Pain Management Task Force
Downrange Pain Control

What has Changed?

Program Director
Defense and Veterans Center for Integrative Pain Management (DVCIPM)
I have no financial relationships with any product or company discussed in this presentation.
Agenda

- Pain Management Task Force (PMTF)
- Pain Chronification
- Acute Pain Service (APS)
  - Joint Theater Practice Guideline on Pain, Anxiety, and Dilerium
  - Why?
  - Data to support
- Proposed Role 3 (APS) Staffing
- PMTF Major Lines of Effort
  - Defense & Veterans Pain Rating Scale (DVPRS)
  - Patient Assessment Screening Tool and Outcomes Registry (PASTOR)
  - Interdisciplinary Pain Management Clinics
  - ECHO – Extension for Community Healthcare Outcomes
- Suggested way forward
Pain Management Task Force

Mission

NDAA 2010, Section 711:
- Directed SECDEF to develop comprehensive pain management policy by March 2011
- Annual Report: update to Congress required 180 days after initiation of policy and annually each 1 October

MEDCOM Pain Management Task Force and Campaign Plan:
- Chartered by Army Surgeon General in August 2009 to make recommendations for improving clinical, administrative, and research processes involved with the provision of pain management care and services at MEDCOM facilities.
- Tri-Service and Veterans Administration Membership
- Task Force Report included over 100 recommendation for a holistic, multimodal, multidisciplinary pain strategy and 19 recommendations requiring establishment of a DoD-level pain management advisory/synchronization organization
- MEDCOM operationalizing TF recommendations in the Comprehensive Pain Management Campaign Plan

» Army surgeon general presents top 10 initiatives


- Pain Management Task Force/Comprehensive Pain Management

http://www.armymedicine.army.mil/reports/reports.html
Pain Management Task Force

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

- Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education and Research
  
  » June 2011
John Ranby, a physician describing the care of battlefield injuries in 1776

“...to act in all respects as if your are entirely unaffected by their groans and complaints, but at the same time behave with such caution as not to proceed rashly or cruelly, and be particularly careful to avoid unnecessary pain.”
“What an infinite blessing.”
In 1803, Sertturner, a German pharmacist, identified and isolated the main ingredient of opium, Morphine. He called this alkaloid "Morphia" after Morpheus, the Greek God of Dreams. The name "Morphine" is now used instead of Morphia because of the standard that all alkaloids end in "-ine".
21st Century Evacuation Realities
Chronification: The Chronic Pain Cycle

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

**Pathology:**
- Muscle atrophy, weakness;
- Bone loss;
- Immunocompromise;
- Depression;
- Substance abuse

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

**Acute injury and pain**

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

**Central Sensitization:**
- Neuroplastic changes

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

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

Slide 12
## Pain Management Task Force

### Consequences of unrelieved pain

<table>
<thead>
<tr>
<th>Organ systems</th>
<th>Physiologic responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>Increased heart rate, peripheral vascular resistance, arterial blood pressure, and myocardial contractility resulting in increased cardiac work, myocardial ischemia and infarction</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>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</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>Increased gastrointestinal secretions and smooth muscle sphincter tone, reduced intestinal motility, ileus, nausea, and vomiting</td>
</tr>
<tr>
<td>Renal</td>
<td>Oliguria, increased urinary sphincter tone, urinary retention</td>
</tr>
<tr>
<td>Coagulation</td>
<td>Increased platelet aggregation, venostasis, increased deep vein thrombosis, thromboembolism</td>
</tr>
<tr>
<td>Immunologic</td>
<td>Impaired immune function, increased infection, tumor spread or recurrence</td>
</tr>
<tr>
<td>Muscular</td>
<td>Muscle weakness, limitation of movement, muscle atrophy, fatigue</td>
</tr>
<tr>
<td>Psychological</td>
<td>Anxiety, fear, anger, depression, reduced patient satisfaction</td>
</tr>
</tbody>
</table>

Overall recovery delayed recovery, increased need for hospitalization, delayed return to normal daily living, increased healthcare resource utilization, increased healthcare costs

Prevalence of Chronic Pain, PTSD and TBI in a sample of 340 OEF/OIF veterans with polytrauma

WASHINGTON — Narcotic pain-relief prescriptions for injured U.S. troops have jumped from 30,000 a month to 50,000 since the Iraq war began, raising concerns about the drugs' potential abuse and addiction, says a leading Army pain expert.

The sharp rise in outpatient prescriptions paid for by the government suggests doctors rely too heavily on narcotics, says Army Col. Chester "Trip" Buckenmaier III, of Walter Reed Army Medical Center in Washington.

By 2005, two years into the war, narcotic painkillers were the most abused drug in the military, according to a survey that year of 16,146 servicemembers.

MORE: Prescription drug abuse hits Mo. Army unit hard

Among Army soldiers, 4% surveyed in 2005 admitted abusing prescription narcotics in the previous 30 days, with 10% doing so in the last 12 months. Researchers said the results may have been skewed by respondents mistakenly referring to legal use of pain medication. A 2008 survey has not been released.
In 2008, there were 14,800 prescription painkiller deaths.  

For every 1 death there are... 

- 10 treatment admissions for abuse 
- 32 emergency dept visits for misuse or abuse 
- 130 people who abuse or are dependent 
- 825 nonmedical users
Goal: To provide state-of-art pain services to combat zone casualties in the theater Roll 3 hospitals prior to the air evacuation of casualties to their country of origin.

Guidelines: The acute pain service will be available to all patients that are admitted to the theater hospital.
Afghanistan Study Data summary

Total # Patients seen: 160 of 392 surgical trauma patients (April – July 2009).

Demographics:
# Males seen: 155
# Females seen: 5
Mean Age of Patients: 25.8 years old → Min: 5 years old; Max: 85 years old
# Repeat Patients: 19
# OEF/OIF’s: 99 ISAF
# Non-OEF/OIF’s: 61 Afghans

VAS Score:
Average Pre-pain score: 5.266
Average Post-Pain score: 0.734

# Times Ultrasound and/or Stimulation used:
U/S (+): 99
Stim (+): 37

Block Info:
Total # Catheters Placed: 91
Total # Single blocks performed: 129
Total # Bolus: 10
# Patients with Multiple blocks: 53
# Procedures done with General Anesthesia (Sleep): 50
A Survey of Military Health Professionals’ Perceptions of an Acute Pain Service at Camp Bastion, Afghanistan

Rosemary C. Polomano, PhD, RN,**, Ellie Chisholm, RN,** Todd M. Anton, MD, CPT, MC, USA,§ Nancy Kwon, CRNP, MSN, Peter F. Mahoney, OBE, TD, MSc, FRCA, L/RAMC, and Chester “Trip” Buckenmaler III, MD, COL, MC, USA

Health Profession

Physician Specialties

Sample Characteristics (N=70)

- 50.0% Physician
- 41.6% Nurse
- 8.4% Other (medics, technicians)

- 24.1% Anesthesiologist
- 20.7% Trauma Surgeon
- 20.7% Orthopedic Surgeon
- 10.3% Plastic Surgeon
- 10.3% GDMO
- 6.9% Emergency Medicine
- 6.9% Other Physician

11 Aug 2014
Pain Management Task Force

Perceptions of an APS

- Extremely
- Not At All

- How satisfied with APS: Total Sample (N=64) = 7.7, Physicians (n=26) = 8.38, Nurses (n=32) = 7.23
- How beneficial has APS care been: Total Sample (N=64) = 7.89, Physicians (n=26) = 8.65, Nurses (n=32) = 7.34
- How important to deploy and APS again: Total Sample (N=64) = 8.52, Physicians (n=26) = 9.23, Nurses (n=32) = 8.06

P-values:
- How satisfied with APS: P=0.018
- How beneficial has APS care been: P=0.010
- How important to deploy and APS again: P=0.006
Pain Management Task Force

The New Face of Regional Anesthesia
Compartment Syndrome

• High risk patients can be identified
• Communication is the key!
• Options available
  – No block for injury of concern
  – Multimodal therapy
  – Place block 24 hours after surgery if ↑ Pain
  – Place catheter – don’t use until after postoperative exam
  – Electing to not treat pain is no longer an option in the 21st century.
Integrative Medicine

Omega 2

Shen men

Point Zero

Thalamus

Cingulate Gyrus

Pain Management Task Force
Pain Management Task Force

Novel pain control methods and equipment

Paracetamol
Proposed APS Staffing*

APS Medical Officer – Identified physician with medical expertise in acute pain medicine. This will usually be a military trained anesthesiologist.

APS Chief Nurse – Chief nurse responsible for unit pain policy adherence and ward safety.

Ward Pain Nurse Champions – Nurse from each Role 3 ward to serve as the ward pain nurse.

*These personnel can be identified and tasked from existing Role 3 force structures.
# Pain Equipment Chests

## Standardized Medical Equipment and Personnel in Deployed Setting

### Medical Equipment Template

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Quantity</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equipment List (Partial)

- **Equipment Description**
- **Quantity**
- **Location**
- **Comments**

### Equipment Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Manufacturer</th>
<th>Description</th>
<th>Quantity</th>
<th>Location</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT-001</td>
<td>ABC Equipment Co.</td>
<td>Ambulance Equipment</td>
<td>5</td>
<td>Hospital A</td>
<td></td>
</tr>
<tr>
<td>EMT-002</td>
<td>DEF Medical Inc.</td>
<td>Field Medical Kit</td>
<td>2</td>
<td>Medical Camp B</td>
<td></td>
</tr>
<tr>
<td>EMT-003</td>
<td>GHI Health Labs</td>
<td>Surgical Equipment</td>
<td>10</td>
<td>Surgical Team C</td>
<td></td>
</tr>
</tbody>
</table>

---

**Note**: This template and equipment list are subject to change based on operational needs and availability.
Pain Management Task Force

Main Lines of Effort

Defense & Veterans Pain Rating Scale (DVPRS)
- An innovative new scale for rating pain across the DoD

Extension for Community Healthcare Outcomes (ECHO)
- Expanding DoD providers knowledge of pain through Video Teleconference

Pain Assessment Screening Tool and Outcomes Registry (PASTOR)
- A screening tool and reporting system to examine a soldiers individual pain over time

Interdisciplinary Pain Management Centers (IPMC)
- Incorporating integrative and traditional medicine to treat pain
Pain Management Task Force

Defense and Veterans Pain Rating Scale (DVPRS)

• **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.

---

**Defense and Veterans Pain Rating Scale**

- **MILD** (Green)
- **MODERATE** (Yellow)
- **SEVERE** (Red)

---

**DoD/VA 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 usual **ACTIVITY**:
   
   - 0: No pain
   - 1:Hardly notice pain
   - 2:Notice pain, does not interfere with activities
   - 3:Sometimes distracts me
   - 4:Distractions, can do usual activities
   - 5:Interrupts some activities
   - 6:Hard to ignore, avoid usual activities
   - 7:Focus of attention, prevents doing daily activities
   - 8:Awful, hard to do anything
   - 9:Can't bear the pain, unable to do anything
   - 10:As bad as it could be, nothing else matters

   - 0: Does not interfere
   - 1: Completely interferes

2. Circle the one number that describes how, during the past 24 hours, pain has interfered with your **SLEEP**:
   
   - 0: Does not interfere
   - 1: Completely interferes

3. Circle the one number that describes how, during the past 24 hours, pain has affected your **MOOD**:
   
   - 0: Does not affect
   - 1: Completely affects

4. Circle the one number that describes how, during the past 24 hours, pain has contributed to your **STRESS**:
   
   - 0: Does not contribute
   - 1: Contributes a great deal

Pain Management Task Force

PASTOR/PROMIS

RESEARCH * OUTCOMES REGISTRY * CLINICAL DECISION TOOL

- Center for Disease Control and Prevention: (Health People 2020 will include PROMIS Global Measure)

- Bravewell Collaborative Integrative Medicine Outcomes Study

- DVCIPM Research
  - Pain Management
  - Rx Med Abuse
  - Interdisciplinary Care
RESEARCH ● OUTCOMES REGISTRY ● CLINICAL DECISION TOOL

• Web application served from MAMC
  – Clinical Assessment
    • Using validated computer adaptive testing (CAT) PROMIS instruments
  – Clinical Report/Decision Tool
    • Longitudinal pt pain/function/alert data in concise format
  – Patients Enter Information Prior to Appointments
    • Using the web capable device of their choice
Pain Management Task Force

PASTOR Clinical Report

- Pain Mapped by Region
- Clinical Alerts
- Patient Defined Goals
Pain Management Task Force

- Gen population percentile indicator
- Color Coding on each graph
INTERDISCIPLINARY PAIN MANAGEMENT CENTER (IPMC): Serves as hub for pain management synchronization for designated MTFs within RMC. Provides pain management specialty referral/consultation services, patient and provider education, and coordination of research initiatives.

PAIN AUGMENTATION TEAM: Serves as the MTF lead element for pain management education, training, and practice standards; linked to a designated IPMC for support.

Pain Champion; Clinical Pharmacist; Nurse Care Coordinator

IPMC (8)
- Ft Gordon
- Ft Hood
- Ft Bliss
- Ft Lewis
- Ft Sam Houston
- Landstuhl
- Tripler
- Ft Bragg

Pain Augmentation Teams (25)
- Ft Benning
- Ft Campbell
- Ft Carson
- Ft Drum
- Ft Huachuca
- Ft Irwin
- Ft Jackson
- Ft Knox
- Ft Leonard Wood
- Ft Meade
- Ft Polk
- Ft Riley
- Ft Sill
- Ft Stewart
- Ft Wainwright
- Schofield Barracks
- Stuttgart
- Vilseck
- Vicenza
- Ft Eustis
- Ft Lee
- Ft Leavenworth
- West Point
- Wiesbaden
Pain Management Task Force

Extension for Community Healthcare Outcomes

30 April 2013

NORTHERN Region

IPMC is Womack Army Medical Center, Ft Bragg

Additional Call in sites
- University of New Mexico
- SRMC IPMC

Call in sites:
- Ft Drum
- Ft Meade
- Ft Knox
- Westpoint
- Ft McCoy

IPMC

PMAT
Synchronize a culture of pain awareness, education and proactive intervention

• This is no less than a cultural change and reorientation of attitudes about pain and its consequences within the military.

• Medical leaders at all Roles of care must recognize that pain management will be a new criteria used to measure the success and quality of healthcare within their facility.
Way Ahead

• Encourage Role 3 leaders to follow the pain CPG and integrate APS structure into their CSH.
• Utilize the MARAA handbook as a guide for APS function in the field.
• Ensure pain management equipment inventories are adequate and monitored.
• Adjust pre-deployment training of all personnel to re-orient providers on the importance of acute pain medicine and consequences of allowing pain chronification.
• Make the DVPRS standard for collecting pain management outcomes and include this data in the JTTR.
• Embrace PASTOR as a model for obtaining patient reported outcomes data to drive MHS resource decisions.
• Maintain and expand the IPMC concept with ECHO for improved pain care.
• Use pain medicine as a ‘gateway drug’ for integrative medicine to enter our system.
• Support pain research and the DVCIPM.
Pain Management Task Force

Defense and Veterans Center for Integrative Pain Management

DVCIPM

Military Pain Management Association
Center of Mass - Throughout the Continuum of Care

Acute Pain

Chronic Pain

Military Pain Medicine Board of Directors (MPMBD)

Clinical Pain Medicine
- Outcomes
  - Functional / Vocational
- Information and Technology
  - JRAATS / AHLTA / Essentris
- Pain Clinical Practice Guidelines

Pain Education
- Patients
- Providers
- Commands

Pain Research & Technology
- CRMPP / MRMC
- ISR
- DVPMI provides the subject matter experts to help set the research agenda

Drive to Support the Balanced Scorecard
Questions?

Pain: A disease, not a symptom

Not my Job
Questions?

Defense & Veterans Center for Integrative Pain Management
DVCIPM

www.dvcipm.org