SET,REGIONAL NERVE BLOCK CONTINOUS 12S	PG	L	1	1						$ 184.75
6515	015620740	ANESTHESIA SET,REGIONAL NERVE BLOCK CONTINOUS TUOHY	PG	L	1	1						$ 412.97
6510	015623579	BANDAGE GAUZE SELF-ADHERENT 4"X2YDS NON WOVEN COVE	PG	L	1	1						$ 49.99
6510	015623639	BANDAGE GAUZE SELF-ADHERENT POLYESTER COVER ROLL 6	PG	L	1	1						$ 64.12
6530	014940126	BASIN EMESIS PLAS KIDNEY SHAPED 9IN LG500 CC CAP AUTOC	PG	Y	1	1	avail thru OM	CB6	4352YND88320	CS	1	$ 5.94
6545	015338202	CASE,MEDICAL INSTRUMENT & SUPPLY SET #3 OLIVE DRAB 30X	EA	L	1	1		S01	6545015338202	EA	1	$ 411.00
6515	015621328	CASSETTE INTRAVENOUS SPIKE USE V/65150153436 23 20S	PG	L	1	1						$ 228.22
6515	012923736	CATHETER & NDL UNIT D12IV 16GAX1.25" 18GA NDL PLASICRS YE	PG	L	1	1		CB6	0723301447	BX	1	$ 109.36
6515	014133616	CATHETER AND NEEDLE UNIT INTRAVENOUS 18GAGE 200S	PG	L	1	1		CB6	0723301444	BX	1	$ 109.62
6515	014884911	CATHETER INTRAVENOUS D9 14 GA PLAST POLY RD 2" STR NEE	PG	L	1	1		CB6	3584125259402	CS	1	$ 450.86
6510	010866987	DRESSING OCCLUSIVE ADHESIVE PLASTIC COATED 5.5X3.87IN T	PG	L	1	1						$ 315.52
6505	015620786	DULOXETINE HYDROCHL CAPULES DELAYED RELEASE 30 MG 3	BT	L	1	1		CB6	F00002-3240-30	BT	1	$ 95.06
6515	015620639	EXTENSION SET,INTRAVENOUS ADM EXTENSION SET IV 22IN L L	PG	L	1	1						$ 86.94
6505	015620122	GADODIAMIDE INJECTION USP 287MG/ML 10ML VIAL 10 PER PAC	PG	L	1	1						$ 1,842.04
6515	013780222	GLOVES SURGEONS' NATURAL BEADED CUFF SZ 8 200 PR PER	PG	L	1	1		CB6	0158030480	BX	4	$ 246.64
6505	012656312	IOPAMIDOL INJECTION 20ML SINGLE DOSE VIAL 10 VIALS PER PA	PG	L	1	1		N/A	F00270-1415-25	PG	1	$ 263.05
6515	011217072	MASK ORDNASAL ADULT MALE 500/ML REBREATHING BAG	PG	L	1	1		N/A	3280000007	CS	1	$ 69.57
6515	015405334	NEEDLE HYPO DISP SHT BEVEL 16GA 1 1/2 IN 100S	BX	L	1	1						$ 594.05
6515	015620877	NEEDLE HYPODERMIC ANESTHESIA 3.5"L 21GA SINGLE SHOT NE	PG	L	1	1						$ 652.05
6515	015620893	NEEDLE HYPODERMIC ANESTHESIA 6"L 21GA SINGLE SHOT NER	PG	L	1	1						$ 652.05
6515	015615864	NEEDLE HYPODERMIC ANESTHESIA/EPIDURAL WEISS 20GAX3.5	PG	L	1	1						$ 91.51
6515	013223063	NEEDLE HYPODERMIC C20 SPINAL 22GAX5" LUER LOCK HUB ST	PG	L	1	1		CB6	0723405149	BX	1	$ 49.54
6515	015620858	NEEDLE HYPODERMIC EPIDURAL TUOHY 6" LONG 20GA STERILE	PG	L	1	1						$ 104.33
6515	015615896	NEEDLE HYPODERMIC EPIDURAL WEISS TUOHY POINT 18GAX3.5	PG	L	1	1						$ 91.51
6515	014063676	NEEDLE HYPODERMIC SPINAL 5IN CANNULA 22GAGE DISOSABL	PG	L	1	1		N/A	0723405149	CS	1	$ 225.23
6515	015620759	NEEDLE,HYPODERMIC 27GA 1.5IN STER PRECISIONGLIDE 100S	PG	L	1	1						$ 97.81
6515	015620733	NEEDLE,HYPODERMIC EPIDURAL ANES 18GA 6IN EX LGTH 10S	PG	L	1	1						$ 102.15
6515	015623227	NEEDLE,HYPODERMIC PERIPHERAL ANESTHESIA SINGLE SHOT	PG	L	1	1						$ 652.05
6515	015623233	NEEDLE,HYPODERMIC PERIPHERAL ANESTHESIA SINGLE SHOT	PG	L	1	1						$ 652.05
6505	009264773	NORTRIPTYLINE HYDROCHLORIDE CAPSULES USP 25MG 100 CA	BT	L	1	1		CB6	F00093-0819-01	BT	1	$ 3.24
6505	015623656	PREGABALIN CAPSULES 75MG 90 CAPSULES PER BOTTLE	BT	L	1	1		CB6	F00071-1014-68	BT	1	$ 143.16
6515	015343627	PUMP SYSTEM INTRAVENOUS 10S	PG	Z	1	1		CB6	6515015343627	PG		$ 3,762.50
6515	012714894	SENSOR OXYGEN MONITORING NON-INVAS ARTERIAL F/ADULT	PG	L	1	1		CB6	4130000D25	CS	1	$ 386.44
6515	015621320	SYRINGE AND NEEDLE HYPODERMIC SAFETY 1ML 27GA 5/8" ND	PG	L	1	1						$ 32.60
6515	015575832	SYRINGE HYPO GP DSGN 5ML CAP CONCENTRIC LUER LOCK V	PG	L	1	1		CB6	0723309603	BX	4	$ 38.92
6515	015621288	TRAY EPIDURAL SPINAL W/ESPOCAIN & THREAD ASSIST GUIDE	PG	L	1	1						$ 586.85
6515	012395612	TRAY EPIDURAL STERILE COMPLETE C/O 18GAX3.5" EPIDURAL	PG	L	1	1						$ 302.39
6515	015621249	TRAY EPIDURAL V/18GA NEEDLE PERIFIX 10-KITS	PG	L	1	1						$ 347.76
6515	010849023	TUBE DRAINAGE SURG PENROSE E3 12" LG 0.625" DIA 0.011" THK	PG	L	1	1		CB6	06200912040	CS	1	$ 78.22
6515	015790994	STIMULATOR NERVE 1S	EA		1	1		OAM		EA		$ 1,900.82
	L05322	SONOSITE M-TURBIO 1.2	EA		1	1						$ 22,496.25
	P08545	GENERAL anesthesiology package, M-Turbo	EA			1						$ 6,000.00
	P07682-HFL38x	MHz Transducer Bioopsy Compatible	EA			1						$ 8,625.00
	P07680-C60x	5-2 MHz Transducer BIOPSY COMPATIBLE	EA			1						$ 6,375.00
	P07699-SLAx	13-6 MHz TRANSDUCER	EA			1						$ 8,625.00
	P08792	POWER SUPPLY	EA			1						$ 187.50
	P09222	BATTERY-MICROMAXX/M-TURBO	EA			1						$ 296.25
Estimated Component Cost								**$71,573.78**				
Estimated Reimbursable Packing C	**$500.00**											
Estimated Reimbursable Labor Cost												
VG5 (ASSEMBLY) 56 lines @ 25 minutes	$916.67											
C5 (PULL) 56 lines @ 7.5 minutes	$245.00											
GS11 (Procurement) 56 lines	$20.23											
QA (Inspect) 56 lines	$32.67											
MED MAINT Inspect $50.00	$1,600.00											
Total Estimated Reimbursable Labor/Packing Cost				**$3,214.57**								
Total Estimated Production Cost								**$74,788.35**				

B-6 Joint Regional Anesthesia and Analgesia Tracking System (JRAATS)

Appendix to Theater Integration CONOPS

1. Purpose

During the course of Operations Enduring Freedom and Iraqi Freedom (OEF and OIF), many Service Members have been severely wounded. Pain management for the severely Wounded Warriors has been a challenge. However, the military anesthesiology community developed regional anesthesia techniques that have revolutionized pain management of the Wounded Warriors. These regional anesthesia techniques require close management at all times, whether the patient is in a hospital bed or being transported to another hospital. This appendix to the Theater Integration CONOPS describes requirements for a Regional Anesthesia Tracking System to allow for the required monitoring of Wounded Warriors who are benefiting from the advanced regional anesthesia pain management techniques.

2. Current Status

The Army anesthesia specialists recognized the need to closely monitor Wounded Warriors who were receiving specialized regional anesthesia for pain control, especially during transportation. Therefore, they developed a Regional Anesthesia Tracking System (RATS) to monitor regional anesthesia patients as they traveled through the military health care system. RATS is a small, ad hoc information system. It allows medical providers to document pain management notes on a central server and notify receiving providers concerning patients with regional anesthesia that are being transported. RATS is a stand-alone system. It does not connect to or share data with any of the Military Health System (MHS) electronic health record systems, such as the Theater Medical Data Store (TMDS) or AHLTA. The anesthesia community has recognized the importance of the data collected in RATS. They have requested that RATS functionality be incorporated into a MHS electronic health record system.

3. Planned Improvements

This Appendix includes requirements for incorporating the RATS functionality into TMDS. When included in TMDS, it will be renamed JRATS.

4. Scenario.

A. An airman working at a Forward Operating Base (FOB) is injured during a blast caused by a mortar round. The blast severs the airman's left leg at his knee level. The airman is quickly stabilized at the scene and evacuated to the local Expeditionary Medical Support (EMEDS) hospital.

B. Surgeons at the EMEDS stop the bleeding and stabilize the wound. While in the Operating Room, the anesthesiologist installs a Continuous Peripheral Nerve Block (CPNB) catheter in the left leg to stop the pain from the traumatic amputation. The CPNB is connected to a Patient Controlled Bolus (PCB) device so that when the airman begins to feel pain, he can add more medication to the CPNB.

C. After the surgery and installation of the CPNB, the anesthesiologist logs on to JRATS. The anesthesiologist searches for the airman in JRATS using the airman's last name and Social Security Number (SSN). After finding the airman, the anesthesiologist completes a Peripheral Nerve Block Procedure note.

D. The EMEDS surgeon determines the airman needs to be evacuated to Landstuhl Regional Medical Center (LRMC) for more definitive treatment. The evacuation clerk logs on to TRAC2ES and completes a Patient Movement Request (PMR). In a few hours, the EMDS surgeon learns (through TRAC2ES) the airman will be evacuated in two days.

E. The next day, after evaluating the airman's condition, the anesthesiologist determines the pain is well controlled with the CPNB. The anesthesiologist then logs in to JRATS, finds the airman's record and documents a Clinical Note. When the anesthesiologist opens the Clinical Note, information from the anesthesiologist's procedure note is "copy forwarded" into the Clinical Note. The anesthesiologist completes the clinical note with any changes to the airman's status.

F. On the day of the airman's evacuation, the anesthesiologist logs on to JRATS, finds the airman's record and documents a Transfer Note. When the anesthesiologist opens the Transfer Note, the previous day's Clinical Note is "copy forwarded" into the Transfer Note. The anesthesiologist documents any changes in the Transfer Note. Within the Transfer Note, the surgeon clicks the "New Location" button which populates the Transfer Note with the airman's receiving location (LRMC). The "New Location" button also triggers an email to be sent to the LRMC Pain Management Team notifying them of the impending arrival of the airman with advanced pain management technologies on board.

G. The designated member of the LRMC Pain Management Team logs on to JRATS, finds the airman's record, and reviews the pain management notes entered by the EMEDS anesthesiologist and surgeon. LRMC Pain Management Team uses the JRATS pain management notes to prepare for continuing care for the airman.

H. After evaluating the airman at LRMC, the LRMC surgeon determines the airman needs to go to Walter Reed Army Medical Center (WRAMC) for further treatment and rehabilitation. The LRMC surgeon and Pain Management Team further determine the CPNB should remain during transport of the patient.

I. The LRMC anesthesiologist logs on to JRATS, finds the airman's record and documents a Transfer Note. When the LRMC Pain Management Team clicks the "New Location" button, an email is sent to the WRAMC Pain Management Team alerting them to the airman's impending arrival.

J. The designated member of the WRAMC Pain Management Team logs on to JRATS, finds the airman's record, and reviews the pain management notes. The pain management notes assist the WRAMC Pain Management Team to prepare for continuing care for the airman.

K. Two days after arriving at WRAMC, the surgeon determines the CPNB can be discontinued. When the Pain Management Team member discontinues the CPNB, a clinical note is documented in JRATS with this information.

L. The WRAMC surgeon determines the airman should be transferred to a VA Poly Trauma Center for rehabilitative care. The receiving VHA provider is able to view (via Bidirectional Health Information Exchange) all of the theater notes documented on the airman, including the pain management notes entered through JRATS. Using these notes, the VHA provider is able to establish a continuing pain management plan during the airman's rehabilitation.

5. Requirements

The full list of requirements can be found at the TDMS shop.

B-7 Facilitate Osteopathic Manipulation Clinics and Education

Related Issues

1. **OMT visit logistics**
   A. Separate clinic vs. embedded in primary care clinic setting for non-teaching visits
   B. OMT GME teaching clinics

2. **Concern for access to care**
   A. Held accountable for same throughput (#patients)?
      1) How to measure value as measured by and, in addition, to RVU?
      2) Improvements in coding (E&M/CPT)
   B. Expanded novel appointment templates–variable time slots (20/30 for OMT for non-GME settings)
   C. Limit the number of appointments for a certain diagnosis
   D. Handouts for patients describing what the clinic does, how many visits a patient may expect, process for referral, process for completion of care (resolution of problem vs. non-response to treatment and referral back to provider)

3. **OMT referral process (e.g. for non-DO, WTU, specialty providers)**
   A. Consult-based only:
      1) GME OMT clinics are consult-based only
      2) Staff providers will see assigned patients, in addition to consults
      3) Consults will be seen for a set number of appointments and must follow up with assigned Primary Care Manager

4. **Applicability to inpatient setting**
   A. GME training programs may implement inpatient OMT rounds:
      1) Analysis of staffing needs and applicability to each facility is needed
   B. Staff inpatient OMT consults:
      1) Based on availability and interest of OMT trained providers and command support

5. **Command Support / consultant support**

6. **Coordinate with Chiropractic care**
   A. Chiropractors provide similar, and sometimes identical, manual therapies to treat musculoskeletal complaints
   B. Coordination of manual medicine consults and clinics should be done at individual facilities for all providers using manual medicine to treat musculoskeletal complaints (OMT, Physical Therapy manual medicine, and Chiropractors)

7. **OMT Education**
   A. Education for both MD and DO staff physicians
   B. GME education for both MD and DO resident physicians
   C. Integrated with allied health care providers (e.g. Physical Therapy)
   D. CME for staff

8. **Staffing for residents**
   A. Establish the optimal recommended ratio
   B. Concern for continuity of staff
   C. Ability to maintain recommended ratio for DO staff physicians to residents at GME training sites
   D. Contingency plan for when staff is not available

9. **Appointment templates**
   A. GME
      1) 1 hour new visits
      2) 30 minute follow up visits
   B. Staff
      1) Integrated into routine appointment visits
      2) Follow up appointments for OMT for more complicated conditions with 20 or 30 minute slots

10. **Availability of resources**
    A. Space
       1) GME Clinics
          a. One room per resident
          b. Room to review cases with staff
          c. Another option is to use a Physical Therapy Clinic (multiple treatment bays with individual treatment tables) for the GME OMT Clinic
       2) Staff Clinics
          a. Standard exam rooms
             i. Two rooms per provider is ideal
    B. Tables
       1) Flat, full length
    C. Staffing for GME programs

11. **Priority**
    A. OMT should not displaced in favor of other activities

12. **Competency Evaluation Standards Development**

13. **Training module development**

B-8 Primary Care Pain Management

Patient Centered Primary Care Collaborative (PCPCC) Principles

1. Each patient has an ongoing relationship with a personal physician trained to provide first contact, continuous and comprehensive care.
2. The personal physician leads a team of individuals, at the practice level, who collectively take responsibility for the ongoing care of patients.
3. The personal physician is responsible for providing for all of the patient's health care needs or taking responsibility for appropriately arranging care with other qualified professionals. This includes care for all stages of pain care: preventive care, acute care, chronic care, and end of life care.
4. Care is coordinated and/or integrated across all elements of the complex health care system (e.g., subspecialty care, hospitals, home health agencies, nursing homes) and the patient's community (e.g., family, public and private community-based services). Care is facilitated by registries, information technology, health information exchange and other means to assure that patients get the indicated care in a culturally and linguistically appropriate manner when and where they want and need it.
5. Enhanced access to care is available through systems such as open scheduling, expanded hours and new options for communication between patients, their personal physician, and practice staff.
6. Quality and safety are hallmarks of the medical home:
    A. Practices advocate for their patients to support the attainment of optimal, patient-centered outcomes that are defined by a care planning process driven by a compassionate, robust partnership between physicians, patients, and the patient's Family.
    B. Evidence-based medicine and clinical decision-support tools guide decision making.
    C. Physicians in the practice accept accountability for continuous quality improvement through voluntary engagement in performance measurement and improvement.
    D. Patients actively participate in decision-making and feedback is sought to ensure patients' expectations are being met.
    E. Information technology is utilized appropriately to support optimal patient care, performance measurement, patient education, and enhanced communication.
    F. Practices go through a voluntary recognition process by an appropriate non-governmental entity to demonstrate that they have the capabilities to provide patient centered services consistent with the medical home model.
    G. Patients and Families participate in quality improvement activities at the practice level.
7. Assessment of practice success appropriately recognizes the added value provided to patients who have a patient-centered medical home. The productivity metric structure should encompass the following in its framework:
    A. Reflect the value of physician and non-physician staff patient-centered care management work that falls outside of the face-to-face visit.
    B. Account for services associated with coordination of care both within a given practice and between consultants, ancillary providers, and community resources.
    C. Support adoption and use of health information technology for quality improvement.
    D. Support provision of enhanced communication access, such as secure e-mail and telephone consultation.
    E. Recognize the value of physician work associated with remote monitoring of clinical data using technology.
    F. Recognize case mix differences in the patient population being treated within the practice.
    G. Recognize and quantify savings from reduced hospitalizations and emergency services associated with physician-guided care management in the office setting.
    H. Recognize and reward achieving measurable and continuous quality improvements.

B-9 Stepped Care Model and VHA Directive

VHA DIRECTIVE 2009-053
Pain Management

1. PURPOSE

This Veterans Health Administration (VHA) Directive provides policy and implementation procedures for the improvement of pain management consistent with the VHA National Pain Management Strategy and compliance with generally accepted pain management standards of care.

2. BACKGROUND

A. The VHA National Pain Management Strategy, initiated November 12, 1998, established Pain Management as a national priority. The overall objective of the national strategy is to develop a comprehensive, multicultural, integrated, system-wide approach to pain management that reduces pain and suffering and improves quality of life for Veterans experiencing acute and chronic pain associated with a wide range of injuries and illnesses, including terminal illness. VHA employs a stepped-care model of pain care that provides for management of most pain conditions in the primary care setting. This is supported by timely access to secondary consultation from pain medicine, behavioral health, physical medicine and rehabilitation, specialty consultation, and care by coordination with palliative care, tertiary care, advanced diagnostic and medical management, and rehabilitation services for complex cases involving comorbidities such as mental health disorders and traumatic brain injury (TBI).

B. Definitions

1) **Stepped Care.** Stepped care is instituted as a strategy to provide a continuum of effective treatment to a population of patients from acute pain caused by injuries or diseases to longitudinal management of chronic pain diseases and disorders that may be expected to persist for more than 90 days, and in some instances, the patient's lifetime.

   i. Step One, Primary Care. Requires the development of a competent primary care provider workforce (including behavioral health) to manage common pain conditions. To accomplish this, primary care requires the availability of system supports, family and patient education programs, collaboration with integrative mental health-primary care teams, and post-deployment programs.

   ii. Step Two, Secondary Consultation. Requires timely access to specialty consultation in pain medicine, physical medicine and rehabilitation, Polytrauma programs and teams, and pain psychology; occasional short-term co-management; inpatient pain medicine consultation; and the collaboration of pain medicine and palliative care teams.

   iii. Step Three, Tertiary, Interdisciplinary Care. Requires advanced pain medicine diagnostics and pain rehabilitation programs accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF).

2) **Quality of Life.** Quality of life is now accepted by the medical field as a standard outcome measure of effectiveness of treatment, including treatment of pain. The concept includes such factors as level of physical and psychosocial functioning (e.g., in roles at work and home) and treatment satisfaction.

3) **The Biopsychosocial Model.** The Biopsychosocial Model takes the position that the causes and outcomes of many illnesses often involve the interaction of physical and pathophysiologic factors, psychological traits and states, and social-environmental factors. Effective treatment planning accounts for the salience of these factors in the precipitation and perpetuation of illness and illness-related disability.

4) **VHA National Pain Management Strategy Coordinating Committee.** The VHA National Pain Management Strategy Coordinating Committee, a multidisciplinary Field Advisory Committee, was established to support the National Pain Management Program Office in meeting its responsibilities. The Committee is comprised of representatives from key clinical disciplines involved in provision of quality pain care as well as representatives from other VHA offices, including, but not limited to, the Employee Education System (EES), Office of Research and Development (ORD), Mental Health, Geriatrics and Extended Care, Primary Care, Nursing, Rehabilitation, and Pharmacy Benefits Management.

C. Specific Objectives
The updated VHA National Pain Management Strategy aims to:

1) Establish expectations for attitudes, knowledge, and skills in pain management in primary, secondary, and tertiary care.

2) Create system-wide VHA care standards for pain management, appropriate to setting and professional roles that reduces suffering and improves quality of life.

3) Ensure that pain assessment is performed in an appropriately timely, regular, and consistent manner along the continuum of care from acute to chronic pain in all VHA settings.

4) Ensure that pain treatment is prompt and strives to achieve pain management objectives along the continuum of care from acute to chronic pain in all VHA settings.

5) Include patients and families as active participants in pain management.

6) Provide for appropriate level and frequency of monitoring for improvement in outcomes of pain management including pain control, physical and psychosocial function, quality of life, and complications.

7) Provide for an interdisciplinary, multimodal approach to pain management that emphasizes optimal pain control, improved function, and quality of life.

3. POLICY
It is VHA policy that VHA's National Pain Management Strategy and the on-going work of the VHA National Pain Management Program Office and Coordinating Committee is to be used to guide the development of local policies related to pain management.

4. ACTION
A. VHA National Pain Management Program Office. The VHA National Pain Management Program Office, in VA Central Office, has the responsibility for policy development, coordination, oversight, and monitoring of the VHA National Pain Management Strategy. Specifically, the National Pain Management Program office is charged with:

1) Coordinating the system-wide implementation of the Strategy, including full implementation of a stepped care model of pain care at the facility and Veterans Integrated Service Network (VISN) levels.

2) Coordinating a system-wide performance improvement plan. This plan evaluates the effectiveness of the VHA in meeting the objectives of the Strategy; it includes working with the appropriate VHA offices to establish target goals, mechanisms for accountability, and a timeline for implementation for a comprehensive, integrated VHA National Pain Management Strategy.

3) Coordinating the development and dissemination of state-of-the-art treatment protocols for pain management that are appropriate for different facility types (e.g., neuropsychiatry facility, teaching facility, and community based outpatient clinic).

4) Identifying VHA pain management expertise and resources at each facility and VISN.

5) Facilitating a national and regional referral system to ensure that all eligible Veterans have timely and appropriate access to pain management services.

6) Collaborating with the EES, Primary Care Program Office, and the several other relevant program offices, as appropriate, to develop, implement, and disseminate education and training tools to assist VHA clinicians in acquiring the skills necessary to provide high-quality pain assessment and treatment. This includes funding to:
   i. Establish performance expectations;
   ii. Develop facility and VISN self-assessment tools;
   iii. Develop effective educational programs and tools including distance learning;
   iv. Evaluate the performance of these programs and tools in improving clinical care; and
   v. Establish feedback mechanisms for clinical improvement.

7) Collaborating with ORD in identifying pain research opportunities and priorities and facilitating collaborative research efforts.

8) Collaborating with the Office of Academic Affiliations in assessing the current state of pain management education in health professional training programs ("gap analysis") and in exploring the development of innovative educational interventions for enhancing pain management.

9) Establishing a plan for both

B. Veterans Integrated Service Network (VISN) Director. The VISN Director is responsible for ensuring that:

1) All facilities within the VISN establish and implement current pain management policies consistent with this Directive.

2) A pain management Point of Contact (POC) is appointed and supported at the VISN level who is an appropriately trained and experienced clinician credentialed in pain medicine, pain management, or another credential appropriate to the clinical discipline.

3) Tertiary interdisciplinary pain care services are available at the VISN level that include the capacity for advanced diagnostics and advanced integrated and interventional pain medicine, as well as functional rehabilitation for complex cases (e.g., chronic pain with comorbidities, such as post-traumatic stress disorder (PTSD), TBI, and substance abuse). *NOTE: Each VISN is expected to have at least one CARF-accredited tertiary, interdisciplinary pain care program no later than September 30, 2014.*

4) The implementation of the VHA Pain Management Strategy is evaluated according to performance measures established by the National Pain Management Program Office.

C. VISN POC. The VISN POC is responsible for:

1) Reporting to the VISN Director annually to describe progress in implementing the Pain Management Strategy throughout the VISN;

2) Establishing a VISN pain committee to develop timelines for achieving and maintaining pain management standards;

3) Partnering with VISN primary care leadership to develop a shared implementation strategy;

4) Collaborating with VISN leadership in preparing responses to formal inquiries from the National Pain Management Program Office;

5) Maintaining a reliable contact list of facility Pain POCs; and

6) Serving as a link in communication

D. Facility Director. The Facility Director, in consultation with the Chief of Staff and Associate Director for Patient Care Nursing Services, is responsible for ensuring that:

1) The objectives of the VHA National Pain Management Strategy are met, including establishing a multidisciplinary pain management committee.

2) A stepped care model of pain care is fully implemented.

3) Accepted standards of pain care are met. These standards are:
   i. Pain assessment and treatment;
   ii. Evaluation of outcomes and quality of pain management; and
   iii. Clinical competence and expertise in pain management.

5. REFERENCE
Veterans' Mental Health and Other Care Improvements Act of 2008, Public Law 110-387 § 501.

6. FOLLOW-UP RESPONSIBILITY
The Office of Patient Care Services (11), Medical-Surgical Services (111) is responsible for the contents of this Directive. Questions may be referred to the National Program Director for Pain Management at (203) 937-3841.

7. RESCISSIONS
VHA Directive 2003-021 dated May 3, 2003, is rescinded. This VHA Directive expires October 31, 2014.

STANDARDS OF PAIN MANAGEMENT
The accepted standards of pain management are:

1. PAIN ASSESSMENT AND TREATMENT
Procedures for early recognition of acute and persistent pain and the design of prompt, longitudinal, and effective treatment must be implemented at each medical facility.

A. VHA has implemented "Pain as the 5th Vital Sign" in all inpatient and outpatient clinical settings to ensure consistent recognition and assessment of pain intensity and pain's effects on function and quality of life. NOTE: A toolkit for implementation of this standard is available at the VHA pain management Web site at: www.va.gov/pain_management.

B. Routine assessment for the presence of pain is required for non-communicative patients, as well as for patients who communicate well. Assessment in this circumstance requires an approach that involves a range of methods including: direct observation by clinical staff, input from family members, and close monitoring of the effects of pain management interventions.

NOTE: A consensus statement that provides additional guidance for pain screening in the non-communicative patient is available at the VHA pain management Web site at: www.va.gov/pain_management.

C. Once pain symptoms are recognized, a timely and appropriate comprehensive pain assessment is performed, a pain treatment plan is developed and implemented, and reassessment of the effectiveness of the plan is completed. Each of these parameters must be documented.

NOTE: To ensure consistency of documentation and to facilitate pain outcomes monitoring, all facilities are strongly encouraged to use the pain reminders and dialogs sponsored by the VHA National Pain Management Strategy Coordinating Committee. These reminders and dialogs can be downloaded from the Clinical Reminders Web page at: vista.med.va.gov/reminders.

D. Patient and family education regarding pain and pain management is included in the treatment plan.

NOTE: Patients are encouraged to be active participants in pain management.

E. Evidence-based, to the degree possible, pain management protocols are implemented in all clinical settings.

1) Using guidelines. Published clinical practice guidelines and related resources providing information regarding these pain management protocols are available on the VHA pain management Web site at: www.va.gov/pain_management and at: www.healthquality.va.gov.

2) Patient participation in decision-making. Most uncomplicated pain conditions, for which the responsibility for assessment and management rests with the primary care provider or team (trained to implement a stepped care approach, as needed), respond best to one or more of several therapies readily available and coordinated in primary care settings. These therapies emphasize continuing patient participation in decision-making and clinical planning, patient instruction in self-management, and appropriate levels of family participation.

NOTE: Standards for training in the use of these therapies in a primary care and other settings is available on the VHA pain management Web site at: www.va.gov/pain_management.

3) Implementing stepped, consultative care

i. Integrating behavioral health in primary care of chronic pain is essential to optimize clinical outcomes and provide essential support to the medical care of patients. Chronic pain can be a complex, biopsychosocial condition involving cognitive, psychosocial, and substance abuse issues as well as medical and mental health comorbidities. The complexity of chronic pain management is often beyond the expertise of a single practitioner, especially for patients whose pain problems are complicated by homelessness, PTSD, cognitive impairment from TBI and other conditions, including depression, combat injuries, Polytrauma, substance abuse, and other complex psychosocial issues. The experience of pain both impacts and is affected by social and family functioning. Veterans with complex chronic pain conditions are best served by a comprehensive, interdisciplinary approach within a continuum of care that is informed by a biopsychosocial model.

NOTE: The VHA Pain Management Program is presently developing models of pain care through inter-program collaboration with various VHA program offices, as listed below. Educational programs are being planned and executed through Employee Education System (EES) to present such collaborative clinical planning. New program models to achieve the objectives of this Directive will be found on the VHA pain management Web site at www.va.gov/pain_management as they are implemented.

ii. Primary care providers must have access to pain consultative and treatment sources to effectively evaluate and manage these complexities. Access must be timely to the needs of the Veteran. These sources include Pain Medicine specialists, interdisciplinary pain clinics and centers, Hospice and Palliative Care Services, Mental Health services, Social Work services, and Clinical Chaplaincy services, among others. If such consultative services are not readily available at a specific facility, the facility Director, or designee, is responsible for arranging with the VISN Director reasonable and timely access to these consultative services through inter-facility collaborations within the VISN or through community resources, as appropriate.

iii. At least one tertiary, interdisciplinary pain rehabilitation program must be available in each VISN to manage more complex cases.

iv. Acute pain management is expected in every environment, including provision for seamless pain management during transportation from primary care and secondary care facilities to tertiary care.

F. Effective pain management often requires consideration of the use of one or more of several different classes of medications and other treatment modalities prescribed simultaneously. Treatment may become particularly complex in the context of several causal or perpetuating mechanisms and comorbidities. The potential for each modality for improving pain treatment outcomes is weighed against the potential for drug-drug and drug-disease interactions, side effects, and toxicities. Patients with cognitive deficits from disease or TBI are particularly vulnerable when drug regimens increase in their complexity. Evidence-based stepped care treatment algorithms for managing different types and complexities of chronic pain and its comorbidities is readily available to providers as is training appropriate to their practice setting.

G. The safe and effective use of opioid analgesics for the management of pain, particularly complex chronic pain conditions, requires special attention to personal and public health risks.

1) Risks include adverse side effects of these medications, development of addiction, and risks to the public through diversion of prescribed medications.

2) The potential for fatal overdose either by accident or in a suicidal attempt in patients suffering from multiple disorders or with polypharmacy must be considered in prescribing opioids and other medications, including prescribing for pain patients on opioid substitution programs.

NOTE: Published guidelines for chronic opioid therapy, pain polypharmacy, and management of pain in the post-operative setting are available to guide the use of these medications. These guidelines are available at www.healthquality.va.gov and on the VHA pain management Web site at www.va.gov/pain_management . Completion of a written opioid pain care agreement is strongly encouraged to document provider-patient discussion of potential risks and benefits of opioids, provider and patient responsibilities related to their use, and the parameters for continued use. In this context, other methods such as random urine drug monitoring, frequent clinic visits and opioid renewal clinics may be useful to ensure adherence and safety. Further information about how to manage opioid treatment agreements can be found at www.healthquality.va.gov and on the VHA pain management Web site, www.va.gov/pain_management.

H. As pain management is an integral part of palliative and end-of-life care, the expertise of hospice and palliative care clinicians needs to be available to all patients with a serious, life-limiting illness.

I. Patient satisfaction with pain management is monitored on an on-going basis.

2. EVALUATION OF OUTCOMES AND QUALITY OF PAIN MANAGEMENT

A. A multidisciplinary pain management committee must be established at each VHA facility to provide oversight, coordination, and monitoring of pain management activities and processes to facilitate the implementation of the VHA Pain Management Strategy in compliance with evidence-based standards of pain care and adherence to requirements of external accrediting bodies. In some facilities, this function may be the responsibility of an overarching clinical practice committee. In each facility, processes will be developed and implemented to evaluate the success of meeting the goals of the VHA National Pain Management Strategy on a regular basis, at least yearly.

B. The quality of pain assessment and the effectiveness of pain management interventions must be monitored. Measures may include: adherence to published clinical practice guidelines, timeliness of pain treatment, adequacy of pain control, medication safety, appropriate use of stepped care treatment including behavioral health and pain medicine consultation and treatment, and clinical outcomes such as improvements in pain control, patient satisfaction, physical and psychosocial functioning, and quality of life.

NOTE: A VHA Pain Outcomes Toolkit is available at www.va.gov/pain_management/docs/outcomes.doc.

C. All elements of pain management must be documented in the patient record, often in the initial visit or in subsequent visits as clinically indicated over time.

NOTE: For clinical tips, clinicians may want to consult www.va.gov/pain_management/docs/outcomes.doc and www.va.gov/pain_management. Elements of pain management include:

1) Medical History. The patient's prior experience of pain and pain-related diseases, disorders, injuries and comorbidities.

2) Routine Screening for Pain. Routine screening for the presence and intensity of pain using "Pain as the 5th Vital Sign," or a validated alternative tool for special populations, must be documented. This must be accomplished in association with outpatient or home visits and in residential and inpatient settings at a frequency that is appropriate to the specific clinical setting and problem. Screening for pain in non-communicative patients must be documented by the use of the code "99," which indicates the pain assessment occurred in lieu of a verbal assessment.

NOTE: It is important to appreciate that the goals of this method include the timely monitoring of pain treatment effectiveness, and the identification of new or previously undetected pain concerns.

3) Comprehensive Pain Assessment. NOTE: Use of pain reminders and dialogs is encouraged.

4) Individualized Plan of Care. An individualized goal-oriented, prioritized pain management plan of care that may include, but is not limited to:

i. Pharmacologic interventions, including:

a. The use of mechanism-specific and condition-specific treatment algorithms,

b. Appropriate trials of individual medications to determine effectiveness (pain control and function), and

c. Cessation of medication without effectiveness.

ii. Prescribing opioid analgesics for regular use, documentation of:

a. An opioid pain care agreement, which is strongly encouraged, if not mandated (according to local facility policy),

b. Effectiveness, including pain control, function, and quality of life, and

c. Safe storage and management in the home.

iii. Non-pharmacologic interventions, to include:

a. Educational interventions to improve self-management;

b. Psychological interventions, including established psychotherapies for chronic pain and associated sequelae (e.g., Cognitive-Behavioral Therapy), in conjunction with other treatments as appropriate, particularly for patients with unremitting chronic pain that demonstrate limited response to other treatment approaches;

c. Family interventions and community supports;

d. Rehabilitation therapies;

e. Complementary therapies as available; and

f. Pain medicine specialty procedures, such as injections, nerve blocks, ablations, and neuromodulation.

5) Evaluation. Periodic evaluation of adherence, response to interventions, and achievement of time-limited therapeutic goals in the pain management plan, should include:

i. Moderation or alleviation of pain;

ii. Satisfaction with current treatment plan;

iii. Stabilization or improvement in physical and psychosocial function;

iv. Stabilization or improvement in salient comorbidities and overall health status;

v. Adherence to opioid pain care agreement, if used; and

vi. Adherence to pain management plan of care.

6) Education. Pain education for family and patient that may include the availability of pain specific programs, such as: formal pain school; pain relevant Web sites; printed pain management patient education materials at or below the ninth grade literacy level; and hospital video networks. Veterans' learning needs, readiness, preferences and barriers should be considered to ensure that messages are presented in an understandable format which the Veteran finds helpful. This education needs to occur:

   i. During hospitalization, as soon as clinically appropriate and acceptable to the patient.

   ii. At discharge from hospital or facility.

   iii. In all outpatient treatment settings when pain is assessed or treated.

3. CLINICIAN COMPETENCE AND EXPERTISE IN PAIN MANAGEMENT

A. All clinical staff (e.g., physicians, psychologists, nurses, pharmacists, therapists, and chaplains), should have orientation related to the principles of pain assessment and management upon being hired, as well as ongoing education and training. While general principles of pain management apply to all VHA clinicians, each staffing group must clearly delineate its specific pain management responsibilities and abilities and ensure that all its members receive training adequate to meet these responsibilities and to maintain these abilities. Education and training must be relevant to the specific needs of the patient population and clinical setting that provider groups serve, and should include, as appropriate, pharmacologic (especially opiates and including education regarding physical dependency, pseudoaddiction, tolerance, and potential for addiction, overdose and/or suicide; appropriate titration; side effects and benefits) and non-pharmacologic (including psychological, physical, complementary, and spiritual) treatment modalities.

   NOTE: Annual pain management education for clinical staff is highly recommended. Such education should include: for physicians, PAs, CRNPs, and nurses, 5 hours of continuing education in pain management, which can be obtained by attending continuing medical education (CME) and continuing education unit (CEU) offerings, completing online self-studies for CME and CEUs, or earning the credits in other ways and submitting evidence of the credits to the education staff at their facility. When feasible, facilities are encouraged to provide interactive "workshop" formats for learning specific cognitive and behavioral skills. Courses and educational tools for facilities can be found on the VHA pain management Web site at *www.va.gov/pain_management*. It is highly recommended that Pain Medicine Physician specialists obtain and maintain one or more of the following certifications: Pain Medicine specialty board certification by the American Board of Pain Medicine; Pain Management subspecialty board certification by the American Board of Anesthesiology, the American Board of Physical Medicine and Rehabilitation, or the American Board of Psychiatry and Neurology; Hospice and Palliative Care Medicine subspecialty board certification by one of the various ABMS boards granting this certification. It is recommended that they should also obtain yearly pain-relevant continuing medical education. In addition, innovative training programs are being developed and evaluated to ensure the adequacy of the pain management workforce for providing quality pain management to all Veterans regardless of location.

B. VHA standards for pain management will be communicated by training faculty to all medical students, allied health professional students, residents, and interns who provide patient care; appropriate education in pain assessment and management will also be provided to these students and trainees.

THERAPIES EMPHASIZING CONTINUING PATIENT PARTICIPATION

Most uncomplicated pain conditions, for which the responsibility for assessment and management rests with the primary care provider or team (trained to implement a stepped care approach, as needed), respond best to one or more of several therapies readily available and coordinated in primary care settings. These therapies emphasize continuing patient participation in decision-making and clinical planning, patient instruction in self-management, and appropriate levels of family participation.

NOTE: Standards for training in the use of these therapies in a primary care and other settings is available on the VHA pain management Web site at: www.va.gov/pain_management. Therapies may include, as medically appropriate and indicated:

1. Medication management through evidence-based algorithms;
2. Office-based procedures (e.g., myofascial injections);
3. Behavioral therapies (e.g., pain school, behavioral groups, support groups);
4. Physical therapy interventions (e.g., stretching, posture, exercise, ice, and electronic stimulation), occupational therapy interventions (e.g., splinting, positioning, and adaptive equipment for modified activity, and chiropractic interventions (e.g., spinal manipulation); and
5. Complementary and alternative therapies based on availability (e.g., acupuncture, massage, tai chi) may be considered.

Figure B-9.1: Continuum of Stepped Care

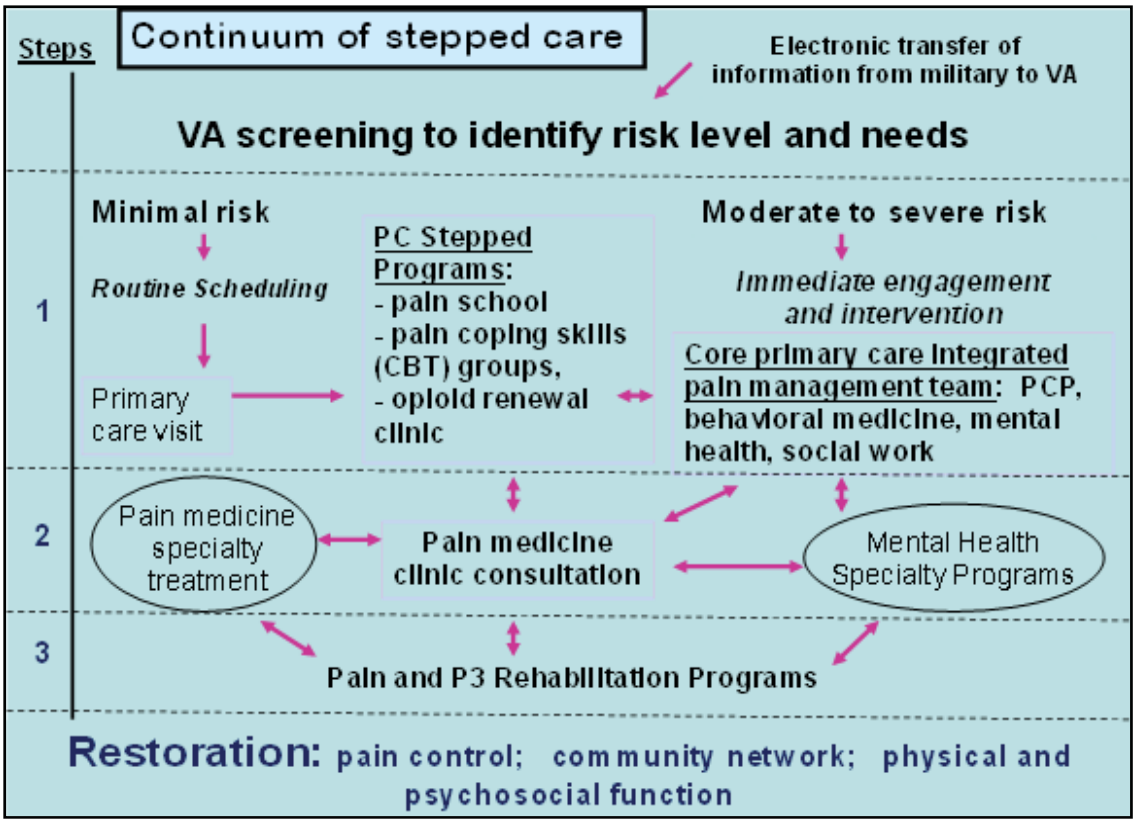
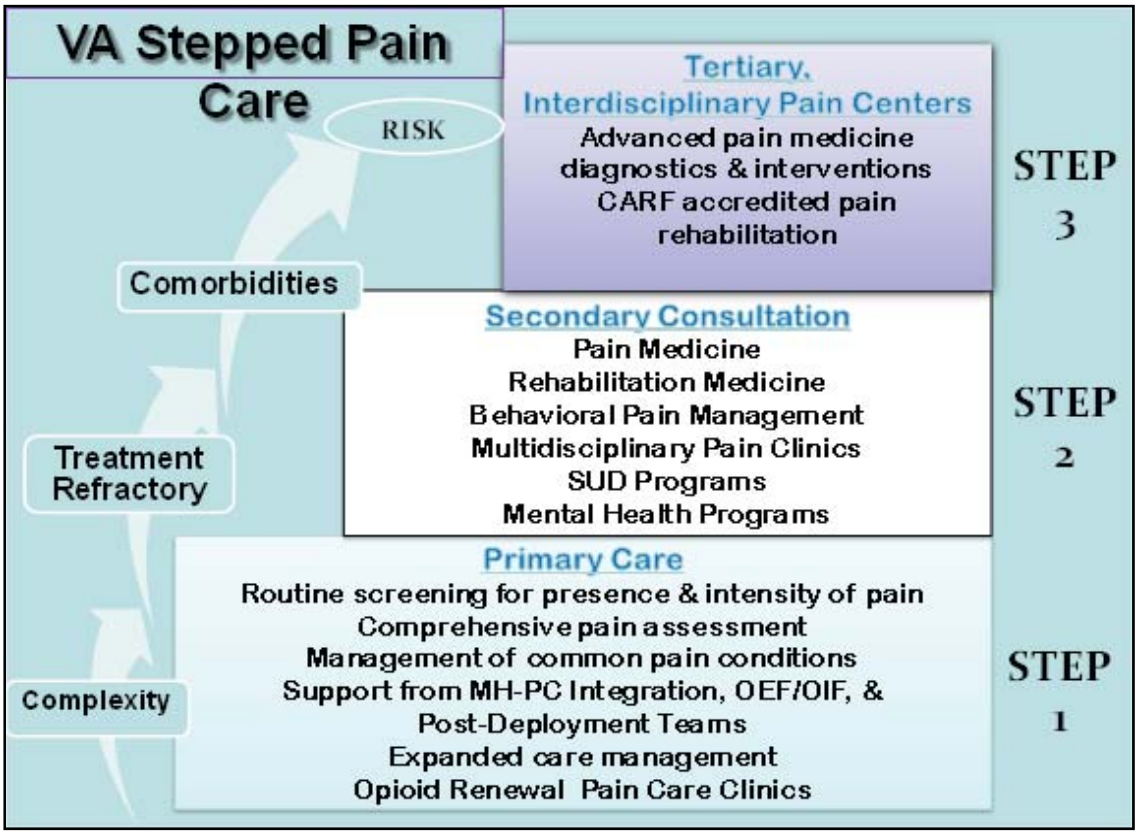


Figure B-9.2: VHA Stepped Care Model



B-10 The Safe Use of Opioids

Safety Proposals

1. **Improve assessments of pain with function, pain level and quality of life to determine if pain is undertreated or over-treated and what are patients' barriers to good treatment**
   A. Need primary care pain team or clinic
   B. Need Assessment tools

2. **Psychological assessment of each patient**
   A. Identify patients in pain with substance abuse, mental disease, PTSD, mTBI
   B. Determine suicide risk
   C. Risk Stratification of patients with chronic pain – low, moderate, high

3. **Profiles provided for Soldiers on chronic opioids**
   A. Notifies command of safety issues
   B. May effect deployability or need for change of military occupational specialty

4. **Identify addiction and provide treatment**
   A. Visibility of Army Substance Abuse Program referrals and assessments
   B. Medical is notified of command directed hot UAs for safe use of pain meds

5. **PCMs able to identify their chronic pain patients**
   A. Providers need a quarterly list of their chronic pain patients
   B. Providers should have available calculated daily morphine equivalents, and the number of prescribers for past quarter for each patient

6. **Improve documentation of pain visits and opioid refills**
   A. Separate appointments with PCM for only pain management
   B. Document analgesia level, ADLs-function, adverse effects and aberrant behaviors (4A's) for both visits and telephone consults
   C. Document longitudinally aberrant drug-related behaviors
   D. Determine effectiveness of pain treatment
   E. Set Treatment Goals

7. **Clinical Guidelines for Opioid Therapy at MTFs and VA Hospitals with measurable metrics**
   A. Chronic pain patient should have PCM and sole prescriber
   B. All chronic pain patients have Opioid Treatment Agreement and Informed Consent (should be standardized)
   C. Chronic pain patient must see PCM at least every six months
   D. High Risk chronic pain patients must see pain specialist every 2 years
   E. Documented drug screening for illegal drugs and compliance

8. **Provide Opioid Return Program for unused prescriptions of opioids to decrease doses available for misuse and abuse**
   A. Prescribe smaller quantities
   B. Limit number of tablets (provide multiple dated Rxs)
   C. Ceiling limit mg of morphine/day prescribed in primary care

9. **Launch Safety Education Program to educate teens, providers, Soldiers and Families**
   A. Educating about the dangers of drugs leads to a decrease in abuse
   B. Proper disposal of opioids
   C. Dangers of using someone else's prescriptions

10. **Provide non-drug pain therapies at both inpatient and outpatient clinics**
   A. Consider OMT teams
   B. Acupuncture
   C. Provide a resource list to all providers in each MTF and VA Hospital

11. **Improve communication between civilian and VA, and MTF pharmacies for all beneficiaries**
   A. Poly-pharmacy is a problem (example: methadone at VA and opioids at MTF)
   B. Outside mental health provider prescribing benzos and MTF giving opioids

12. **System to flag patients**
   A. ER "frequent fliers" and list the sole prescriber
   B. History of addiction
   C. Suicidal risk
   D. High risk due to medication regimens-multiple psychoactive drugs with opioids
   E. Misuse/Abuse behaviors who require closer monitoring
   F. Notify ER of drug seeking behaviors, opioid treatment agreement, medication management plan
   G. Identify patients who need safety restrictions
      1) TRICARE limit controlled drugs or prescribers (MTF only or one prescriber)
      2) Limit 1:1:1 one prescriber, one pharmacy, and one ER

B-11 WTC Pain Survey Collaboration

Figure B-11.1: Pain Survey Questions Provide to WTC

WARRIOR TRANSITION COMMAND PAIN SURVEY

1. Do you have pain? If no, please skip this section.
   _____ Yes
   _____ No

2. Is pain your primary medical problem?
   _____ Yes
   _____ No

3. Where are you receiving pain care?
   _____ Military medical facility
   _____ Civilian facility

4. Does your provider believe you are in pain?
   _____ Yes
   _____ No

5. Please check all of the following pain management techniques you have used or would use:

		Was Helpful		Would Try If Available
		Yes	No	
_____	Acupuncture	_____	_____	_____
_____	Behavioral Health	_____	_____	_____
_____	Bio Feedback	_____	_____	_____
_____	Chiropractor	_____	_____	_____
_____	Massage Therapy	_____	_____	_____
_____	Meditation	_____	_____	_____
_____	Occupational Therapy	_____	_____	_____
_____	Pain Education	_____	_____	_____
_____	Pain Medication	_____	_____	_____
_____	Physical Therapy	_____	_____	_____
_____	Yoga	_____	_____	_____
_____	Other	_____	_____	_____

6. What are your expectations with respect to pain management?
   _____ Pain free
   _____ Pain reduction
   _____ Tolerable pain that allows me to perform my activities
   _____ I have no expectation that my pain will improve

7. Are you confident that your provider will be able to manage your pain?
   _____ Yes
   _____ No

	Completely Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Completely Satisfied
8. Overall, how satisfied are you with your current pain management?	☐	☐	☐	☐	☐

If you are dissatisfied with your current pain management, what can we do to improve?

_____

_____

B-12 Pain Education Campaign Plan

Figure B-12.1: Notional Pain Management Curriculum (extended list)

100 - General Information about Pain / Pain Management
101: Introduction to Pain Management (Audience: General Military Population)
• Core knowledge and message about pain/pain management for patients, medical staff, Family members, and leaders. It should describe an approach to pain and pain management within our health care systems. Definition in non-clinical terms, describe the problem to nation and the military. • Introduction to the new DoD/VA pain scale. How it will be used and what it will mean for patients. • Introduction to the new DoD Tier structure for pain management. • Pain and the Patient – expectations and responsibilities. What care should patients expect, what are reasonable goals for pain treatment, and what responsibilities do patients have in the management of their pain? • Pain medications – good, bad, and ugly. What are substance abuse, misuse, and dependence? What is drug addiction? What about alcohol and tobacco?
102: Pain Management for Leaders/Supervisors (Audience: Military Leaders)
• Understanding pain, effects on readiness, deployment, medications, profiles, communication with Medical Providers. • Basic pain pharmacology. What are the risks and benefits of broad categories of drugs, such as opioids, NSAIDs, antidepressants, anti-seizure, sleep aids, and others? • What are the pain resources throughout the Levels of care?
103: Understanding a Family Member with Pain Management Issues (Audience: Family Member of those with pain management issues)
• Coping skills, support. • Resources (military and civilian) available for assistance. • Warning signs that alert to self-destructive behavior. How do I intervene?
104: Patients with pain and co-existing disorders of TBI, PTSD, Depression, Substance Abuse, etc. (Audience: All of the above)
• What is the relationship between these issues and pain? • Strategies and resources for minimizing the impact of pain on patients with co-existing disease.

200 - Pain Management for Healthcare Staff
201: Introduction to Pain Management for Healthcare Personnel (Audience: All health care personnel)
• Medical overview, definitions, mechanisms, pathophysiology, identification, assessment and basic management. • Overview of pain care throughout the continuum. Introduction of the Tier system of pain care. • Introduction of the new DoD/VA pain scale. How is it administered and how is the information used clinically?

(continued on next page)

202: Pain Management in Primary Care (Audience: Primary Care Providers)
• Information on proper assessment, management, and referral of pain management conditions for the primary care provider. • PASTOR – an introduction to the tool and how it can be used. • Treating patients with headaches. • Managing patients with pain and co-existing disease (PTSD, TBI, Substance abuse). • Pain pharmacology – best pain medication resources. Non-pharmacologic approaches to pain management. What are the pain resources throughout the Levels of care?
203: Pain Management in the WTU (Audience: Providers and Staff in Warrior Transition Units)
• Pain and the combat casualty. What makes this population unique? • Strategies for tapering pain medications. • What resources are available to manage pain and/or refer patients? • PASTOR – an introduction to the tool and how it can be used.
204: Pain Management for Pharmacist (Audience: Pharmacists)
• Medication treatment algorithms • Pharmacy pain care clinics • Opioid pain care agreements

300 - Deployed / Battlefield Pain Management
301: Medic Management of Battlefield Pain (Audience: Medics, Hospital Corpsmen, Airmen)
• Field Management Guidelines, assessment, documentation, pre-hospital treatment. • Future medications and technologies
302: Pain Management at Level III (Audience: Deploying health care personnel)
• Military Advanced Regional Anesthesia and Analgesia (www.DVPMI.org). • Use of the new DoD/VA pain scale in the deployed environment. • Why is far forward pain management important? • Opioids for pain on the battlefield – blessing or curse? • Multimodal analgesic techniques for the battlefield. • CSH Pain Consultant and pain nursing – What is there role? • Future medications and technologies for pain.
303: Evacuation Pain Medicine (Audience: Deploying health care personnel)
• Air evacuation and pain management – what are the challenges • Preparing a patient for evacuation from a pain perspective.
304: Acute Pain Medicine Service (Audience: Pain medicine physicians (anesthesiologists) and nurses)
• Military Advanced Regional Anesthesia and Analgesia (www.DVPMI.org). • CSH pain physician mission and responsibilities. • Pain nursing at the CSH. • Introduction to the pain equipment set. • Future pain medications and technologies.

(continued on next page)

400 - Pain Care by Specialty
401: Pain Medicine Specialty Care (Audience: Pain Medicine Specialists)

• Core principles of biopsychosocial pain assessment, prioritized goal-oriented pain management planning, and time-dependent treatment outcomes assessment.
• Operational management of a continuum of integrated stepped pain care from injury-related acute pain to chronic pain management within the Tiered System, including an interdisciplinary pain medicine clinic or service, and, when appropriate, a pain medicine department. Tasks would include the following:
  ○ Appropriate setting-specific clinical duties in the stepped model of care.
  ○ A system of clinical service outcomes assessment, such as patient/provider satisfaction, pain control and quality of life measures.
  ○ How to develop and manage collaborative care models between primary care, pain medicine, behavioral medicine/psychiatry, pharmacy, rehabilitation, and other medical and integrative medicine services.
  ○ Risk management processes for patients, including procedures, medications especially opioids, and suicide.
• Medical supervision of a pain rehabilitation program.
• How to contribute to training of front line and primary care providers and other providers and clinicians in pain management.
• Medical overview, Definitions, Mechanisms, Pathophysiology, Identification, Assessment and basic Management.

402: Perioperative pain management (Audience: Surgical personnel)
• Why is perioperative pain management important? What are the consequences to my patients when acute pain in poorly managed? • The advantages of multimodal analgesia vs. opioid monotherapy for pain. • The role of regional anesthesia on the battlefield – what are the advantages and the risks (compartment syndrome)? • The role of the Acute Pain Service in the care of the patient.

B-13 Standardize Pain Management Capabilities

TRICARE Regional Pain Center of Excellence Future Directions

1. **Pain Medicine Service (interdisciplinary)**
   A. Acute & Chronic Pain Services
      1) Inpatient
      2) Outpatient
      3) Perioperative
2. **Pain PT**
3. **Pain OT**
4. **PM&R**
   A. Physical Rehabilitation
5. **Behavioral Health – Pain**
   A. Co-existing Psychiatric Diseases
   B. Cognitive Therapy
   C. Substance Abuse and Addiction Medicine
6. **Pediatric Pain Service**
7. **Cancer Pain & Palliative Care**
   A. Pain Treatment
   B. Quality of Life
   C. Hospice
8. **Complementary and Alternative Medicine Techniques**
   A. Acupuncture
   B. Yoga / Yoga Nidra
   C. Non-allopathic Chiropractic Care
   D. Therapeutic Medical Massage
   E. Biofeedback
9. **Family Education and Support**
10. **Pain Rehabilitation Center**
    A. Focus on patients with refractory maladaptive pain coping behavior:
       1) Inpatient Hospitalization
       2) Intensive Outpatient Program
       3) Outpatient Program

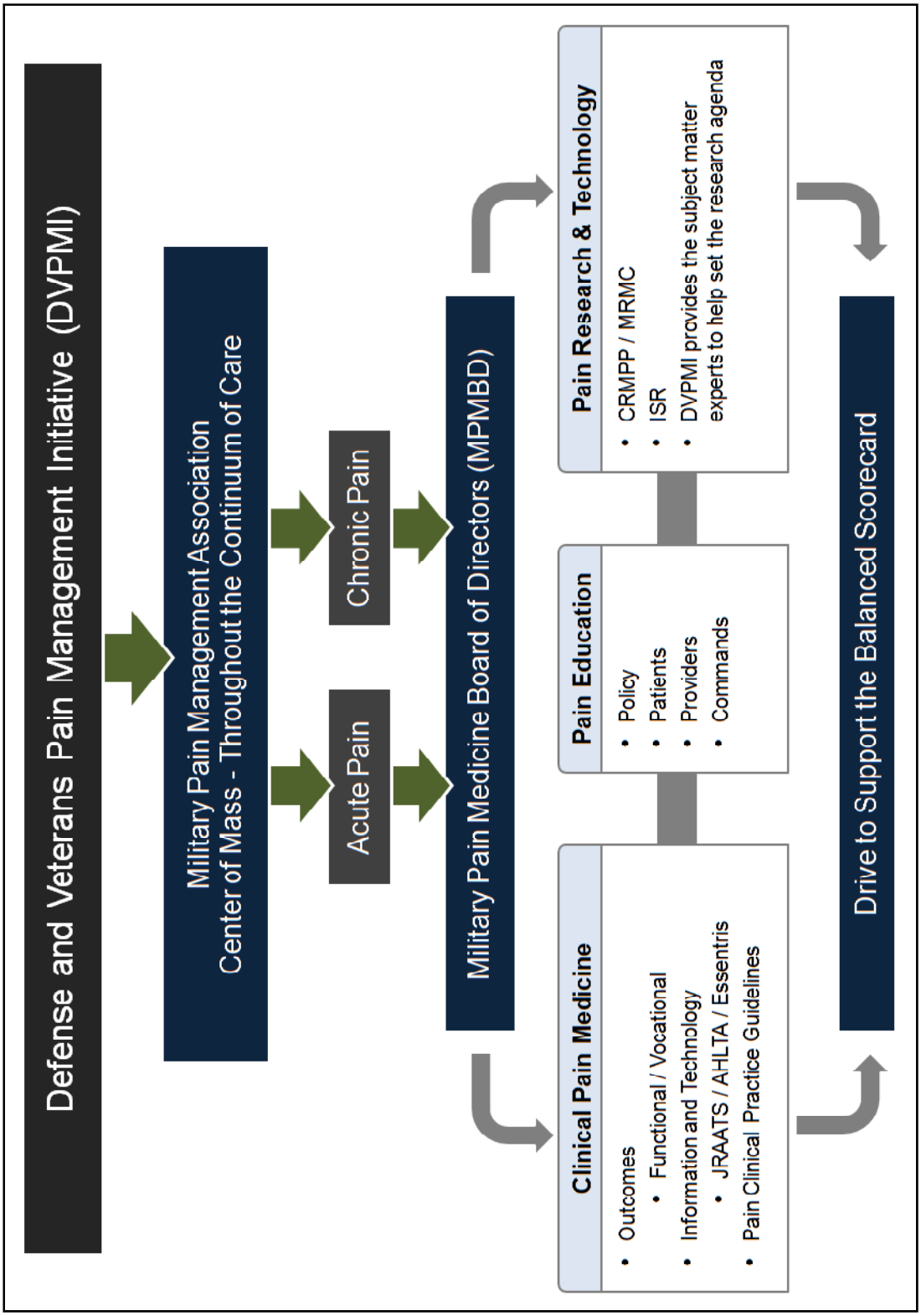
Within each TRICARE region, pain services will be distributed by a Tier system based on the facility size, mission, and local patient pain care needs.

Figure B-13.1: RPCoE Tiers

Tier	Facility
I	Outpatient Health Clinics
II	Small MTF Large Multidisciplinary Clinics
III	MTF
IV	Medical Center

B-14 Central Pain Management Advisory Board for DoD and VHA

Figure B-14.1: Proposed Central Pain Management Advisory Board Structure



DVPMI Charter

CHARTER OF THE DEFENSE & VETERANS PAIN MANAGEMENT INITIATIVE (DVPMI)

ARTICLE I: NAME, OBJECTIVE, PURPOSE, and HISTORY

1. Name

The Defense and Veterans Pain Management Initiative (DVPMI). Defense represents all United States Armed Forces personnel and dependents. Veterans represent the organization's commitment to enhancing the continuity of effective pain care of Veterans and retirees into the health care systems of the Veterans Health Administration (VHA) and the community.

2. Objective

The DVPMI will serve the DoD and VHA as a clinical advisor of best integrated pain medicine practice, a pain medicine educational resource, and a pain research and outcomes evaluation focal point. As the Defense Pain Center of Excellence (DPCoE), the DVPMI will be responsible for assessing the effectiveness and safety of pain care for DoD and VHA Beneficiaries. The DVPMI will provide an administrative structure for a Military Pain Medicine Board of Directors (MPMBD) consisting of Air Force, Army, Navy and VHA senior expert clinicians and researchers experienced in the management of acute and chronic pain on the battlefield, at sea, in the air, and at home through recovery, rehabilitation and reintegration.

3. Purpose

Based on the best available evidence, the DVPMI will develop consensus recommendations for the Air Force, Army, Navy, and VHA integrated pain management communities for improvements in pain medicine practice, education, and research. The DVPMI will be the proponent of world class pain management services for military and VHA Beneficiaries. The organization will serve as an advisory board (MPMBD) to the individual service pain consultants to the Surgeons General and VA's Undersecretary for Health Director.

The DVPMI will contribute directly to pain-related research, development, tests, and evaluations (RDT&E) sponsored by the Services or the Defense Health Program, or by other Federal organizations that sponsor research, such as the Department of Veterans Affairs and the National Institutes of Health. Direct contributions include proposing and executing clinical and nonclinical trials as a Principal Investigator and establishing clinical trial resources (e.g., clinical sites, subject recruitment, protocol development and execution, Institutional Review Board coordination, and analytical and report-writing capabilities). The DVPMI will support the compilation, organization, assessment, and dissemination of pain-related research information and outcomes.

4. History

The DVPMI began as a congressionally directed program called the Army Regional Anesthesia and Pain Management Initiative in 2000. Upon recognition that pain issues required a tri-service approach, the organization was re-named the Military Advanced Regional Anesthesia and Analgesia (MARAA) in 2005 to include Air Force and Navy partners in military pain medicine recommendations. Finally, the acknowledgment that military and VHA Beneficiaries require an integrated response to acute and chronic pain issues throughout the patient care continuum, led to the current DVPMI structure. The establishment year for the organization remains 2005 when it first became tri-service.

ARTICLE II: MANAGEMENT

1. DVPMI Executive Administration

The DVPMI Executive Administration serves as the non-voting administrative core of employees for the organization. The Chief Executive Officer will be appointed. The Chief Executive Officer serves with the approval of the MPMDB and is responsible for the supervision and staffing of administration employees. The Executive Administration is responsible for the dissemination of MPMDB recommendations to the DoD and VHA. The Executive Administration will ensure that the DVPMI organization is in compliance with all pertinent DoD and VHA regulations and policies.

The Executive Administration will include, but is not limited to, the following positions:

- Chief Executive Officer (Appointed Position)
- Operations/Projects Officer
- Program Manager/Budget
- Clinical Pain Medicine Policy Coordinator
- Pain Medicine Education Coordinator
- Pain Medicine Research Coordinator
- Medical Writer
- Statistician
- Information Technologist
- Legal Assistant
- Project personnel (as required)

2. DVPMI Military Pain Medicine Board of Directors (MPMBD)

The DVPMI MPMBD group serves as an expert military and VHA advisory board on pain medicine clinical, educational, and research issues. The MPMBD will have four permanent members consisting of the Air Force, Army, and Navy Pain Consultants to the Surgeons General and a National Pain Director from the VHA. In consultation with their respective Surgeons General and VA Director, the four permanent members will appoint three additional members from their respective services. Consultants can nominate members outside of their respective service. At least one of the appointed members must come from the Medical Research and Material Command (MRMC). Appointed members must represent the following medical specialties (no particular ranking or order) with an interest and expertise in pain medicine:

- Primary Care
- Pain Medicine
- Anesthesiologist
- PM&R
- Neurologist
- Pharmacist
- Physical Therapy
- Occupational Therapy
- Integrative Medicine / Complementary and Alternative Medicine
- Behavioral Health
- Addiction Psychiatry
- Nursing
- Pain Research
- Patient Advocate
- Combat Medic
- Other pain specialists

The permanent members will coordinate MPMBD appointments to ensure maximum representation of the listed pain medicine related specialties. All appointments will be reviewed by the permanent members on an annual basis with member adjustments made at the annual spring meeting.

Each member of the organization has one vote on issues that require agreement and collaboration between services and VHA. All decisions will be made by a simple two thirds majority vote of the MPMBD. Issues that fail to obtain a two thirds majority will be tabled and re-addressed at the next meeting called by the DVPMI Chief Executive Officer.

ARTICLE III: MPMBD and CHIEF EXECUTIVE OFFICER RESPONSIBILITIES

The Chief Executive Officer will be responsible for soliciting meeting issues from MPMBD members, setting meeting agendas, conducting meetings, keeping meeting minutes, and maintaining all meeting documents. The Chief Executive Officer never votes on MPMBD decisions. The Chief Executive Officer will be responsible for generating organization position white papers on decisions made by the MPMBD. The position white papers will provide each service Pain Consultant with collaborative recommendations for issues addressed by the organization. The Chief Executive Officer can assign the writing of decision papers to MPMBD members. The permanent Pain Consultant MPMBD members will have final editorial authority over any white paper recommendations submitted to their primary service Surgeon General and VA Director.

ARTICLE IV: MEETINGS

1. **Meetings**
   The organization will meet (at a minimum) twice yearly. Meeting locations and times will be set by the Chief Executive Officer to facilitate maximum participation of MPMBD members. Meetings will be coordinated by the Executive Administration. MPMBD members can send proxies to attend meetings in their place (proxy voting is allowed) if approved by that member's service Pain Consultant. Teleconferencing is an acceptable means of attending a meeting. Meetings will only be held when a quorum of members (or their proxies) is available. A quorum will be defined as a majority of voting members with representation from each service and VHA.

2. **Special Meetings**
   The Chief Executive Officer can call a special meeting by MPMBD members on issues requiring prompt attention. Special meetings can be conducted via teleconferencing with votes documented by email.

3. **Conduct of Meetings**
   Meetings will be presided over by the Chief Executive Officer or, in the absence of the Chief Executive Officer, a member of the Executive Administration appointed by the Chief Executive Officer.

4. **Meeting Agenda**
   The Chief Executive Officer will provide members with the meeting agenda one week prior to the scheduled meetings. MPMBD members may add new items to the agenda during meetings with the Chief Executive Officer's request for new business. Meetings will be concluded with a review of unresolved issues. Meetings will be conducted by the Chief Executive Officer using Robert's Rules of Order as a guide.

ARTICLE V: ORGANIZATION SEAL

The organization seal is represented at the head of this document.

ARTICLE VII: AMENDMENTS

Amendments to this charter can be made with two-thirds majority vote of the MPMBD.

B-15 Theater Hospitalization (FM 4-02.10)

Figure B-15.1: Army Levels of Care

Level	Description and Location	Care	
I	**Service -** The first medical care a Soldier receives: • Divisions • Corps • Echelons Above Corps Units	• Life Saving Measures • Emergency Medical Treatment (EMT) • Advanced Trauma Management (ATM)	• Disease Prevention • Stress Prevention • Casualty Collection • Evacuation from Supported United to Supporting MTF
II	**Service -** Capabilities duplicate Level I and are expanded: • Combat Zone • Echelons Above Corps Units	• Dental Care • Laboratory • X-Ray	• Patient Holding Capabilities • Mental Health* • Preventative Medicine*
III	**Service -** Capabilities duplicate Level II and are expanded: • Offshore Support Facilities • Third Country Support Basis • Other Hospital Locations	• Hospital (Command, Control, Communications) • Patient Administration • Nutritional Care • Supply and Services • Triage • Emergency Medical Equipment • Preoperative Care • Orthopedics	• General Surgery • Operating Rooms and Central Material and Supply Services • Anesthesia • Nursing Services • Pharmacy • Clinical Laboratory and Blood Banking • Radiology Services • Hospital Ministry Team Services
IV	**Service -** Capabilities duplicate Level III and are expanded: • Echelons Above Corps Units Combat Support Hospital • Third Country Support Basis	• Specialized Medical Capabilities • Specialized Surgical Capabilities	
V	**Service -** Capabilities duplicate Level IV and are expanded: • CONUS Support Base • Other Service, VA, and Civilian Hospitals	• Provide the most definitive care available	

Appendix C: Task Force Charter

Figure C-1: Army Pain Management task Force Charter (signed August 21, 2009)

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND
2050 WORTH ROAD
FORT SAM HOUSTON, TX 78234-6000

REPLY TO
ATTENTION OF

21 AUG 2009

MCHO-CL

MEMORANDUM FOR Assistant Surgeon General, Force Projection

SUBJECT: Army Pain Management Task Force Charter

1. Purpose: To establish the Army Pain Management Task Force.

2. Proponent: The proponent for this charter is the Proponency Office of Rehabilitation and Reintegration (PR&R), Health Policy and Services (HP&S) Directorate, Office of The Surgeon General (OTSG).

3. Charter:

a. Authority. As Commander, US Army Medical Command (MEDCOM), I hereby establish the Army Pain Management Task Force.

b. Mission. The Army Pain Management Task Force will make recommendations for improving clinical, administrative, and research processes involved with the provision of pain management care and services at MEDCOM facilities. Areas for analysis and recommendation include, but are not limited to:

(1) Existing pain management policies, procedures, and resources.

(2) Best practices for pain management.

(3) Ongoing pain management research efforts with emphasis on optimizing delivery of effective pain management, minimizing complications, and maximizing function.

(4) Resources required for the early identification, assessment, treatment, and rehabilitation for pain.

(5) Safe and effective complimentary alternative approaches to pain management.

(6) Education training plan for patients, providers, family members and leaders to support patients with pain management issues.

(7) Variables unique to Warriors in Transition.

(continued on next page)

MCHO-CL
SUBJECT: Army Pain Management Task Force Charter

(8) Integration of pain management strategy to Comprehensive Soldier Fitness Program, Army Campaign Plan for Health Promotion (ACPHP), Risk Reduction and Suicide Prevention, Army Family Covenant, Army Family Action Plan and other DoD, Army and MEDCOM initiatives.

c. Administration.

(1) The Pain Management Task Force is authorized to operate for 6 months from the date on this charter.

(2) You are designated to serve as the Task Force Chairperson.

(3) The Task Force Chairperson shall serve as the single point of contact for official Pain Management Task Force communications. This does not restrict other informal communications.

(4) The Task Force Chairperson may request assistance and resources through OTSG/MEDCOM, coordinated by the Health Policy and Services Directorate.

(5) Not later than 6 months from the date on this charter, the Pain Management Task Force will conduct an in progress review (IPR) with the Deputy Surgeon General (DSG) and Chief of Staff (CoS), MEDCOM, to report on progress and to request an extension, if necessary.

(6) The Task Force shall terminate 60 days after the date on which the report of the Task Force is submitted.

d. Membership.

(1) The core membership will consist of the Chairperson, a Chief of Staff, a senior medical officer, physicians trained in the management of acute and chronic pain, a primary care provider, a behavioral health provider, a medical researcher, a physical medicine and rehabilitation physician, and a Warrior Transition Command representative, all of whom will be full-time or permanent part-time officers or employees of the federal government. Other members who are full-time or permanent part-time officers or employees of the federal government may be included at the discretion of the Task Force Chairperson.

(2) Commander, MEDCOM will extend an invitation to the Assistant Secretary of Defense (Health Affairs), the Secretary of the Department of Veterans Affairs, and the Surgeons General of the Navy and Air Force to include their representatives on the Task Force.

(3) The Task Force Chairperson may request support from additional subject matter experts as needed, provided that the support consists of full-time or permanent part-time officers or employees of the federal government. The Task Force may also obtain information or viewpoints from persons who are not full-time or permanent part-time officers or employees of the federal government, provided that such persons do not participate in

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task force deliberations or in the creation of consensus advice.

e. Functions and Processes.

(1) The Pain Management Task Force will provide periodic In Progress Review (IPR) to TSG as determined by the Task Force Chairperson or CoS.

(2) Changes to this charter require the approval of Commander, MEDCOM.

(3) Not later than 45 days after charter, the Task Force shall submit its issues for analysis to TSG for approval.

(4) Task Force will ensure its activities and recommendation are coordinated, when applicable, with existing DoD, Army and MEDCOM initiatives (e.g., Comprehensive Soldier Fitness Program, Army Campaign Plan for Health Promotion, Risk Reduction and Suicide Prevention (ACPHP) and the Army Family Covenant).

(5) Not later than 6 months after task force charter, the Task Force shall submit its report containing recommendations for an MEDCOM Comprehensive Pain Management Strategy. The report will include:

(a) Methodology used by the Task Force.

(b) Assessment of current pain management clinical and administrative processes, capabilities, best practices, and research.

(c) Safe and effective complimentary alternative approaches to pain management.

(d) Recommendations for improvements to clinical and administrative processes, capabilities, best practices, and research.

(e) Such other matters relating to the activities of the Task Force that the Task Force onsiders appropriate.

ERIC B. SCHOOMAKER
Lieutenant General, MC
Commanding

Appendix D: Task Force Stakeholders

Figure D-1: Medical Specialties and Stakeholders paramount to the Task Force

Behavioral Health*	Warrior Transition Command*
Case Management	Patients and Family Members
Chaplain	Military Line Commanders
Integrated Medicine*	DoD Leadership
Nursing*	Air Force*
Pain Management*	Navy*
Pharmacy*	Reserve*
Physical Medicine and Rehabilitation*	National Guard*
Primary Care*	Veterans Administration*
Physical Therapy*	TMA / Health Affairs*
Occupational Therapy	Defense Center of Excellence*
Social Work	M&RA*

* Designated TF member / invitee

Appendix E: MTF Pain Data Call

Figure E-1: MTF Pain Data Call - Survey Distribution

Region	Facilities	
Europe Regional Medical Command	• Bavaria MEDDAC • Landstuhl Regional Medical Center	• Heidelberg MEDDAC • Vicenza Army Health Clinic
Great Plains Regional Medical Command	• BAMC (Fort Sam Houston) • CRDAMC (Fort Hood) • GLWACH (Fort Leonard Wood) • MAHC (Fort Leavenworth) • RWBAHC (Fort Huachuca)	• BJACH (Fort Polk) • EACH (Fort Carson) • IACH (Fort Riley) • RACH (Fort Sill) • WBAMC (Fort Bliss)
North Atlantic Regional Medical Command	• BAHC (Fort Detrick) • DHCN (Fort Belvoir) • GAHC (Fort Drum) • KACC (Fort Meade) • KAHC (Fort Lee) • MCAHC (Fort Eustis) • WAMC (Fort Bragg)	• DAHC (Carlisle Barracks) • DTHC (Pentagon) • IACH (Fort Knox) • KACH (West Point) • KUSAHC (Aberdeen MD) • PAHC (Fort Monmouth) • WRAMC (Washington DC)
Pacific Regional Medical Command	• TAMC, Hawaii • BG Sams USAHC, Camp Zama, Japan	• USA MEDDAC Korea • Schofield Barracks Health Clinic, Hawaii
Southern Regional Medical Command	• BACH (Fort Campbell) • FAHC (Redstone Arsenal, AL) • MACH (Fort Jackson) • LAHC (Fort Rucker)	• DDEAMC (Fort Gordon) • MACH (Fort Benning) • LJAH (Fort McPherson) • WACH (Fort Stewart)
Western Regional Medical Command	• BACH (Fort Wainwright) • MAMC (Fort Lewis)	• WACH (Fort Irwin)

MTF Pain Data Call Questions

Introduction: This data call is related to The Surgeon General's decision to charter a Pain Task Force to examine the delivery of pain care and services across the MEDCOM and make recommendations for a comprehensive pain management strategy. Your response will ensure that the Pain Task Force has visibility of the pain-related best practices and initiatives at your MTF.

Additional Documentation: Please provide copies of any local policies related to pain management at your MTF and return with this completed spreadsheet. On a separate document, provide summary on any Pain-Related "Best Practices" or Initiatives ongoing or planned at your MTF. Please include POCs for these Best Practices and Initiatives and return with this completed spreadsheet. This includes any programs that provide alternate or

complementary therapies, treatments, and activities that might have impact on pain management, such as Rehab, R&R programs, Animal Therapy, and CAM.

Figure E-2: Data Call Survey Questions

#	Question
1	MTF (enter name):
2	Region (select from dropdown at right):
3	MTF POC for this data call:
4	Email address:
5	Duty Phone:
6	Do you have a Warrior Transition Unit at your location?
7	If you have a Warrior Transition Unit at your location, what is the average number of WTs?
8	Does your MTF have a designated pain management clinic / service? If no, please proceed to next section (question 24)
9	What service is responsible for the pain management clinic / service? (Anesthesia, psychology, PM&R, etc.)
10	What is the emphasis of your program? (acute pain, chronic pain, BOTH)
11	How long has your pain clinic / program been in existence?
12	List the number of personnel in the Pain Clinic / Service by specialty; indicate what percentage of their time is dedicated to Pain Management duties and responsibilities.
13	What percentage of your patients are WT's, other Active Duty, Res / NG, Family Members of AD, RET and RET Family members?
14	What is your program's capacity? (e.g., # of appointments available per day)
15	What is the average # of patient visits per month?
16	What is the average # of NEW patients per month?
17	Are you able to offer interventional pain management procedures for your patients? If so, please detail.
18	What service provides the majority of your referrals?
19	Can patients self-refer?
20	Do you offer any Complementary and Alternative Medicine (CAM) approaches to pain management within your Pain Management Clinic / Service? If so, please describe. (e.g. Acupuncture, Aromatherapy, BioFeedback, Heart Rate Variability Training Transcutaneous Electrical Stimulation, Relaxation techniques, Therapeutic Massages (dry/hydro), others)

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21	Outcome measures: How do you measure the effectiveness of your services? (metrics, outcomes measures, etc.)
22	If you do not have an MTF Pain Management Clinic / program within your MTF, where do you refer your patients with pain management issues? (PM&R, Anesthesia or other clinics within your MTF, network pain clinics, other military treatment facility, VA facility)
23	Outside of any Pain Clinic / Service, does your MTF provide any Complementary and Alternative Medicine (CAM) approaches to pain management? If so, please describe. (e.g. Acupuncture, Aromatherapy, BioFeedback, Heart Rate Variability Training Transcutaneous Electrical Stimulation, Relaxation techniques, Therapeutic Massages (dry/hydro), others)
24	If you are providing alternate approaches to pain management outside of any pain clinic, how do you measure the effectiveness of these services? (metrics, outcomes measures)
25	If not using integrative medicine (CAM) why not? (no expertise, privileging issues, other (please explain))
26	Is your facility involved in pain research? If yes, include completed studies, references. (may attached separate document if that would be easier)
27	What recommendations, proposals, and comments would you like to make available to the Pain Management Task Force? What do you need at your MTF to improve the delivery of pain management to your patients and families? (may attach separate sheet if necessary)

Appendix F: Sites Visited by Task Force

Figure F-1: Site Visit Facilities

• Fort Lewis (MAMC) • Puget Sound VA • University of Washington • Swedish Hospital	• Fort Sam Houston (BAMC) • San Antonio VA • Wilford Hall
• Fort Bliss (WBAMC) • Fort Hood (CRDAMC)	• Tampa VA • University of Florida
• Balboa Naval Hospital • Travis AFB (DG USAF) • Scripps Center	• Fort Bragg (WAMC) • Camp Lejeune • Duke University
• Fort Gordon (DDEAMC) • Fort Stewart (WACH)	• Fort Campbell (BACH)
• Fort Carson (EACH)	• Walter Reed (WRAMC)
• Fort Drum (GAHC)	• White River Junction VA
• Tripler Army Medical Center (TAMC) • Schofield Barracks	• Landstuhl Regional Medical Center (LRMC) • Baumholder AHC

Site Visit Interview

General Interview Questions

Introduction: On behalf of BG Richard Thomas, Chairperson of the TSG chartered Pain Management Task Force, I am requesting your approval for the Pain TF to visit *Medical Facility*. As you might already be aware, we are evaluating pain management across the MEDCOM in order to provide recommendations for a MEDCOM comprehensive pain management strategy. We have a limited time to conduct our evaluation of current pain management models and best practices across MEDCOM. Part of the evaluation process involves visits to MTFs across MEDCOM, Air Force, Navy, VA, and civilian medicine. Site visit team will consist of 4-5 TF members. Purpose is to conduct interviews with leadership and clinical staff.

Site Visits: This is not an inspection. Our intent is to meet with clinical leaders and providers to evaluate "What's working?", "What's not working?", "What additional resources are required?", and "What's going on at your facility that should be replicated across MEDCOM?" Begin trip with Command Inbrief. Followed by separate interviews with DCCS, DCN, and CSM. Additionally, we'd like to schedule interviews with representatives from Behavioral Health, Medic(s), Nursing Staff (in and outpatient), Pain Service, Pharmacy, Primary Care, Warrior Transition Unit, Anesthesiology, Emergency Department, Orthopedics / Sports Med, PM&R, Physical Therapy, and Surgery. We estimate approx. 30-45mins per interview. Only need a place to sit and chat with these folks. We can also move from place to place if that is easier. There is no intent to provide interview summaries to the command on departure. However, we will do a short out brief with DCCS to provide an overview of the visit.

Figure F-2: Site Visit Survey Questions

#	Question
A	Date:
B	Facility:
C	Name:
D	Specialty:
E	Contact Info:
F	Outpatient (Yes/No):
G	Inpatient (Yes/No):
H	WTU (Yes/No):
1	What is the biggest challenge in pain management at your facility? (For Inpatient, Outpatient, and WTU)
2	Who is the primary consultant for your organization on clinical pain issues?
3	Who is responsible for pain training in your facility?
4	What routine training in pain management does your clinical staff receive?
5	Are you aware of Clinical Practice Guidelines (CPGs) for pain management?
6	If you answered yes to previous question, which pain management CPG(s) do you use?
7	How do you determine your patient's expectations for pain management?
8	How do you manage your patient's expectations for pain management?
9	Do you use a standard strategy or ladder model when treating pain? Which model / strategy?
10	What questions about a patient's pain are a routine part of all clinical examinations / visits? (For Inpatient, Outpatient, and WTU)
11	How is pain measured and documented in your clinic / facility? (For Inpatient, Outpatient, and WTU)
12	How do you evaluate your patient's pain or validate the pain assessment that was done by support staff? (For Inpatient, Outpatient, and WTU)
13	How valuable is that pain assessment to you? (For Inpatient, Outpatient, and WTU)
14	How do you assess the effectiveness of your interventions in pain treatment? (For Inpatient, Outpatient, and WTU)
15	What clinical practice guidelines (if any) are used to assist providers in prescriptions for pain medications?

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16	What local policies or initiatives are used to assist providers in prescriptions for pain medications?
17	How are opioid medications controlled in your patient population? Who can write for opioid medications? (For Inpatient, Outpatient, and WTU)
18	Other than Opioids, what medications are used clinically for pain care? (For Inpatient, Outpatient, and WTU)
19	What adjunctive therapies are available for you for pain care? Which of these do you use? (For Inpatient, Outpatient, and WTU)
20	What Complementary or Alternative Medicine (CAM) therapies are available for you to treat pain? Which of these do you routinely use or request for pain treatment? (For Inpatient, Outpatient, and WTU)
21	How is pain clinically managed and pain care documented in your inpatient population?
22	How are patients transitioned from inpatient pain medications to outpatient pain medications?
23	How are pain medications monitored in outpatients?
24	What pain 'best practices' in your facility do you think should be replicated across the DoD?
25	Where / How do you refer patients whose pain you cannot adequately treat?
26	Do you feel as though you are adequately resourced to manage ACUTE pain in your patients? If not, what tools or capabilities for pain assessment or management are you or your institution lacking that might be valuable in your practice? (For Inpatient, Outpatient, and WTU)
27	Do you feel as though you are adequately resourced to manage CHRONIC pain in your patients? If not, what tools or capabilities for pain assessment or management are you or your institution lacking that might be valuable in your practice? For Inpatient, Outpatient, and WTU)
28	In an ideal world for treating pain at your facility, what would you ask for?
29	What are the key components you feel should be part of any MEDCOM Comprehensive pain management strategy?
30	Initial thoughts on the proposed Pain Assessment Tool?
31	Additional Notes:

Figure F-3: Pharmacy Interview Questions

#	Question
A	Date
B	Facility:
C	Name:
D	Contact Info:
1	Is a clinical pharmacist involved in pain management decisions? Does that involvement include co-management of chronic pain conditions?
2	Who in Pharmacy is the primary pain management "go to" person?
3	How does your MTF respond with the growing demand of non-formulary pain medication prescriptions for patients referred to network providers? Examples?
4	How prevalent is 'off label' use of medications in the treatment of pain? How important is 'off label' use of medications to managing pain? Does your MTF have a culture of encouraging or discouraging 'off label' use of medications for managing pain?
5	Do clinicians typically use multimodal therapy (therapeutic classes) for pain management? Examples?
6	How does your MTF execute its sole-prescriber program?
7	Have you experienced barriers in providing care to pain patients related to DOD P&T decisions (e.g., non-formulary, medical necessity, or prior authorizations)?
8	How responsive is your P&T committee in addressing new drug requests from clinicians?
9	Does your MTF's MUE Subcommittee monitor prescribing habits for pain medications? What interventions has your MTF provided to effect prescribing habits?
10	Are pharmacists in your MTF involved in staff and patient education programs in pain management?
11	Are you aware of clinical practice guidelines in pain management? What is pharmacy's use of such CPGs?
12	What controls are in place at your MTF to prevent prescriber's medication errors for pain medications? (information technology, policy and procedures, education, etc)?
13	How does your MTF use pharmacy monitoring of medication errors and pharmacy interventions to change prescribing behaviors?
14	What is Pharmacy's biggest challenge in managing pain in your MTF?
15	Are there differences in pharmacy standard of practice in providing pain medications for Active Duty, family members and Warrior in Transition Soldiers?
16	Is your facility involved in any VA and DOD collaboration on P&T issues / Joint Formulary issues to support the transition of Soldiers from active duty to VA status?
17	Additional Notes:

Figure F-4: Pain Service Questions

#	Question
A	Facility:
B	Pain Service POC:
C	Specialty:
D	Contact Info:
	PATIENTS
1	How many pain patients are deferred to the network by your MTF each month on average?
2	How was this data obtained?
	OUTCOMES
3	Which clinics in your MTF see patients for pain and how many visits per month based on an annual average does each clinic provide? (Can be gathered from ALTHA by searching pain diagnostic codes for clinics that do not do pain management exclusively, do not forget inpatient and regional anesthesia). Providing this data should probably be tasked to the DBO (budget office): • Primary care • Physical Medicine • Pain Clinic • Acute pain service / Regional anesthesia • Complementary and Alternative Medicine visits • Warrior Transition Unit Pain Services • Surgery clinics • OT / PT • Other (specify)
	PAIN DATA QUESTIONS
4	What pain data (VAS scores, return to work, etc.) are you collecting?
5	How are you collecting pain data / outcomes?
6	How has collected pain data influenced clinical practice?
7	How are you measuring effectiveness of your pain interventions?

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	EDUCATION
8	What programs exist at your MTF for pain management education for (this includes all pain related education with emphasis on opioid related education)?
9	Providers and support staff?
10	Patients and families?
11	Commanders and unit leaders?
12	What additional pain education needs do you have?
	TECHNOLOGY
13	What technology used in pain management is available at your MTF?
14	Dedicated clinic space with treatment and fluoroscopically equipped procedure rooms?
15	Do you feel your ratio of clinical support staff to FTE pain provider adequate? What is your ratio?
16	An acute pain service and a regional anesthesia section? Do you have a dedicated block area?
17	Do you have acute and/or chronic pain nurses?
18	Do your nurses have specialized pain nursing education?
19	Implantable pain systems (and board certified pain specialists to implant and use them)?
20	Ultrasound?
21	How do you track and acquire new pain technology / systems?
	RESEARCH
22	What non-clinical research (if any) is being done?
23	What clinical trials are being conducted (if any) to improve pain control for patients? Do the studies involve therapeutics? If so, what are they?
24	What research budget (if any) supports these projects and the research staff?
25	Who are your personnel conducting this research (AD, GS, Contract, Clinician v. Dedicated Researcher)?
26	What research collaborations (civilian, federal, corporate) do you have?

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OUTCOMES (NEGATIVE)	
27	How do you track negative outcomes?
28	What process is used for tracking and follow-up of negative outcomes?
29	Interventions? • Epidurals (separate out OB) – Dural puncture, nerve injury, infection? • Peripheral Nerve Blocks?
30	Single injection?
31	Continuous peripheral nerve block? • Facet procedures • Implantable pain systems • Vertebroplasty / kyphoplasty • Other pain related procedures (percutaneous fusion, etc.)
EDUCATION COMPLICATIONS	
32	How do you provide education about pain treatment complications for?
33	Providers and support staff?
34	Patients and families?
35	Leaders?
OTHER COMPLICATIONS	
36	What technology do you use to limit complications?
37	What research is your MTF participating in aimed at identifying or decreasing complications?
WAY FORWARD & CPG	
38	What pain CPGs would you like to see developed to assist you in your clinical practice?
39	Do you use any pain CPGs in your clinical practice?
40	The Pain TF will be producing a recommendation for CPS to TSG, based on this, what would be essential components/ to be included to assist you in your practice and improve deliver of pain mgt in your population?

Appendix G: Subject Matter Expert Briefings

Figure G-1: Task Force briefings with Subject Matter Experts

Date	Purpose	SME Attendees (Non-Task Force)
12/1/2009	MPP overview and discussion	• Dr. (b) (6)
1/15/2010	Collaboration on pain management care and treatment	• Dr. (b) (6)
1/19/2010	Current State of Medical Education and USUHS Pain-Related Curriculum	• Dr. (b) (6) • Associate Dean, Dr. (b) (6) • Vice Dean, Dr. (b) (6) • Assistant Dean of Curriculum
1/19/2010	USUHS discussion for the establishment of a Department of Defense/Veterans Health Administration pain center of excellence	• Dr. (b) (6) USUHS Vice President
1/20/2010	Samueli Institute overview and discussion	• (b) (6) Samueli Institute • (b) (6) Samueli Institute
1/21/2010	Warrior Transition Command Pain Survey	• (b) (6) Warrior Transition Command
2/3/2010	Joint Formulary discussion with the VA and TMA on current joint formulary practices	• (b) (6) Col, OASD(HA)/TMA • (b) (6) DOD Pharmacoeconomic Center/ HEC Pharmacy Workgroup • (b) (6) CTR, OASD(HA)/TMA • (b) (6) VA • (b) (6) (PBM) • (b) (6) (VACO)
2/17/2010	PASTOR meeting reviewing various electronic registry technologies for use for improving both patient care and satisfaction, in addition to being a wealth of knowledge for future research	• (b) (6) PhD; New Haven VA and Yale • (b) (6) MSN, PhD; University of Pennsylvania • (b) (6) MSN, MPH, PhD, epidemiologist; Drexel University
3/1/2010	Pain-Related Curricula	• COL (b) (6) (IPAP) • LTC (b) (6) (neurosci faculty DPT) • LTC (b) (6) (GPAN)

Appendix H: Acronyms

Figure H-1: Acronyms Used

Acronym	Name
AAPM	American Academy of Pain Management
ABMS	American Board of Medical Specialties
ABPM	American Board of Pain Medicine
ACGME	Accreditation Council for Graduate Medical Education
AFAP	Army Family Action Plan
AKO	Army Knowledge Online
AMEDD	United States Army Medical Department
APS	Acute Pain Service
ASAM	American Society of Addiction Medicine
ASAP	Army Substance Abuse Program
ASPTF	Army Suicide Prevention Task Force
ATM	Advanced Trauma Management
BCT PT	Brigade Combat Team Physical Therapists
BPI	Brief Pain Inventory
BSA	Building the Soldier Athlete
CAM	Complementary Alternative Medicine
CARF	Commission on Accreditation of Rehabilitation Facilities
CME	Continuing Medical Education
CONOPS	Concept of Operations
CONUS	Contiguous United States
CPG	Clinical Practice Guidelines
CPNB	Continuous Peripheral Nerve Block
CPT	Common Procedural Terminology
CRMRP	Clinical and Rehabilitative Medicine Research Program
CSF	Army's Comprehensive Soldier Fitness
CSH	Combat Support Hospital
CTP	Clinical Transition Program
DAMIS	Drug and Alcohol Management Information System
DATA 2000	Drug Abuse Treatment Act of 2000
DCoE	Defense Centers of Excellence
DoD	Department of Defense
DPCoE	Defense Pain Center of Excellence
DVPMI	Defense and Veterans Pain Management Institute
E&M	Evaluation & Management
EES	Employee Education System
EMEDS	Expeditionary Medical Support
EMT	Emergency Medical Treatment
FOB	Forward Operating Base

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FORSCOM	Forces Command
GME	Graduate Medical Education
HEC	Healthcare Executive Committee
HIPAA	Health Insurance Portability and Accountability Act
HP&S	Health Policy and Services
HQDA	Headquarters Department of the Army
IASP	International Association for the Study of Pain
IOM	Institute of Medicine
JC	Joint Commission
JRAATS	Joint Regional Anesthesia and Analgesia Tracking System
M&RA	Manpower and Reserve Affairs
MAP	Musculoskeletal Action Plan
MAPS	MEDCOM AHLTA Provider Satisfaction
MARAA	Military Advanced Regional Anesthesia & Analgesia
MAT	Musculoskeletal Action Team
MEB	Medical Evaluation Boards
MEDCOM	US Army Medical Command
METC	Medical Education and Training Campus
MHO	Army's Medical Holdover
MHS	Military Health System's
MPMBD	Military Pain Medicine Board of Directors
MPP	My Pain Profile
MRMC	United States Army Medical Research and Materiel Command
mTBI	mild-Traumatic Brain Injury
MTFs	Military Treatment Facilities
MTM	Medication Therapy Management
MTMS	Medication Therapy Management Services
NCCAM	National Center for Complementary and Alternative Medicine
NDAA	National Defense Authorization Act
NIDA	National Institute on Drug Abuse
NIH	National Institute of Health
OAM	Office of Alternative Medicine
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OMT	Osteopathic Manipulative Treatment
ORD	Office of Research and Development
OT	Occupational Therapy
OTC	Over the Counter
OTSG	Office of The Surgeon General
PASTOR	Pain Assessment Screening Tool and Outcomes Registry
PBM	VA Pharmacy Benefits Management
PCB	Patient Controlled Bolus
PCM	Primary Care Manager
PCMH	Patient Centered Medical Home

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PCPCC	Patient Centered Primary Care Collaborative
PCS	Permanent Change of Station
PEB	Physical Evaluation Boards
PM&R	Physical Medicine and Rehabilitation
PMR	Patient Movement Request
POC	Point of Contact
PR&R	Proponency Office for Rehabilitation and Reintegration
PT	Physical Therapy
PTSD	Post Traumatic Stress Disorder
R&D	Research and Development
RATS	Regional Anesthesia Tracking System
RDTE	Research, Development, Test & Evaluation
RMCs	Regional Medical Centers
RPCoE	Regional Pain Centers of Excellence
RVU	Relative Value Unit
SME	Subject Matter Expert
SOAP	Subjective, Objective, Assessment, Plan
SSC	Pain Management Scientific Steering Committee
SSN	Social Security Number
STRATCOM	Strategic Communications
TBI	Traumatic Brain Injury
TDA	Table of Distribution and Allowances
TDY	Temporary Duty
TF	Task Force
TMA	TRICARE Management Activity
TMDS	Theater Medical Data Store
TO&E	Table of Organization and Equipment
TRADOC	Training and Doctrine Command
TSG	The Surgeon General
UFR	Unfinanced Requirements
USANG	United States Army National Guard
USAR	United States Army Reserve
USUHS	Uniformed Services University of the Health Sciences
UW	University of Washington
VA	Veterans Administration
VA MAP	VA Medical Advisory Panel
VAMC	VA Medical Center
VANF	VA National Formulary
VAS	Visual Analog Scale
VHA	Veterans Health Administration
VISN	Veterans Integrated Service Network
WRAMC	Walter Reed Army Medical Center
WT	Warriors in Transition
WTC	Warrior Transition Command
WTU	Warrior Transition Unit

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