Army Pain Management Task Force

Findings-Recommendations-Way Ahead

COL Chester “Trip” Buckenmaier, MC
“What an infinite blessing.”
21st Century Evacuation Realities
Novel pain control methods and equipment

Paracetamol

ACTIQ®
fentanyl
400 mcg

KETOROLAC
TRAMETHAMINE INJECTION USP
15 mg/mL
1 mL Vial
FOR IM OR IV USE ONLY
Why a Pain Management Task Force?
Mission

To provide recommendations 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.

» from Army Pain Management Task Force Charter; signed 21 Aug 2009

Vision Statement

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

“Standardize to Optimize”
**Task Force Process**

- TSG appointed BG Richard Thomas, Assistant Surgeon General for Force Projection, as the TF Chairperson
- Air Force, Navy, and Veterans Health Administration appointed TF representatives

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<th>TASK FORCE</th>
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<td>TMA/Health Affairs</td>
<td>Warrior Transition Command</td>
<td>DCOE</td>
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<td>Pharmacy</td>
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<td>Primary Care</td>
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<td>Family Medicine</td>
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Site Visit Map

PACIFIC Region
1. Fort Lewis (MAMC) & Puget Sound VA & Univ of Washington & Swedish Hospital
2. Fort Drum (GAHC)
3. San Antonio VA & Wilford Hall & Fort Sam Houston (BAMC)

SOUTHERN Region
4. Fort Carson (EACH)
5. Fort Bliss (WBAMC) & Fort Hood (CRDAMC)
6. Tampa VA & Univ of Florida
7. Balboa Naval Hospital) & Travis AFB & Scripps Center

EUROPEAN Region
8. Landstuhl (LRMC) & Baumholder AHC
10. Fort Campbell (BACH)
11. Honolulu (TAMC)
12. Fort Gordon (DDEAMC) & Fort Stewart (WACH)
13. White River Junction VA
14. Walter Reed (WRAMC)
The Beginning of Pain for Veterans: Blast/Projectile Trauma and Axial Load Injuries
VHA National Pain Management Strategy

- Strategy initiated by the Undersecretary for Health in 1998
- Pain Management Directive 2009-053 recently published
- Three top priorities
  - Implement stepped pain care model
  - Integration into Medical Home
    - Expand Integrative Primary Care
  - Build partnership with DoD
# Frequency of Possible Diagnoses among OEF and OIF Veterans

<table>
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<th>Diagnosis (Broad ICD-9 Categories)</th>
<th>Frequency</th>
<th>Percent</th>
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<tr>
<td>Infectious and Parasitic Diseases (001-139)</td>
<td>68,569</td>
<td>13.5</td>
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<tr>
<td>Malignant Neoplasms (140-208)</td>
<td>5,809</td>
<td>1.1</td>
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<tr>
<td>Benign Neoplasms (210-239)</td>
<td>25,491</td>
<td>5.0</td>
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<td>Diseases of Endocrine/Nutritional/ Metabolic Systems (240-279)</td>
<td>135,250</td>
<td>26.6</td>
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<tr>
<td>Diseases of Blood and Blood Forming Organs (280-289)</td>
<td>14,342</td>
<td>2.8</td>
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<tr>
<td><strong>Mental Disorders (290-319)</strong></td>
<td>243,685</td>
<td>48.0</td>
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<tr>
<td><strong>Diseases of Nervous System/ Sense Organs (320-389)</strong></td>
<td>202,298</td>
<td>39.8</td>
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<td>Diseases of Circulatory System (390-459)</td>
<td>94,671</td>
<td>18.6</td>
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<td>Disease of Respiratory System (460-519)</td>
<td>116,308</td>
<td>22.9</td>
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<tr>
<td>Disease of Digestive System (520-579)</td>
<td>172,462</td>
<td>33.9</td>
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<tr>
<td>Diseases of Genitourinary System (580-629)</td>
<td>63,421</td>
<td>12.5</td>
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<td>Diseases of Skin (680-709)</td>
<td>93,635</td>
<td>18.4</td>
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<tr>
<td><strong>Diseases of Musculoskeletal System/Connective System (710-739)</strong></td>
<td>265,450</td>
<td>52.2</td>
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<tr>
<td><strong>Symptoms, Signs and Ill Defined Conditions (780-799)</strong></td>
<td>233,443</td>
<td>45.9</td>
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<tr>
<td>Injury/Poisonings (800-999)</td>
<td>130,300</td>
<td>25.6</td>
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*These are cumulative data since FY 2002, with data on hospitalizations and outpatient visits as of September 30, 2009; Veterans can have multiple diagnoses with each health care encounter. A Veteran is counted only once in any single diagnostic category but can be counted in multiple categories, so the above numbers add up to greater than 508,152; percentages add up to greater than 100 for the same reason.
Prevalence of Chronic Pain, PTSD and TBI in a sample of 340 OEF/OIF veterans with polytrauma

Beginning to End: The Chronic Pain Cycle

**Pathophysiology of Maintenance:**
- Radiculopathy
- Neuroma traction
- Myofascial sensitization
- Brain, SC pathology (atrophy, reorganization)

**Psychopathology of maintenance:**
- Encoded anxiety dysregulation
- PTSD
- Emotional allodynia
- Mood disorder

**Neurogenic Inflammation:**
- Glial activation
- Pro-inflammatory cytokines
- Blood-nerve barrier disruption

**Acute injury and pain**

**Central Sensitization**
- Neuroplastic changes

**Peripheral Sensitization:**
- New Na+ channels cause lower threshold

**Disability**
- Less active
- Kinesophobia
- Decreased motivation
- Increased isolation
- Role loss
- Sleep disorder

**Pathology:**
- Muscle atrophy, weakness;
- Bone loss;
- Immunocompromise
- Depression
- Substance abuse
The key elements in the continuum of pain care

- **Primary prevention**: avoiding injury, nociception, nerve damage

- **Secondary prevention**: after injury / start of disease,
  - minimizing pain’s access to the CNS
  - minimizing concurrent augmenting factors (e.g. stress)
  - minimizing the pathophysiologic response of the CNS (e.g. neuroplastic pathophysiology)

- **Tertiary prevention**: Once “chronification” occurs, reducing its negative impact on quality of life by rehabilitation: social networks (love & support), motivation (goals) towards functional restoration, and reversal of neuroplastic damage
Multimodal Analgesia

- **Opioids**
  - Alpha₂ agonists
  - Tricyclic Antidepressants
- **Local anesthetics**
  - Opioids
  - Alpha₂ agonists
  - NMDA antagonists
  - Anticonvulsants
  - Tricyclic antidepressants
- **Local anesthetics**
  - Anticonvulsants
  - Anti-inflammatory drugs

**Ascending input**
- Spinothalamic tract
- Dorsal horn
- Dorsal root ganglion

**Descending modulation**
- Peripheral nerve
- Peripheral nociceptors

**PAIN**

**TRAUMA**
Primary Care
- Routine screening for presence & intensity of pain
- Comprehensive pain assessment
- Management of common pain conditions
- Support from MH-PC Integration, OEF/OIF, & Post-Deployment Teams
- Expanded care management
- Opioid / Pharmacy Management Clinics

Secondary Consultation
- Pain Medicine
- Rehabilitation Medicine
- Behavioral Pain Management
- Multidisciplinary Pain Clinics
- Mental Health & SUD Programs

Tertiary, Interdisciplinary Pain Centers
- Advanced pain medicine diagnostics & interventions
- CARF accredited pain rehabilitation

Comorbidities

Complexity

Treatment Refractory

STEP 1

STEP 2

STEP 3
TF Site Visit Findings

BEST PRACTICES
- Integrated Pain Center (TAMC and BalboaNMC)
- Case Management of Pain Patients (Ft Drum)
- Strong Interventional Pain Capabilities at MEDCENs
- Integrated Pain Board (Travis AFB)

- WTU Medication Policies/Initiatives
  - Sole Provider
  - Medication Reconciliation (Ft Campbell, Baumholder, Ft Bragg)
  - WTU Pharmacist (Ft Bliss, Ft Hood, Ft Carson)
  - Embed Pain Mgt Resources in WTU (WRAMC, Ft Bragg)

EDUCATION
- Primary Care Providers feel they are ill-prepared to handle “pain patients” and look to move them to specialty care ASAP
- Lack of common orientation to pain among medical staff
  - Taxonomy
  - Practice
- Lack of common orientation to pain among Patients

RESEARCH
- Need to improve translational research for pain management
- Current research not fully leveraging the interest/capabilities power of clinicians in research
- We are not able to track sufficient “actionable” pain data for our patients

CAPABILITIES
- Lack of predictable pain management capabilities across our MTFs
- Lack of standardization not unique to MEDCOM or DoD
- Lack of non-medication modalities for pain mgt
- Overwhelming majority of Providers not satisfied with pain management care received in network
## Task Force Recommendations

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<tr>
<td>1</td>
<td>Focus on the Warrior and Family - Sustaining the Force</td>
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<td>2</td>
<td>Synchronize a Culture of Pain Awareness, Education, and Proactive Intervention (Medical Staff, Patients and Leaders)</td>
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<td>3</td>
<td>Provide Tools and Infrastructure that Support and Encourage Practice and Research Advancements in Pain Management</td>
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<td>4</td>
<td>Build a Full Spectrum of Best Practices for the Continuum of Acute and Chronic Pain Care, Based on a Foundation of the Best Available Evidence</td>
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Thank you