Management of Chronic Pain in Multiple Sclerosis

*Moderator: John Booss, MD*

*Presenters:*

- Robert Kerns, PhD
- Heidi Maloni, PhD, ANP
- Jim Hunziker, MSN, ARNP
Disclosures

- Robert Kerns, PhD
  Has no financial interest or relationships to disclose

- Heidi Maloni, PhD, ANP
  Advisory board member: Professional Resources in Medical Education; Sanofi Adventis; Consensus Medical
  Speaker’s Bureau: North American Center for CME

- Jim Hunziker, MSN, ARNP
  Has no financial interest or relationships to disclose

- CME Staff Disclosures
  Professional Education Services Group staff have no financial interest or relationships to disclose.
Agenda

• Introductions
• Chronic pain Case Study
• Robert Kerns, PhD
  – VHA Chronic Pain Policy
• Heidi Maloni, PhD, APN
  – Non-pharmacological treatments of chronic pain
• Jim Hunziker, MSN, ARNP
  – Pharmacological treatment of chronic pain
• Case Studies
Case Study E.S.

- E.S. 37 y.o obese female high school graduate and special ed. classroom aide
- boarded out of Army following diagnosis of RRMS in 2009
- chooses to move with her two children to Virginia to be close to family, leaving spouse in Ft Hood, Tx. - He will soon deploy to Afghanistan.
Neurogenic Pain

- Arrives in the VA system through the ED in 2010
- c/o burning, crushing pain in both ankles, ascending to groin over past three months
- Tx by nonVA neurologist with DMT and three five day courses of steroids within six weeks.
- dilaudid for pain
E.S. in the Emergency Room

- Unable to speak; convulsive type tremors of face, lips and body
- Weakness; unable to walk; arrives in WC
- Admitted and diagnosed with steroid induced psychosis
- Step one: the assessment begins
Pain - The Fifth Vital Sign

- VAS: 14 of 10
- Functional assessment:
  - 15 yo daughter stopped going to school to care for her mom and nine-year-old sister
  - Sick leave from job as special education classroom aide
  - Chronic fatigue; sleeping all day
  - Constant crying
  - Unable to move about due to pain
The VHA National Pain Management Strategy: Implementation Of A Stepped Care Model

Robert D. Kerns, Ph.D.
Director, PRIME Center, VA Connecticut Healthcare System
National Program Director for Pain Management, VA Central Office
Professor of Psychiatry, Neurology and Psychology, Yale University
Pain Management is a Priority

• As many as 50% of male VHA patients in primary care report chronic pain\textsuperscript{1,2}

• The prevalence may be as high as 75% in female Veterans\textsuperscript{3}

• Pain is among the most costly disorders treated in VHA settings; total estimated costs attributable to low back pain was $2.2 billion in FY99\textsuperscript{4}

• Number of Veterans with chronic low back pain is growing steadily\textsuperscript{5}

Concomitants of persistent pain

Pain is associated with:
- poorer self-rating of health status,
- greater use of healthcare resources,
- more tobacco use, alcohol use, diet/weight concerns,
- decreased social and physical activities,
- lower social support,
- higher levels of emotional distress, and
- among women, high rates of military sexual trauma.
Pain among persons with Multiple Sclerosis

- Estimates suggest that 13-92% of persons with MS report presence of pain
- North American Research Committee on MS (NARCOMS) Patient Registry Survey focused on pain conducted in 2002 - 54% response rate (10,176 surveys completed)
  - 74% reported pain in past month
  - 13% reported severe to totally disabling pain


- Survey of Veterans with MS (VR-36 survey; Veterans with MS identified from VA MS National Data Repository) – 63.9% response rate among Veterans with MS (2974)
  - 92% reported bodily pain in prior four weeks
  - 69% reported moderate to severe pain
  - 85% reported pain related interference
  - 71% reported moderate to severe interference

# Frequency of Diagnoses* among OEF/OIF/OND Veterans

<table>
<thead>
<tr>
<th>Diagnosis (Broad ICD-9 Categories)**</th>
<th>Frequency</th>
<th>Percent†</th>
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<tbody>
<tr>
<td>Infectious and Parasitic Diseases (001-139)</td>
<td>101,158</td>
<td>14.8</td>
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<tr>
<td>Malignant Neoplasms (140-209)</td>
<td>8,822</td>
<td>1.3</td>
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<tr>
<td>Benign Neoplasms (210-239)</td>
<td>41,121</td>
<td>6.0</td>
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<tr>
<td>Diseases of Endocrine/Nutritional/ Metabolic Systems (240-279)</td>
<td>207,196</td>
<td>30.3</td>
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<tr>
<td>Diseases of Blood and Blood Forming Organs (280-289)</td>
<td>23,096</td>
<td>3.4</td>
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<tr>
<td>Mental Disorders (290-319)</td>
<td>349,786</td>
<td>51.2</td>
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<tr>
<td>Diseases of Nervous System/ Sense Organs (320-389)</td>
<td>294,433</td>
<td>43.1</td>
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<tr>
<td>Diseases of Circulatory System (390-459)</td>
<td>139,318</td>
<td>20.4</td>
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<tr>
<td>Disease of Respiratory System (460-519)</td>
<td>173,560</td>
<td>25.4</td>
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<tr>
<td>Disease of Digestive System (520-579)</td>
<td>242,070</td>
<td>35.4</td>
</tr>
<tr>
<td>Diseases of Genitourinary System (580-629)</td>
<td>96,624</td>
<td>14.1</td>
</tr>
<tr>
<td>Diseases of Skin (680-709)</td>
<td>139,159</td>
<td>20.4</td>
</tr>
<tr>
<td><strong>Diseases of Musculoskeletal System/Connective System (710-739)</strong></td>
<td>377,205</td>
<td>55.2</td>
</tr>
<tr>
<td>Symptoms, Signs and Ill Defined Conditions (780-799)</td>
<td>341,019</td>
<td>49.9</td>
</tr>
<tr>
<td>Injury/Poisonings (800-999)</td>
<td>190,188</td>
<td>27.8</td>
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</tbody>
</table>

Data are from the DoD Defense Manpower Data Center (DMDC)

*Includes both provisional and confirmed diagnoses.

**These are cumulative data since FY 2002, with data on hospitalizations and outpatient visits as of March 31, 2011; 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 683,521; percentages add up to greater than 100 for the same reason.

† Percentages reported are approximate due to rounding.

Cumulative from 1st Quarter FY 2002 through 2nd Quarter FY 2011
Prevalence of Chronic Pain, PTSD and TBI:
Sample of 340 OEF/OIF Veterans

Chronic Pain
N=277
81.5%

PTSD
N=232
68.2%

TBI
N=227
66.8%

10.3%
16.5%
2.9%

42.1%
6.8%

5.3%

National Pain Management Strategy

Objective is to develop a comprehensive, multicultural, integrated, system-wide approach to pain management that reduces pain and suffering for Veterans experiencing acute and chronic pain associated with a wide range of illnesses, including terminal illness.
VHA Pain Management Directive (2009-053)

- Objectives of National Pain Management Strategy
- Pain Management Infrastructure
  - Roles and responsibilities
- Stepped pain care model
- Pain Management Standards
  - Pain assessment and treatment
  - Evaluation of outcomes and quality
  - Clinician competence and expertise
VHA National Pain Management Strategy Infrastructure

- Pain Management Program Office
  - Specialty Care Services; Patient Care Services; DUSH for Policy and Services

- National Pain Management Strategy Coordinating Committee
  - Coordinating Committee Working Groups
    - Nursing Pain Management Working Group

- VISN Pain Points of Contact
- Facility Pain Points of Contact
- Primary Care Pain Champions
- Pain Resource Nurses
- VISN and Facility Pain Management Committees
VHA Stepped Care Model for Pain Management

• Single standard of pain care for VHA
  – Population based approach
  – Timely access to pain assessment
  – State of the art treatment and follow-up
  – Reliable communication and case management
  – Patient and family participation

• Empirically supported model
VHA Stepped Pain Care

**Patient Aligned Care Team (PACT)**
- Routine screening for presence & intensity of pain
- Comprehensive pain assessment
- Management of common pain conditions
- MH-PC Integration, OEF/OIF, & Post-Deployment Teams
- Expanded nurse care management
- Opioid Renewal Clinics

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

**Tertiary Interdisciplinary Pain Centers**
- Advanced diagnostics & interventions
- CARF accredited pain rehabilitation
- Integrated chronic pain and SUD treatment

**STEP 1**
- Complexity
- Treatment Refractory

**STEP 2**
- Secondary Consultation

**STEP 3**
- Tertiary Interdisciplinary Pain Centers
Implementation of the stepped care model

- OEF/OIF Pain Care Enhancement funding
  - Education for primary care providers
  - Externship at Tampa for building Pain Centers
  - Incentive for increased staffing of secondary and tertiary programs
- National pain management leadership conferences
- Pain and Primary Care Task Force
  - Competencies for primary care providers
  - Model for specialty pain care within PACTs
- Interdisciplinary Pain Center Work Group
- Health Executive Committee/VA-DoD Pain Management Work Group
- Primary Care Rural Health Initiative
- Mental Health-Primary Care Integration
- Project SCAN (Specialty Care Access Networks)
Other Implementation Initiatives

• Communication/education infrastructure
  – VA Pain List Serve
  – National Pain Management Website (www.va.gov/painmanagement)
  – Monthly Pain Management Leadership teleconferences
  – Monthly pain management educational teleconferences

• Guidelines
  – Chronic Opioid Therapy
  – Acute, post-operative pain management
  – Dissemination of APS/AAPM guidelines

• Web-based education
  – General, opioid therapy, polytrauma
  – Lecture series on basics of pain management
<table>
<thead>
<tr>
<th>Primary Care Competency</th>
<th>Educational Strategy</th>
<th>Measurement of achievement</th>
<th>Strategies for sustainability</th>
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<tbody>
<tr>
<td>Conduct of comprehensive pain assessment</td>
<td>&gt;Web-based training&lt;br&gt; &gt;In-person training sessions&lt;br&gt; &gt;Manuals from PainEDU.org</td>
<td>&gt;Completion of training&lt;br&gt; &gt;Chart review</td>
<td>&gt;Panel size adjustments and increased visit time for pain patients&lt;br&gt; &gt;Performance measures/monitors</td>
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<tr>
<td>History including assessment of psychiatric/behavioral comorbidities, addiction, and aberrant behavior (diversion)</td>
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<tr>
<td>Conduct of routine focused physical/neurological examinations</td>
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<tr>
<td>Judicious use of diagnostic tests/procedures</td>
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<td>Optimal patient communication</td>
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<tr>
<td>How to encourage realistic evidence-based expectations</td>
<td>&gt;Web-based training&lt;br&gt; &gt;In-person training sessions&lt;br&gt; &gt;Manuals from PainEDU.org</td>
<td>&gt;Completion of training&lt;br&gt; &gt;Patient feedback&lt;br&gt; &gt;Patient satisfaction surveys, but must account for skew due to disgruntled patients, secondary gain,&lt;br&gt; &gt;Ongoing reassessment of treatment plan&lt;br&gt; &gt; Appropriately soliciting patient questions and concerns</td>
<td>&gt;Availability of wellness programs,&lt;br&gt; &gt;Behavioral management/pain psychology&lt;br&gt; &gt;Patient support groups&lt;br&gt; &gt;Templates for functional evaluation and re-evaluation</td>
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<tr>
<td>How to provide reassurance and discourage negative behavior</td>
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<tr>
<td>How to foster pain self-management</td>
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<tr>
<td>Negotiating behaviorally specific and feasible goals</td>
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<tr>
<td>Pain Management</td>
<td>&gt;Web-based training&lt;br&gt; &gt;In-person training sessions&lt;br&gt; &gt;Manuals from PainEDU.org</td>
<td>&gt;Completion of training&lt;br&gt; &gt;Medication utilization monitoring (long acting vs short acting opioids, non-opioid therapy)&lt;br&gt; &gt;Utilization of adjuvant therapy, other interventions&lt;br&gt; &gt;Chart review</td>
<td>&gt;Separate problem patients from regular PC pain population&lt;br&gt; &gt;Identify and review outliers&lt;br&gt; &gt;Availability of wellness programs,&lt;br&gt; &gt;Behavioral management/pain psychology&lt;br&gt; &gt;Performance measures/monitors</td>
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<tr>
<td>Knowledge of accepted clinical practice guidelines</td>
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<td>Rational, algorithmic based polypharmacy</td>
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<td>Opioid management</td>
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<tr>
<td>Knowledge/use of common metrics for measuring function</td>
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<td>Determining the need for secondary consultation</td>
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### PC Rural Health Series

Purpose: To provide virtual education support primarily to rural primary care providers (PCP) to help ensure all Veterans receive uniform, competent, expert care by VHA physicians regardless of geographic setting.

<table>
<thead>
<tr>
<th>Geriatrics</th>
<th>Mental Health</th>
<th>Pain Management</th>
<th>Post Combat Care</th>
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<tbody>
<tr>
<td>- Dementia</td>
<td>- Evaluation &amp; Treatment of Anxiety, Depression, &amp;</td>
<td>- Complex Chronic Pain</td>
<td>- Post Deployment for Frontline</td>
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<tr>
<td>- Frailty</td>
<td>Suicidality</td>
<td></td>
<td>Providers</td>
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<tr>
<td>- Sex &amp; Driving</td>
<td>- Alcohol Misuse</td>
<td>- Stepped Integrated Pain Care</td>
<td>- C&amp;P Process</td>
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<tr>
<td>- Advanced Care</td>
<td>- PTSD</td>
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<td>- Environmental Agent Exposure</td>
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<tr>
<td>Planning</td>
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<td>- Military Culture</td>
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<td>- Screening</td>
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- Advanced Care Planning
- Screening
SCAMP Trial

Improving access using technologies

• Home telehealth (Cervone/Vogel)
  – Nurse care management

• Videoconferencing (Sellinger)
  – National Telemental Health Center

• Interactive Voice Response (Heapy)
  – Entirely therapist-less intervention
  – Self-management emphasizing self-monitoring, self-evaluation, and self-reinforcement
  – Funded HSR&D Investigator Initiated Research (IIR) Project

• Web-based (Kerns)
  – Veterans Pain Management Resource Center
    ▪ Veteran preferences
    ▪ Pain coping skill module approach
The mission of VA SCAN is to:

- Meet the needs of primary care providers and PACT teams for access to specialist consultation services and support
- Provide case-based (CME) learning modules to improve core competencies and provider satisfaction
- Facilitate referrals to tertiary care centers when indicated
- Ultimately to improve veteran access to specialty care and treatment outcomes
Specialty Pain Care Capacity

- One hundred percent of VISNs are providing dedicated PAIN Clinic Services.
- Eighty-nine percent (124/140) of facilities have dedicated PAIN Clinics established.

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<th>FY09</th>
<th>FY10</th>
<th>% change FY09-FY10</th>
</tr>
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<tbody>
<tr>
<td>Encounters</td>
<td>287,915</td>
<td>333,447</td>
<td>15.8</td>
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<tr>
<td>Unique Patients</td>
<td>88,887</td>
<td>100,833</td>
<td>13.4</td>
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Trends in Pain Care Settings

VHA Health Analysis and Information Group Pain Management Survey conducted in October 2007 and 2009
Promoting Safe and Effective Use of Opioids

- Opioid – High Alert Medication Initiative
  - Opioid Renewal Clinic
  - Collaborative Addiction and Pain (CAP) Program
  - Opioid Decision Support System
- Chronic Opioid Therapy – Clinical Practice Guideline
- Opioid Therapy Web Course
- Pharmacy Benefits Management Initiatives
- Directive and Clinical Considerations regarding state-authorized use of marijuana programs
- Partnership with Office of National Drug Control Policy (ONDCP) in development and implementation of National Prescription Drug Control Policy
Thanks!

robert.kerns@va.gov
www.va.gov/painmanagement
Models of Care

Heidi Maloni PhD
Overview

- The goal of VHA National Pain Management Strategy is to incorporate an interdisciplinary, multimodal approach to pain management

- Application of the multimodal approach to pain in MS and SCI by using
  - Biopsychosocial models
  - Stepped care strategies
  - Self-management strategies

- Tailoring pain care to each person's experience of pain
Pain in MS
What do we Know?

- Recognized by Charcot in 1875

- Affects as many as (O'Connor et al, 2008)
  - 20% at disease onset
  - 50% at any given time
  - 75% of patients within 3 preceding months

- Risk factors for development of MS pain (Boneschi, 2008; Nurmikko, 2010, Hadjimichael et al, 2007)
  - older age
  - longer disease duration
  - lower education level
  - greater duration of pain
  - Increased disability (musculoskeletal pain)
  - progressive course (dysesthetic pain and spasm)
  - depression or mental health impairment
  - Being female (headache pain)
Psychosocial and psychological factors have greater impact than other variables on pain intensity (Jensen et al, 2010; Osbourne et al., 2006; Griswold et al, 2004; Archibald et al, 1994; Kalia & O’Connor, 2005)
- Associated with increased fatigue
- Anxiety
- Depression

Most common pain syndrome: continuous burning in extremities, headache; back pain; painful tonic spasms (Solaro et al, 2004; Moulin et al, 1987; Pollmann et al, 2004)

Insufficiently treated (Pollmann, 2004)

Greater health-care utilization (Hadjimichael et al., 2007)
Pain is an individualistic, physiologic, learned and social response to a noxious stimuli.

Pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage.
Pain is...

- “Whatever the experiencing person says it is, existing whenever he/she says it does”  (McCaffery, 1984)
MS Pain is Mixed

- **Nociceptive**: disability of living with MS. Pain that arises from actual or threatened damage to non-neural tissue and is due to the activation of nociceptors.
  - Caused by any mechanism that stimulates a pain response: mechanical, thermal, chemical, electrical

- **Central neuropathic pain**: Pain caused by a lesion or disease of the central somatosensory nervous system and may be intermittent or steady; spontaneous or evoked
  - Steady pain: burning, tingling, aching, throbbing (dysesthetic extremity pain)
  - Intermittent: shooting, stabbing, electric knife-like, searing (trigeminal neuralgia)

- IASP Taxonomy at http://www.iasp-pain.org/AM/Template.cfm?Section=Pain_Defi...isplay.cfm&ContentID=1728
Intermittent (Paroxysmal) MS Pain Syndromes

- Trigeminal neuralgia
  - 20X general population
  - 11-31% are bilateral

- Glossopharyngeal neuralgia (rare)

- Episodic facial pain

- Paroxysmal limb pain

- Painful tonic spasms (11-17%)

- Headache (prevalence: 13%-34%; 54% at dx; 22% migraine)

- Lhermitte’s
Steady MS Pain Syndromes

• Dysesthetic extremity pain

• Musculoskeletal pain
  • Back pain

• Painful tonic spasms
  • Triggered by touch, movement, hyperventilation, emotions
  • Occur several times in a day for < 2 min
VA Stepped Pain Care (VHA Directive 2009-053)

**Complexity**
- Treatment Refractory
- Comorbidities

**RISK**

**STEP 1**
- Primary Care
  - Routine screening for presence & intensity of pain
  - Comprehensive biopsychosocial pain assessment
  - Evidence-based management of common pain conditions
  - Support from MH-PC Integration, OEF/OIF, & Post-Deployment Teams
  - Expanded care management
  - Pharmacy Pain Care Clinics

**STEP 2**
- Secondary Consultation
  - Pain Medicine
  - Rehabilitation Medicine
  - Behavioral Pain Management
  - Multidisciplinary Pain Clinics
  - SUD Programs
  - Mental Health Programs

**STEP 3**
- Tertiary, Interdisciplinary Pain Centers
  - Advanced pain medicine diagnostics & interventions
  - CARF accredited pain rehabilitation

Slide compliments of Gallagher MD MPH and Mariano PhD
Step one - Assessment

- Identify psychological factors that may affect well-being
  - Depression
  - Anxiety

- Identify social factors that may affect well-being
  - Social support

- Choose appropriate psychometric tools to assess outcome.
Pain Assessment

- Pain is the fifth vital sign; a patient right

- **Self-report of pain is single most reliable indicator of pain**

- Functional measures: mood, sleep, work, enjoyment of life, moving around

- VAS and pain rating scales

- Cognitive impairment limits use of pain scales
Pain Experience

- Different patients experience different levels of pain in response to comparable stimuli
- Heredity, energy level, coping skills, prior pain experience—variation in tolerance
- Patients with chronic pain are more sensitive to pain and other stimuli
- Pain is a sensory, motivational and cognitive experience
Pain is Multidimensional

- Sensory discriminative
- Motivational/Affective
- Cognitive/evaluative
Experience of Pain

• Perceptual dominance
• Pain threshold
• Pain tolerance
Disabling Beliefs

- Shared by patients who are overwhelmed by pain and providers who find pain patients overwhelming:
  - Belief that objective evidence of disease/injury is required for pain to be “real”
  - View of pain as the only problem
  - Expectation that urgent pain relief is the major goal of treatment
  - Overconfidence in medical solutions
  - Provider is the “expert” responsible for outcomes
  - Pt. is helpless “victim” of underlying disease/injury

- Patient thoughts about pain
  - Pain catastrophizing
  - Pain beliefs (ability to control)
  - Self-efficacy
Pain Management Options Based on a Biopsychosocial Model

• Increase mastery and control over fear, anxiety, stress reaction, environmental triggers

• Establish a collaborative relationship

• Promote self-management
  • use of a pain diary
  • good sleep hygiene
  • relaxation skills
  • self hypnosis

• distraction
• acceptance
• mastery
• cognitive retraining
Building Self-management Skills

- Acceptance
  - Allowing some pain some of the time
  - Consists of both thinking and doing
  - Two facets:
    - Willingness to experience pain
    - Engagement with life
- Mindfulness
  - Non-judgmental awareness of pain
  - Acting with intention

Slide compliments of Dawn Ehde PhD
Chronic Pain Acceptance

- Different from commonly studied pain coping strategies that focus on:
  - Eliminating pain
  - Distracting attention away from pain
  - Reframing thoughts about pain

Slide compliments of Dawn Ehde PhD
Why Focus on Pain Acceptance?

- Acceptance is related to positive adjustment
  - Less: pain intensity, psychological distress, physical disability, & attention to pain
  - Greater task persistence, physical functioning, general mental well-being, self-efficacy, motivation, and engagement with daily activities

- Interventions exist targeting pain acceptance
  - Acceptance and Commitment Therapy (ACT), Mindfulness-based interventions

Slide compliments of Dawn Ehde PhD
What is Self-management?

- The tasks that the individual must undertake to live well with one or more chronic conditions.
  - Tasks include having the confidence to deal with
    - Medical management
    - Role management
    - Emotional management of their condition
      - (Institute of Medicine, 2004)
      - Teresa Brady, 2011
  - “…what people do on a day to day basis to feel better and pursue the life they desire.”
    - Teresa Brady, PhD, Centers for Disease Control and Prevention, 2010

Slide compliments of Dawn Ehde PhD
Obtain “Buy-In” to a Self-Management Approach

- Nonjudgmental approach
- Elicit goals (besides pain relief)
- Elicit what self-management skills they already use & reinforce them
- Provide a menu of self-management options
- Ask for permission to make suggestions for pain self-management
- Set realistic goals to increase success (and buy-in)

Slide compliments of Dawn Ehde PhD
Cognitive Behavioral Therapy

- Based on cognitive behavioral theory of pain, in which thoughts and behavioral responses to pain influence adjustment and functioning

- Common ingredients include:
  - Relaxation training
  - Cognitive therapy
  - Behavioral strategies, including adaptive coping strategies, pacing, & activation

Slide compliments of Dawn Ehde PhD
Hypnotic Analgesia

- Relaxation, focused attention, here and now experiencing, rich imaginative experience

- Induction:
  - Attempts to focus attention on a single stimuli (such as the therapist’s voice), induce relaxed state

- Example Suggestions:
  - Alter pain experience, decreased unpleasantness
  - Sensory substitution (e.g., “warm” for “burning”)
  - Increased comfort and control over pain

- Has empirical support for its efficacy in MS (Jensen et al., 2005; 2009)
Encourage Behavioral Activation

- One of the most important ways to treat both pain and emotional suffering is “activation”

- Behavioral activation may include:
  - Increasing physical activity
  - Increasing activities which are enjoyable, meaningful, or pleasurable
  - Increasing participation in activities consistent with values and goals

Slide compliments of Dawn Ehde PhD
Activity Pacing & Goal-Setting

• Systematic increases in activity
• Activity scheduling
• Setting specific, measurable, & attainable goals

Slide compliments of Dawn Ehde PhD
Implementing Goal Setting

- Provide tools (e.g., worksheets) for setting goals outside the clinic visit
- Use a written plan of goals set & progress
- Expect patients to not achieve their goals: learning how to deal with setbacks is part of self-management
- Ask about their progress towards activity or pain self-management goals at office visits

Slide compliments of Dawn Ehde PhD
Goal Setting: Example Framework

“I will ________________________________________(Specific action) for ____________________________ (How long, How many, How far) on ________________ (Which Day or Days) at ____________________________ (What Time or Times/What Situation). I feel confident that I can do this, and even ____________________________ (Barriers) come up, I will deal with them by ____________________________________________ (Solutions) and I will still work on my goal!”
Encourage the use of Relaxation Skills

- Breathing
- Imagery
- Progressive muscle relaxation
- Self-hypnosis
Relaxation Implementation

- Provide a rationale for its use with pain
- Encourage regular practice so that skill becomes natural and habitual
- Discuss how to apply—such as when they have a pain flare up, are fatigued, stressed, etc.
- Encourage the use of audio recordings & other resources such as:
  - http://health.ucsd.edu/specialties/psych/mindfulness/mbsr/audio.htm
  - http://students.georgiasouthern.edu/counseling/relax/OnlineRelax07.htm
  - http://www.olemiss.edu/depts/stu_counseling/relaxation.html

Slide compliments of Dawn Ehde PhD
Consider Mindfulness Approaches

• Involve a focus on non-judgmental awareness and acceptance of the present moment and any feelings, sensations, or thoughts that arise (mindfulness)

• Interventions prescribe regular practice of mindfulness, often via meditation

• Center for Mindfulness in Medicine, Health Care, and Society (www.umassmed.edu/cfm)

Slide compliments of Dawn Ehde PhD
Summary and Conclusions

- A Biopsychosocial approach to pain management fosters satisfaction for both patients and providers

- Use of an interdisciplinary team promotes self-management, reducing suffering and disability

- Primary Goal of treatment: Improved quality of life
Thank you
Educate and Provide Resources

- VHA directive on pain management [www.va.gov/painmanagement/](http://www.va.gov/painmanagement/)
- Multiple Sclerosis Centers of Excellence [www.va.gov/ms/](http://www.va.gov/ms/)
- National Multiple Sclerosis Society (Search terms “pain” or “fatigue”) [www.nationalmssociety.org](http://www.nationalmssociety.org)
- Paralyzed Veterans of America [www.pva.org](http://www.pva.org)
- International Association for the Study of pain [www.IASP-pain.org](http://www.IASP-pain.org)
- American Chronic Pain Association [www.theacpa.org](http://www.theacpa.org)
- American Pain Foundation [www.painfoundation.org](http://www.painfoundation.org)
- American Pain Society [www.ampainsoc.org](http://www.ampainsoc.org)
Using Medications to Treat Chronic Pain

Jim Hunziker, ARNP
Treatment of Chronic Pain (review)

- No one method of treating chronic pain has been proved to be the best
- Treatments should be customized to each person
- Treat comorbid conditions
- Goal of pain treatment is to reduce pain by 50% (although more would be great!)
Initial drug choice

- Provider habits, practice preference
- Local formulary
- Pain
  - Severity
  - Condition (trigeminal neuralgia, neuropathic, etc.)
  - Provider preferences and experience
- Comorbid disorders
  - Medical diagnoses (diabetes, HTN, etc.)
  - Psychiatric issues (depression, bipolar disease, substance abuse, PTSD, sleep disorders, etc.)
General Principles

• To assess what the patient is hoping to get out of the pain management visit ask:
  “If I were a good NP, what should I do?”

• Follow guidelines (when possible) to help back up the treatment modalities you choose

• Benefits of medication(s) used should outweigh risks
Medications Commonly Used

- **Topical agents**
- **Membrane stabilizing agents**
  - Antiepileptics
  - Antiarrhythmics
  - Corticosteroids
- **Modulating agents**
  - Antidepressants
  - Opioids
  - Cannabis
- **Dorsal horn inhibition**
  - Antiepileptics
  - Antidepressants
  - GABA agonists—baclofen, others
- **NMDA antagonists**
  - Ketamine
  - Dextromethorphan
  - Methadone
Topical Medications

• **Lidocaine topical**
  • 3% cream, 5% ointment
  • Use 5 gm of ointment/dose max BID/TID

• **Capsaicin topical**
  • 0.025%, 0.075% cream TID/QID
  • Avoid use on open wounds
Membrane stabilizing agents

- **Antiepileptics**
  - Gabapentin
  - Pregabalin

- **Antiarhythmatics**

- **Corticosteroids**
Antiepileptics

- **Gabapentin**
  - Start 300 mg qd day 1, BID day 2, then TID, max 1800 TID (FDA lists max. 3600)
  - As dose goes higher effectiveness becomes lower and side effect (somnolence) to benefit ratio becomes worse

- **Pregabalin (Lyrica®)**
  - Start 50 mg PO TID, increase to 300 mg PO/day over 7 days
  - Formularies vary, check w/your facility. Some facilities require a variety of other, less expensive medications be used before this drug

- Other antiepileptic medications are used, but those above are most commonly used
Association of Clinical Pharmacists Recommendations

- Prior to pregabalin use, the pain management must have failed using the following:
  - Tricyclic antidepressants (amitriptyline, and/or nortriptyline)
  - Gabapentin
  - Baclofen (or another antispasmodic)
  - Tegretol
  - Valproic acid
  - Topical meds (capsaicin, lidocaine)
  - Venlafaxine/Duloxetine
Antiarrhythmics

- **Mexiletine** *(Mexitin®)*
  - Listed for treatment of diabetic neuropathy
  - Study in MS pain: 300mg-400mg QD (not FDA approved for chronic pain)
  - sodium channel modulator
  - SE: palpitations, chest pain, tremor, GI, dizziness, double vision, nervousness
Corticosteroids can be used as part of the medication regimen:

- Have been used (with a tricyclic) to reduce pain
  - Prednisolone 40mg/d, 83% vs 17% pain at 1 month
  - No clear mechanism of action, but may
  - Reduce inflammation/swelling
- Possibly promote repair of nerve fibers
- Increase sense of well-being
- BUT, they can cause bone demineralization so use extreme caution if used on a long-term basis
Pain Modulating Agents

- Antidepressants
- Opioids
- Cannabis
Antidepressants

- **SSRI’s**
  - **Citalopram**: Start 10 mg/d. Increase to 20 mg/d in 7 days. Therapeutic dose is 20-80mg
  - **Sertraline**: Start 25-50mg/d, increase as tolerated to 50-75 mg/d. Therapeutic range: 50-200mg/d
  - Avoid floxetine due to many drug-drug interactions

- **SSNRI’s**
  - **Duloxetine** *(Cymbalta®)*
    - Great med to start with
    - Start 30 mg/day. Increase to 60 mg/d in 7 days. Therapeutic range 30-60 mg/d
Tricyclic Antidepressants

• With all tricyclics, titrate up to approx. 50% of antidepressant level; concomitant use with SSRI raises the effective level by 40%

• Nortriptyline
  • 10-50mg. Start 10-25 mg/NOC, increase 25 mg q 2-3 days
  • cleanest/safest TCA to use, very helpful for sleep (use caution or avoid with older people)

• Amitriptyline
  • 10-50 mg. Start 10 mg, increase over 2 wks to effective dose. Max 50 mg.
Opiates

• Short acting
  • Oxycodone
    • Oxycodone (not ER, which is OxyContin®)
    • OxyContin® – high abuse potential as they can be crushed to get a fast release of all active ingredient

• Long acting
  • Morphine
    • Morphine sulfate (MS Contin®)
  • Methadone

• With ALL opiates – please monitor bowel function (by asking patient; treat as need)
Short Acting Opiates

• Oxycodone – comes in two basic forms, quick release and slow release
  • Oxycodone
    • Quick release
    • Great for PRN use for break-through pain
  • OxyContin®
    • Slow release over 12 hrs
    • GREAT abuse potential – people abusing will crush medication to get an immediate high
Long Acting Opiates

- **Morphine**
  - Often used for long-term management
  - Half-life of 2-4 hrs
  - q 3-4 hr dosing for reg. release, q 8-12 hr for ER
  - Paresthesias common
Methadone

• Methadone
  • Can be prescribed without special DEA permission when prescribed for pain
  • Analgesic effect can take 3-5 days
  • Peak serum concentration: 1-7.5 hr
  • Half-life: 8-59 hrs
  • Use w/caution with respiratory disease (sleep apnea, COPD, etc.)
  • Start 2.5-10 mg PO q8-12 h, titrate to effect
Opiate Documentation

- Important for long term patient management
- Important when prescribing controlled substances
  - Many providers hesitant to prescribe narcotics due to concerns of DEA scrutiny
  - NO ONE who has adequately documented the need for opiates in management of chronic pain has gotten in trouble with regulatory agencies (that doesn’t mean that they won’t look at your practice, though!)
Minimum Documentation for Opiate Prescription

- History and physical exam
- Diagnostic tests done
- Evaluation and Consultation
- Treatment objectives
- Discuss risks and benefits
- Informed consent
- Treatment offered
- Medication – type, date, dosage, quantity
- Treatment agreement
- Periodic review
Dorsal Horn Inhibitors

- Antiepileptics
- Antidepressants
- GABA agonists (reduce spasticity, which can contribute to pain)
  - Baclofen
    - Start 5 mg/d TID, max 20-80 mg/d, divided TID/QID
  - Dantrolene
    - Start 25 mg/d, increase slowly to max 400 mg/d
NMDA Antagonists

• **Ketamine**
  • IV only, only FDA approved for anesthesia induction, req. continuous EKC monitoring

• **Dextromethorphan**

• **Methadone**

• [**NMDA** - Is an abbreviation for *N*-methyl-**D**-aspartate; an excitotoxic amino acid used to identify a specific subset of receptors of glutamate (an excitatory amino acid)]
Dextromethorphan

- Not FDA approved for pain, but works on the same principles as opiates
- Combining with a NSAID more effective
- Tends to “dry” person out
- 10-20 mg q4h, max 120 mg/d, higher dosing is more effective if person doesn’t mind the side effects
Medications to use cautiously for pain management

- Benzodiazepines
  - Diazepam (Valium®)
  - Lorazepam (Ativan®)
- Muscle relaxants – can help decrease pain
  - Dantrolene (Dantrium®)
  - Cyclobenzaprine (Flexeril®)
  - Baclofen
Cannabis (marijuana)

• Marijuana
  • As effective as Gabapentin in managing pain (50% reduction in pain)
  • VA Employees cannot recommend or encourage use (due to Federal ban on use)
  • Be aware that it should not be combined with opiate use – pt. should use one or the other
  • Ingestion is the preferred method of use (less likely to become “high”)

Chronic Pain Management Summary

The goal that pain management specialists have set for chronic pain reduction is approximately 30-50%. All pain medications and behavioral treatments meet this goal and have approximately the same efficacy – they all reduce chronic pain approximately 30-50%. Geriatric patients should start with 50% of the usual starting dose to account for reduced renal clearance.

• Use assessment tools when assessing pain.
• Avoid/discontinue Benzodiazepam’s
• Muscle relaxants seem to decrease sensation of pain
• Assess/treat sleep disorders as part of initial treatment plan (50-80% of patients with chronic pain have a sleep disturbance). Sleep disorders/pain have a reciprocal relationship.
• PTSD can potentiate pain – treat as needed with Prazosin 1mg/qhs, increase q 2-3d until symptoms abate, usual dose 10mg
• Medications to treat chronic pain
  1. Antidepressants
     a. Citalopram: Start 10 mg/d. Increase to 20mg/d in 7 days. Therapeutic dose is 20-80mg
     b. Sertraline: Start 25-50mg/d, increase as tolerated to 50-75 mg/d. Therapeutic range: 50-200mg/d
  2. Tricyclics (titrate up to approx. 50% of antidepressant level, as concomitant use with SSRI raises the effective level by 40%)
     a. Nortriptyline 10-50mg is the cleanest/safest TCA to use, very helpful for sleep (avoid with older people)
     b. Amitriptyline 10 mg, max dose 50 mg (or when effective at lower dose)
  3. Anticonvulsants
     a. Pregabalin (Lyrica) Start 50 mg PO TID, increase to 300 mg PO/day over 7 days
     b. Gabapentin Start 300 mg qd day 1, BID day 2, then TID, max 1800 TID
  4. Marijuana - As effective as Gabapentin
  5. Opiates **DO NOT USE Meperidine!!**
     a. Short-acting, high potency:
        i. Morphine
        ii. Hydromorphone
        iii. Oxycodone
     b. Short-acting, low/moderate potency:
        i. Codeine
        ii. Hydrocodone
     c. Long-acting, high potency
        i. Methadone: Start 2.5-5mg/8-12 hr, titrate up as needed/tolerated
        ii. Levorphanol
        iii. MS ER
        iv. Oxycontin
        v. Fentanyl TTS
  6. Acupuncture will reduce chronic pain an additional 10%
End Thoughts

• Acute pain that is not adequately treated for a period of 90 days becomes chronic.

• When this happens, the pain becomes a disorder unto itself – not just a symptom of the original disorder

• To be successful, the whole person must be treated – not just the pain!!
Thank you

Case studies and Questions will follow
Case Studies in Pain
Questions to consider:
- Is there evidence that opioids are effective management in MS neurogenic pain?
- Does depression, fatigue, and anxiety impact E.S.’s pain severity?
- What are E.S.’s greatest fears?
- Is she catastrophizing pain?
- What social support does E.S. have?
Step 2 - Bring in the Team

- Psychiatric support with ongoing CBT
- Rehabilitation medicine for maximizing function
- CAM - acupuncture
- Multidisciplinary pain clinic referral
Collaborative Self-management

- assess prior treatments (gabapentin, pregabalin, carbamazepine - none effective; E.S. rejected based on S.E.)
- Create a tailored pain management plan: SNRI, AED and rescue non-opioid (titrating dose to effect).
- Connect to VA & community resources (telemedicine; teleMOVE; aquatic center, MS support group; church)
- Identify long-term functional goals; assess satisfaction
E.S. clinic visit 08/2011

- Burning pain in thighs continues with intermittent intensity. E.S is able to accept and manage pain
- Meds: IFNB- 1b, duloxetine, topiramate, tramadol as rescue
- Continues CBT with psychology
- Continues close r/t with MS Center of Excellence
- 100% S.C. established
- Husband relocating to Ft Lee, Virginia
- Seventy pound weight loss through teleMOVE
- Swims daily
- Daughter attending Lynchburg College
Billy 29 y.o, retired on disability, army scout:
- SPMS (initial sx.: 2002; Dx.: 2006)
- Neuro exam significant for ataxia, tremor, mild LE weakness, spasticity, hyperreflexia and cognitive deficit
- Chronic and constant low back pain; VAS: 7; negative imaging studies
- Social Hx: ETOH- 6 beers a day; smokes 1 pack cigarettes a day and 4-6 joints/d; divorced, wife and 6 yo son live on West coast; living with mother and teen sister
Self-management?

Medications:

- Says marijuana helps his tremor and pain
- Natalizumab q mo (shows up once a month in clinic but may not be adherent to the following:
  - Naproxyn 500mg bid
  - Baclofen 30mg bid and 40mg HS
  - Oxybutynin 5mg tid
Biopsychosocial Model

- Billy spends much of his day intoxicated
- Comorbid depression and fatigue contribute
- MS: age and the degree of disability due to tremor impact QOL
- MS: cognitive deficit - poor attention, poor judgement compound treatment difficulty
- Social and environmental factors: Mom and sister are enablers
Team Approach to Management

- Medical team differential dx
- Education of family and vet and support for long-term functional goals
- Enlist physical therapy for assessment of gait and contributors to back pain
- Refer behavioral Mental Health and SARP
- OT to maximize ADL
- Social work- home safety eval & support in home
- Vocational rehab
Josie, Case Study

- 32 yo working mother of three with RRMS and severe LE dysesthesias
- appears depressed and c/o poor sleep?.... Tricyclics (TCA)
- is severely depressed and overweight?... SNRI: duloxetine/venlafaxine
- wants “something as safe as possible”?... gabapentin/pregabalin
- has medical co-morbidities, many meds?... gabapentin/pregabalin
- has bipolar disorder, is hypomaniac?.... lamotrigine
- has headache and depression?....Tricyclics (TCA)
- has migraines and is overweight? ....topiramate
- also has trigeminal neuralgia? ...carbamazepine
Building Self-management Skills

- Enlist social support- husband and family
- Work toward pain acceptance
- Set functional goals- mood, sleep, QOL, satisfaction with treatment
- Engage in distracting activities

Funny movie
Sig.: i q daily
Mr. J

- 76 yo male w/SPMS, dx w/RRMS in 1982, on no DMT’s.
  - Functionally a hemiplegic, R>L
  - Upper/lower extremity weakness
  - Mobility: PWC, dependent transfers
  - Historically has lived in own home, but after death of wife is in a Nursing Home (100% SC)
  - Moderate fatigue
  - Spasticity R side w/fatigue
Mr. J (cont)

- Pain: Trigeminal neuralgia, getting worse
  - Breakthrough pain “several times/month which lasts for several days” pain score 4/10
  - Would like to consider additional Gabapentin for pain exacerbations
  - Does not want to use any narcotics
  - Has anxiety that pain will return on this intermittent basis
Mr. J (cont)

- Pain treatment
  - Currently on Gabapentin 1500mg TID, but pain is getting worse
  - Gabapentin works better than Tegretol and other anticonvulsants that he has trialed over the years
  - Although he thinks he has trialed a large number of antidepressants, etc. no record of this in CPRS
  - Willing to trial Pregabilin
Mr. J (cont)

- Pregabilin ordered, cancelled by Pharmacy Manager
  - To order, Pt. must have documented failure of:
    - Tegretol (which he did fail)
    - Gabapentin @ max dose
    - Venafaxine
    - Valproic acid
    - All tricyclics
    - Carbazepine
    - Capsaicin/Lidocaine creams to face
Mr. J (cont)

- We started the Pharmacy requirements for Pregabalin by ordering Citalopram 10 mg daily.

- Contract NH has never added medication to his daily regimen – although order was clearly marked “for treatment of chronic pain”.

- When asked, they said they have never received the medication – but our office faxed it to them.

- Reordered medication, will follow-up with them to make sure their MD has ordered med.
Mr. K

- 63 yo male w/SPMS. Dx w/ optic neuritis in 1991 (resulted in L eye vision loss). Currently on Glatiramer acetate

- Hx of bipolar D/O, neuropathic pain, TMJ, BPH, HTN, neurogenic bladder, decreased cognitive fn

- Meds: ASA, Atenolol, Valproic acid, Gabapentin, Glatiramer acetate, Simvastatin
Mr. K (cont)

- Left eye pain:
  - Has had chronic neuropathic eye pain X 7 yrs
  - Unable to touch skin around the L eye due to pain (Ophthalmology just started Abx for blepharitis, w/a little pain relief)
  - Pain varies between 3/10 to 10/10, from sharp needles to dull ache
  - No pain when eye moving in socket
Mr. K (cont)

- Has tried multiple medication therapies, most – but not all medications – documented

- Currently on Gabapentin 800 mg TID (in addition to Valproic acid for bipolar disease), but he is unclear how effective this is – pain comes and goes w/no relation to pain

- Ordered Pregabilin, Nsg Home MD will titrate up to 300 mg/day, higher if needed
Initial, Pharmacy denied Pregabilin, saying that although Amitriptyline had been tried, Nortriptyline had not been tried

Argued with Pharmacist, using the ultimate argument that they didn’t really care about people with chronic pain the same as HTN, diabetes, etc

A second pharmacist then reinstated order

Pain is currently decreasing