Pain Management and PACT
Overview

• Chronic pain in primary care
• Integrating pain care management with PCMHI for PACT approach
• Research results: An intervention to help manage chronic pain in primary care
  – Description
  – Preliminary results
Poll Question #1

• What is your primary role in VA?
  – student, trainee, or fellow
  – clinician
  – researcher
  – manager or policy-maker
  – Other
Poll Question #2

• Which best describes your research experience?
  – have not done research
  – have collaborated on research
  – have conducted research myself
  – have applied for research funding
  – have led a funded research grant
Background: Chronic Pain

• Pain that persists for ≥3-6 months after disease process or injury that has healed
• Associated with significant health care expenditures, disability, lost productivity
Chronic Pain

- Common among veterans
- Usually treated in primary care
- One of the top complaints that bring patients to their primary care providers
  - 40% of all symptom-related outpatient visits
  - 95% of pain is managed in primary care
Chronic Pain

• Prevalence in the VA = 50% of veterans in PC settings report disabling pain symptoms

• Highly comorbid with psychiatric conditions (dep, anx)

• Medications for pain limited in effectiveness for some patients

• A significant challenge for PCP’s; consumes time and resources

• Intervening at early stages may help reduce long-term disability, referral to specialty care (e.g., surgical clinics)
The Challenge of PC Providers in Helping Veterans with Pain

• Providers’ comfort level in managing chronic pain varies
• Time limitations
• Concerns about prescription medications (e.g., opioids)
• Provider internal pressure to “do something”
• Unrealistic patient expectations
Depression and Chronic Pain

• Additional clinical burden for patients with both depression and chronic pain

• 2006 study: among patients in primary care clinics
  – Patients with MDD  66% with chronic pain
  – Patients without MDD  43% with chronic pain
  – Patients with both MDD and chronic pain
    • poorer quality of life
    • anxiety
Depression and Chronic Pain
Depression and Chronic Pain

• Treating depression for patients with both pain and depression linked with:
  – decreased pain
  – improved functional status
  – Improved quality of life
BIOPSYCHOSOCIAL MODEL OF PAIN

Social Factors

Behavioral Factors

Psychological Factors

Biological Factors
Chronic Pain

- Complex response to a number of factors:
  - Physiological/Biological
    - Intensity of tissue damage
    - Biologically-based individual differences in pain threshold and sensitivity
    - Site of injury or source of painful stimuli
  - Psychological
    - Emotional status
    - Attentional effects
    - Beliefs and expectations
    - Self-efficacy
    - Pain experiences
    - General physical health
Chronic Pain Management

• Guidelines for pain management
  – Include biopsychosocial model
• Evidence that exercise and encouraging resumption of normal activities reduces activity limitations due to pain
• Address fear-avoidance – belief that activity and movement will increase risk for re-injury
CBT for Chronic Pain

• Treatment outcome studies demonstrate effectiveness
• Can be a key component of interdisciplinary pain management programs
• Educational interventions have also been shown to be helpful
Barriers to CBT for Chronic Pain

• Travel distance
• Schedules that preclude appointments
• Illness and disability related to chronic pain
• Effective use of resources
Integrated Model of Pain care

• Level 1: primary responsibility with PC
• Level 2: patient education, rehabilitation model
  – Discussion of pain management model
  – Personalized exercise plan
  – Practice of self-regulatory pain strategies
• Level 3: Comprehensive pain management
Stepped-Care Approach

• Sequenced interventions
• Target resources
• Guided by patient outcome
• Step 1:
  – Incorporate collaborative care with behavioral health and target pain management treatment
  – Population-based: targeting the greatest volume of patients reporting pain
The Behavioral Health Lab (BHL)

- PCMHI at the PVAMC
- Provides behavioral health assessment and triage to patients in primary care
- Provides brief behavioral health treatment for patients in primary care
  - Depression, anxiety, alcohol misuse
- Robust evidence base for depression care management, alcohol brief interventions (alcohol misuse), and referral management
PC-MHI and the Patient Aligned Care Team (PACT)

• “Behavioral health and primary care are inseparable, and any attempts to separate the two lead to suboptimal care.” (Patient-Centered Primary Care Collaborative, 2010)

• Particularly relevant to two joint principles of the medical home:
  – Whole Person Orientation
  – Coordinated/Integrated Care

• “Mental health as particularly important to the context of the whole person” (Robert Graham Center, 2007)
BHL Clinical Process

Patient Identification
Screening / Clinical Assessment / Casefinding

Patient Education and Promote Self-Care

Initial Assessment

Treatment Recommendations

Specialty Care

Consultation Or Referral Mgt

Evidence based protocols

Brief Treatment & Care Management

Prevention / Health Promotion

Watchful waiting & Brief Interventions

No treatment & Refusal of care

BHL software – provides the platform
Chronic Pain Identified by BHL Consult

• Survey of 606 patients referred to the BHL
  – over 80% of patients reported pain that interfered with their daily activities

• Pilot study
  – Development of brief intervention for level 1 of stepped care
Pilot Study for Pain Care

• Based on interventions that have been effective in previous studies
• Developed to be delivered by a care manager (nurse, psychologist, social worker)
• Developed to be conducted by telephone or in person for greater access
Behavioral Health Laboratory: Components

A clinical management program focused on:

• Identification

• Assessment and triage to appropriate level of care

• Care Management / Brief treatment/ Health Promotion and Disease Prevention

• Using specialty care and facilitating engagement

• Tracking: Referral Management
Initial Triage

- All patients entering the program complete standard baseline
- Completed via phone or in person (patient preference)
- Includes array of behavioral health symptoms and substance use and overall functioning
- Helps determine next step in treatment
- Completion rate of 80%
- BHL Software output: clinical report, patient letter
Initial Triage Assessment

- Demographics
- Current MH care
- Financial status
- Social support
- Blessed Orientation-Memory-Concentration (>55 yrs or head injury)
- Mini International Neuropsychiatric Interview (psychosis, mania, GAD, panic)
- Depression assessment: PHQ-9
- PTSD Checklist (PCL-c)
- Anxiety assessment: GAD-7 (optional)
- Brief Pain Inventory Interference scale
- Current Psychotropic/Pain medications
- 5-item Paykel scale for suicidal ideation
- Alcohol use (7 day follow-back)
- Illicit substance use
- Depression history
- Work Limitations questionnaire (optional)
- SF-12 (optional)
Behavioral Health Lab Interventions

- Stepped care approach
- Longitudinal but brief treatments
- Promote patient self-management
- Collaborate with PCP
- Pharmacological support
- Measurement based
Measurement Based: BHL Software

• Built in interview for tracking follow-up contacts for care management/brief treatment
• 6 optional domains:
  – Depression: PHQ-9
  – Anxiety: GAD-7
  – PTSD: PCL-c
  – Pain: BPI for pain interference
  – Alcohol: 7-day time line follow-back
  – Referral Management: to track engagement in specialty care
BHL Provider: the Glue
Patient Tracking – Measurement based care
Helping Veterans Manage Chronic Pain

• Center for Evaluation of PACT (CEPACT) funded

• Investigators:
  – Amy Helstrom, PhD.
  – Johanna Klaus, Ph.D.
  – David Oslin, M.D.

• Intervention Team:
  – Kristyna Bedek, PsyD
  – Sherry Cocozza, RN
  – Lisa Dragani, RN

• Research Team:
  – Natacha Jacques, MA
  – Melissa Correa, BA
  – Nisha Nayak, Ph.D.
Pain Care Management (PCM)

Project Objective: To test the effectiveness and sustainability of an integrated primary care based program for veterans with chronic pain designed to strengthen pain management skills and improve quality of life.

• Goals
  – Reduce and/or prevent pain-related disability
  – Improve affect associated behavioral health disorders (e.g., depression, anxiety)
  – Enhance overall quality of life for the veteran
  – Reduce primary care providers’ time.

• Built on empirical support for Depression Care Management, Alcohol Care Management, Specialty Care Referral
Main Research Questions

• Does the addition of PCM to existing PCMHI program lead to better pain outcomes than usual care?
• To what extent does the intervention lead to improvement on quality of life?
• To what extent does the intervention improve depression and anxiety outcomes?
Study Design

- Randomized treatment outcome study
  - Treatment (Pain Care Management: PCM)
  - Usual care (depression or anxiety care management)
Measures

- **Outcomes:** quality of life, pain interference, pain level, pain severity, depression, anxiety

- **Predictors:** Fear-avoidance, pain catastrophizing, coping style
Usual Care

• Support
• Psychoeducation
• Behavioral activation
• Consultation with psychiatry
• Collaboration with PC
• Motivational enhancement approach
• Referral to specialty care when necessary
PCM

• Usual care plus:
  – Psychoeducation about pain
  – Practice self-monitoring of pain levels
  – SMART goal-setting and problem solving
  – Relaxation
    • Deep breathing
    • Guided imagery
  – Pacing
  – Learning to recognize and manage pain flare-ups
EDUCATION: GATE CONTROL THEORY

Situation/Behavior/Physical State

Thought Center

Emotion Center

Pain Center

Gate (open/closed)

Thoughts

Emotions

Pain “Volume” Controls

Site of Injury
PCM also included:

- Workbook sent to the home
- CD with relaxation strategies
- Role of relaxation in managing chronic pain
- Diaphragmatic breathing
- Borrows from behaviorally-based interventions that have been demonstrated to be effective (e.g., Dobscha, Kerns, Otis, Kroenke)
Both conditions included

• Use of BHL software
• Referral to specialty care
• Consultation with psychiatrist
• Collaboration with PCP
Recruitment and Eligibility

- BHL referral
- Inclusion criteria
  - Pain
    - Severity $\geq 5$ out of 10 OR
    - Interference $\geq 5$ out of 10
  - Exclusion criteria
    - Need for specialty mental health care
    - Engaged in specialty pain management (did not exclude patients taking opioids, other pain medications)
    - Problems with cognition
PCM Study Procedures

Patient Identification from Primary Care for Depression, Anxiety Screening / Clinical Assessment

BHL Initial Assessment

- Patients who meet inclusion criteria with interest in study
- Patients who meet inclusion criteria but not interested in study: BHL Pain Care Management
- Patients who do not meet criteria, with exclusion criteria, or not interested

Informed Consent Administered

Participants Randomized to Treatment

Control Condition: Begin Dep, Anx Care Management (12 weeks)

Treatment Condition: Pain Care Management (12 weeks)

No treatment & Refusal of care

Assessment (both groups):
- Baseline
- During Treatment 0, 2, 4, 6, 9, 12 weeks
- Maintenance/Follow-Up 16, 20, 24 weeks
Participants

• 376 veterans referred and preliminarily eligible
  – 216 declined or were excluded based on additional chart review, inability to be contacted

• 160 veterans enrolled
Sample Characteristics: Pain

• What has been your worst pain in the last 24 hours? (0-10)
  – 84% 6 or more
  – 21% 10

• What has your avg. pain severity been in the last 24 hours (>5 on 0-10)?
  – 96%

• What has been your avg interference due to pain in the last 24 hours (>5+ on 0-10 scale)?
  – 90%
Put an X on the area that hurts the most
Baseline Pain Management Techniques

• Heating pads
• Stretching
• Exercise
• Medication
• Shower
• Physical therapy
• Ice
• Quiet
• Massage
• Rest
• Activity
What Exacerbates My Pain?

- Activity
- Lifting
- Weather
- Not enough activity
- Standing
- Sitting
- Walking too long
- Stress, worry
Follow-Up Rates

• Average # Sessions
  – PCM 5
  – UC 3

• Overall, 38% completed 3 or fewer sessions
Participant Demographics

• Average age 54 (22-87 years)
• 57% African-American
• 37% White
• 85% male
• 46% married/partnered
• 23% employed
• 52% financial situation - just enough to get along
Participant Characteristics: Psychological Variables

PHQ-9 Depression Score, %
Moderately-Severe & Severe 49.5
Moderate 27

AUDIT-C score >6, % 9

GAD-7; % Severe 33

Depression, Anxiety, Stress, %
Mod-Extremely Severe
Depression 24
Anxiety 32
Stress 16
Preliminary Results

• No differences between groups
  – Pain variables
  – Psychological variables

• Both groups improved over time
Pain Interference

Visit

mean_BPinter

PCM
Usual Care
Depression
Quality of Life: Mental Health

The graph illustrates the change in mean SF12 MCS scores over visits for two groups: PCM and Usual Care. The scores appear to increase linearly with each visit.
Pain Outcomes: Negative Affect
Conclusions

• Delivering a pain-based intervention as a component of PACT is feasible
• Telephone-based interventions for pain are feasible, acceptable
• Current study: both groups improved in pain and psychological variables
• Need to identify which elements are helpful
A PC Intervention with Similar Results

RCT (Carmody and colleagues, 2013)

• Telephone-delivered CBT intervention for chronic pain with veterans PC
  – T-CBT compared to pain education
  – 12 sessions of CBT over 20 weeks

• No significant differences in outcome measures.
  – Small but significant improvements in physical and mental health for both groups
Potential Moderators?

• Differential responding
  – Type of pain
  – Personality
  – Gender, age
  – Fear, attention and vigilance
  – Catastrophizing and worry
  – Avoidance
  – Coping style, etc.
Possible Future Directions

• Increase emphasis on pain self-management rationale
  – May be particularly important for patients with depression and anxiety
• Assess motivation for change
• Consider behavioral analysis of pain-related behaviors
Future Directions: Increase emphasis on lifestyle modification?

• Recent RCT comparing pain coping skills + behavioral weight modification to each intervention individually (Somers et al., 2012) for obese pts with osteoarthritis
  – Combined group led to better outcomes

• Current sample
  – BMI mean = 31
  – Borrow from MOVE and other lifestyle programs?
Questions?
Amy Helstrom, Ph.D.
Philadelphia VA Medical Center
3900 Woodland Ave.
Philadelphia, PA  19104

Amy.helstrom@va.gov

215-823-4164