

# Pain Management and PACT

# Overview

- Chronic pain in primary care
- Integrating pain care management with PCMH 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  $\geq 3$ -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)

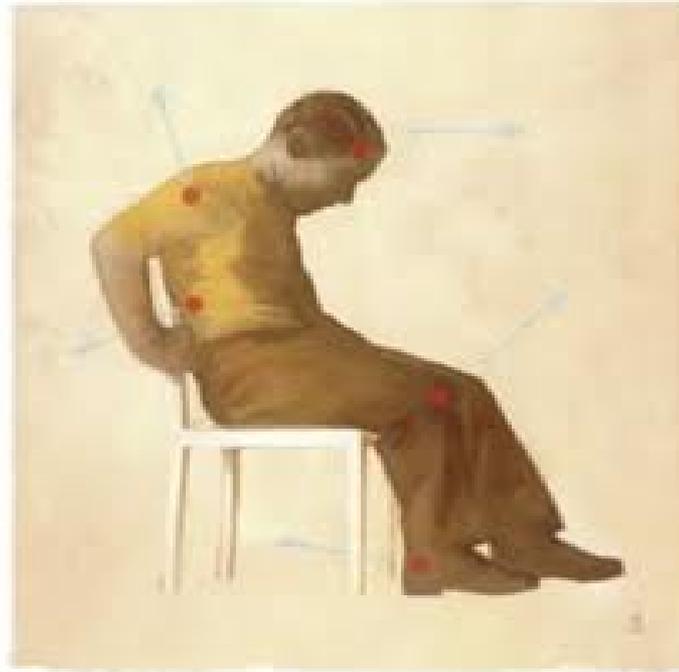
# The Challenge of PC Providers in Helping Veterans with Pain

- 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

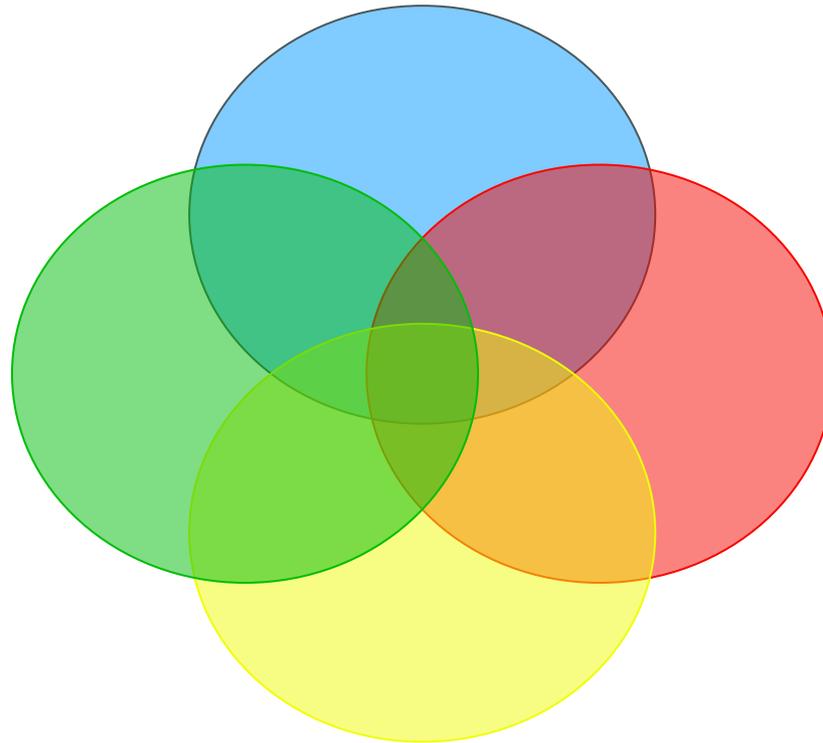
- Treating depression for patients with both pain and depression linked with:
  - decreased pain
  - improved functional status
  - Improved quality of life

# BIOPSYCHOSOCIAL MODEL OF PAIN

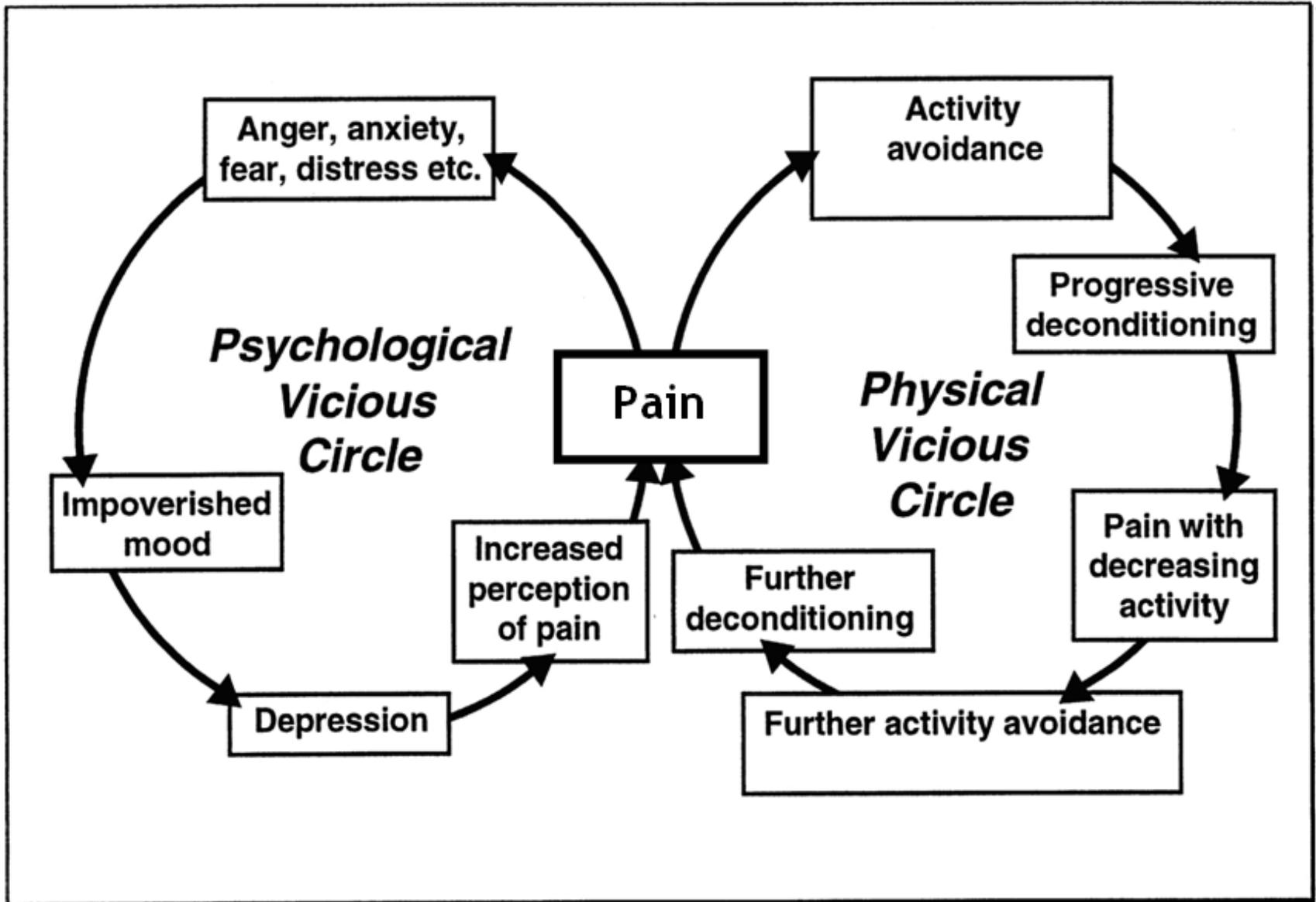
**Social Factors**

**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

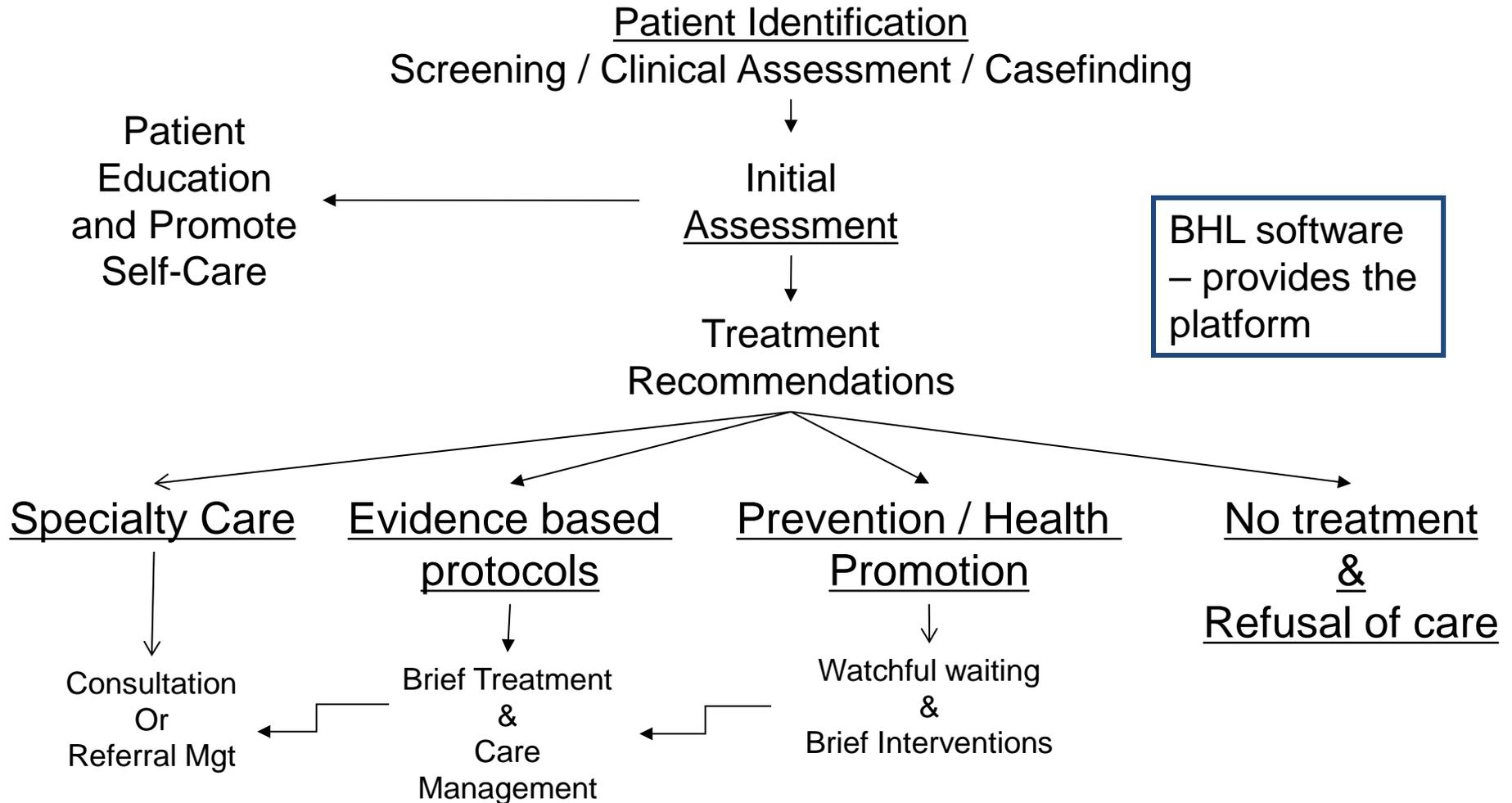
# The Behavioral Health Lab (BHL)

- 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



# 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)

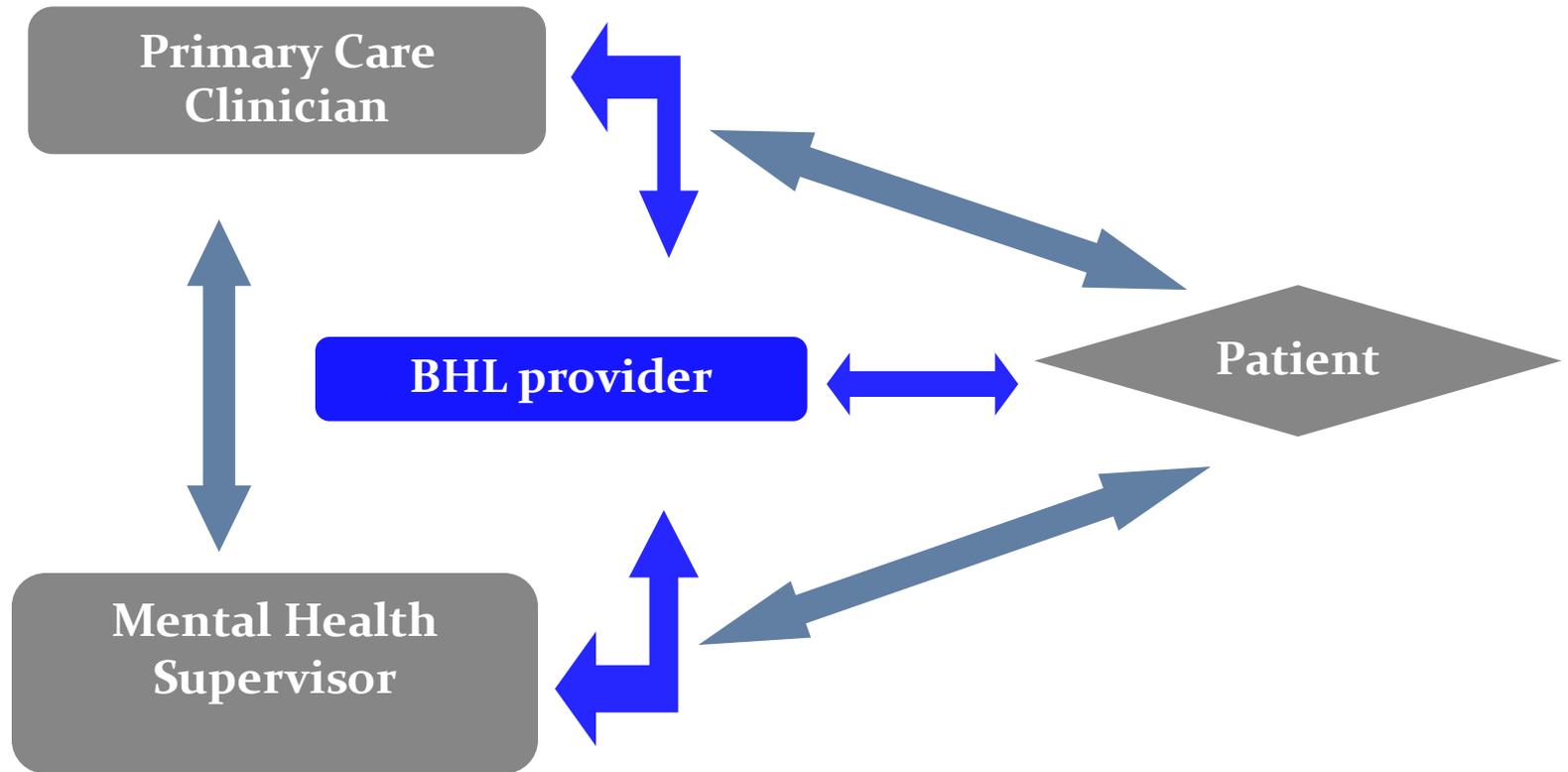
# Behavioral Health Lab Interventions

- 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

Behavioral Health Lab - Ver. 4.0.2 (1030) - User: admin

Patient Functions Admin Functions

**Patient History and Information**  
Name: **Betty Boop** Mr Id / SSN: **156-41-2644** Primary Phone: (1

**Previous Episode History**

- Care Management [Open]
  - Window #1 (Ends: 3/6/2012)
- Care Management
  - Window #1
    - Contact
    - Interview
- Care Management
  - Window #1
    - Contact
- Care Management
  - Window #1
    - Contact
    - Contact
    - Contact
    - Interview

**Available Actions**  
Patient has an active Care Manager

**Domains**  
You have requested to change the domains related to this episode. Items highlighted are the originally selected items:

Choose Domains

- Depression Symptoms
- Anxiety Symptoms
- Alcohol Symptoms
- Pain Symptoms
- Referral Management
- PTSD / PCL

Save Domains

**Detail**  
Open Time: 9/2/2009  
Close Time: Still Open  
Status: Open

Enrolled By: H T  
Enrollment: Normal  
Referred By: Joe

**Patient Health**  
 Mark for supervision  
Current PHQ=7 Date = 9/20/2010  
Graph PHQ

Patient Action: Choose One Run

Return to Search

**GraphDisplay: Right click the graph for more options**

**Past PHQ values**

Date of interview	PHQ Score
10/1/09	4
12/1/09	10
2/1/10	16
4/1/10	18
6/1/10	20
8/1/10	21
10/1/10	7

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# Helping Veterans Manage Chronic Pain

- Center for Evaluation of PACT (CEPACT) funded
  - Investigators:
    - Amy Helstrom, PhD.
    - Johanna Klaus, Ph.D.
    - David Oslin, M.D.
  - Research Team:
    - Natacha Jacques, MA
    - Melissa Correa, BA
- Intervention Team:
- Kristyna Bedek, PsyD
  - Sherry Coccozza, RN
  - Lisa Dragani, RN
  - 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 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 PCMH 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

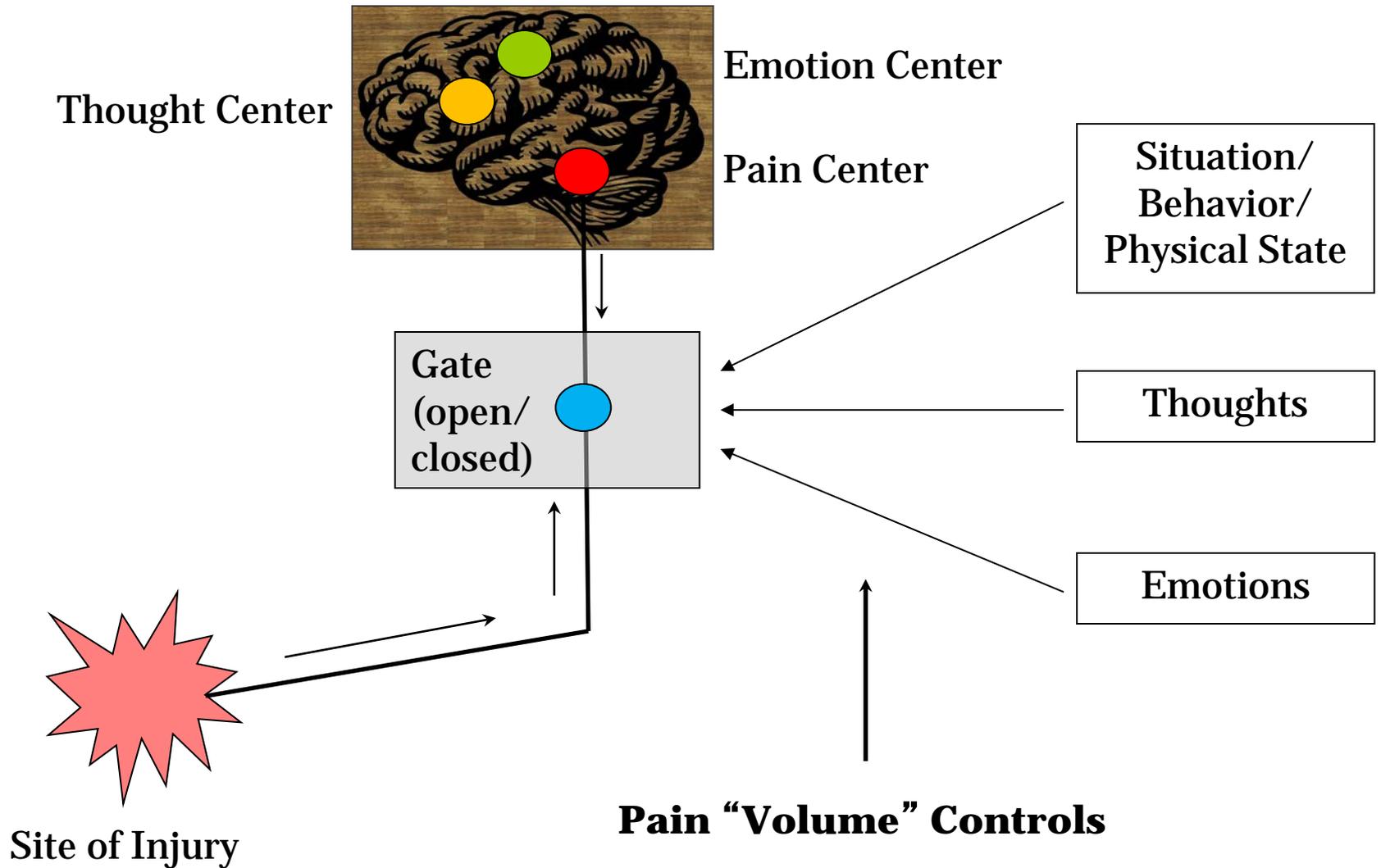
# Usual Care

- 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



# 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

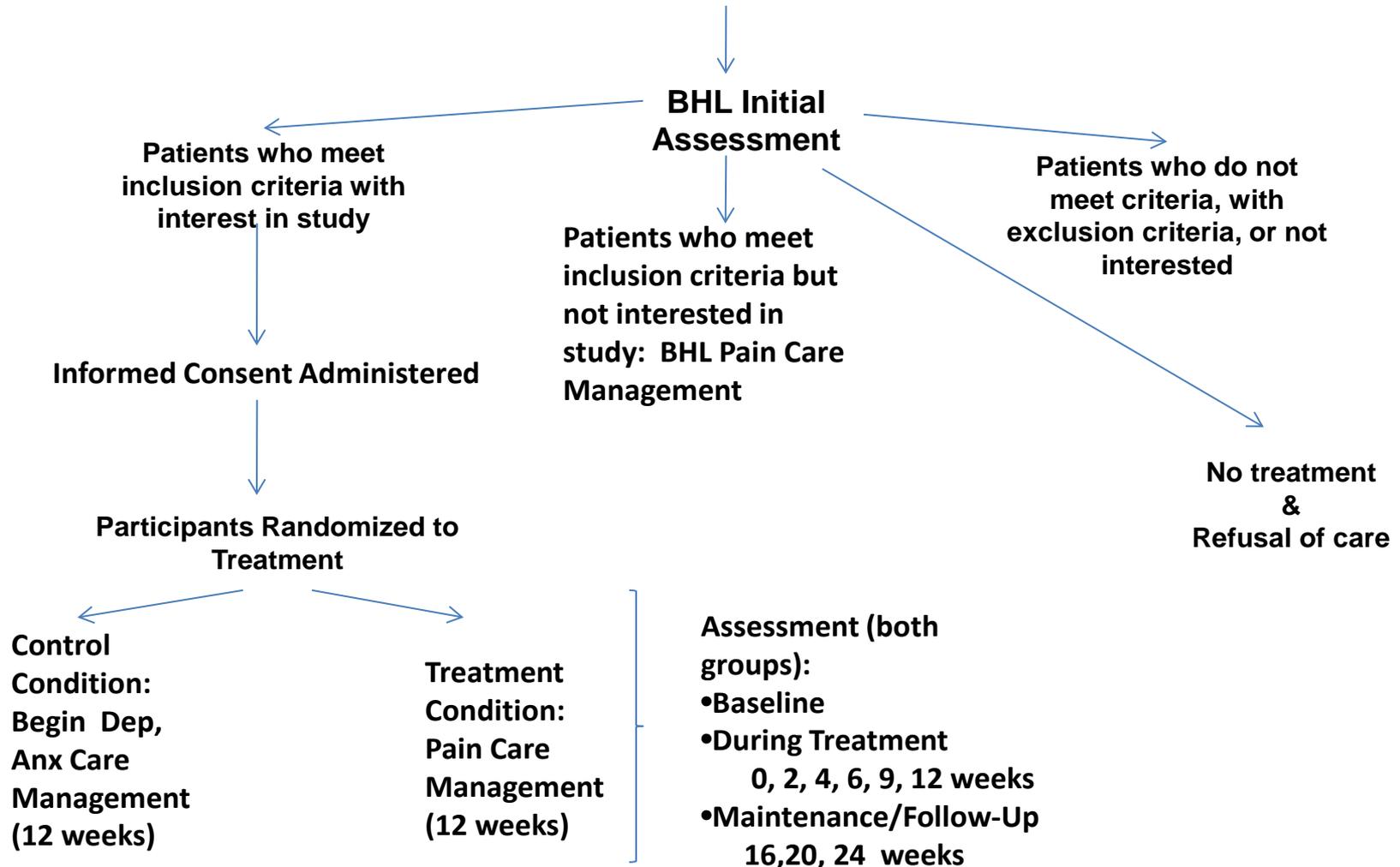
- Use of BHL software
- Referral to specialty care
- Consultation with psychiatrist
- Collaboration with PCP

# 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



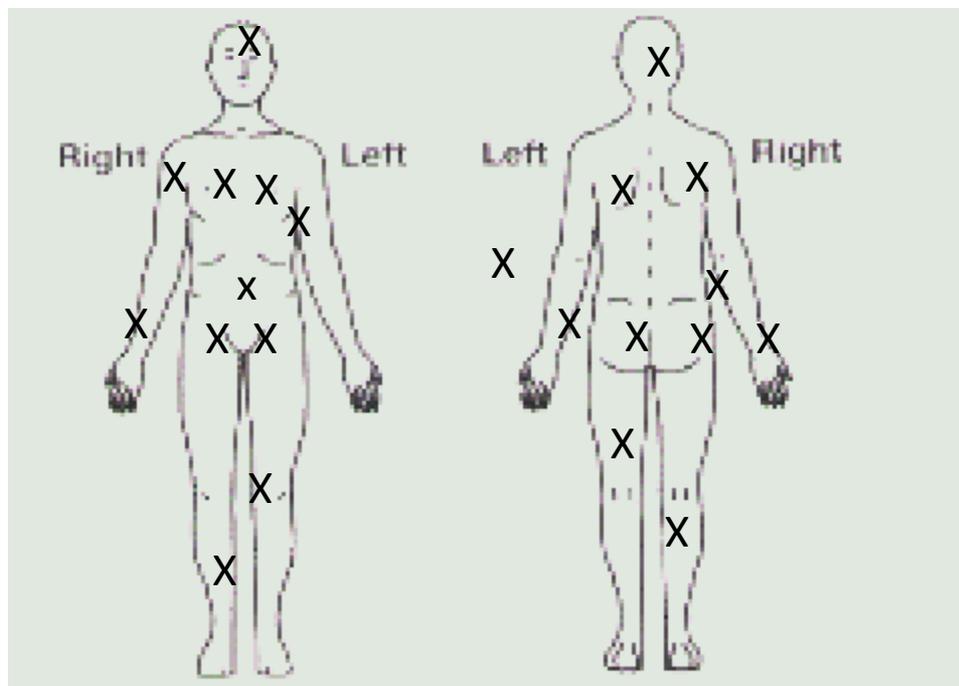
# Participants

- 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 ( $\geq 5$  on 0-10)?
  - 96%
- What has been your avg interference due to pain in the last 24 hours ( $\geq 5+$  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

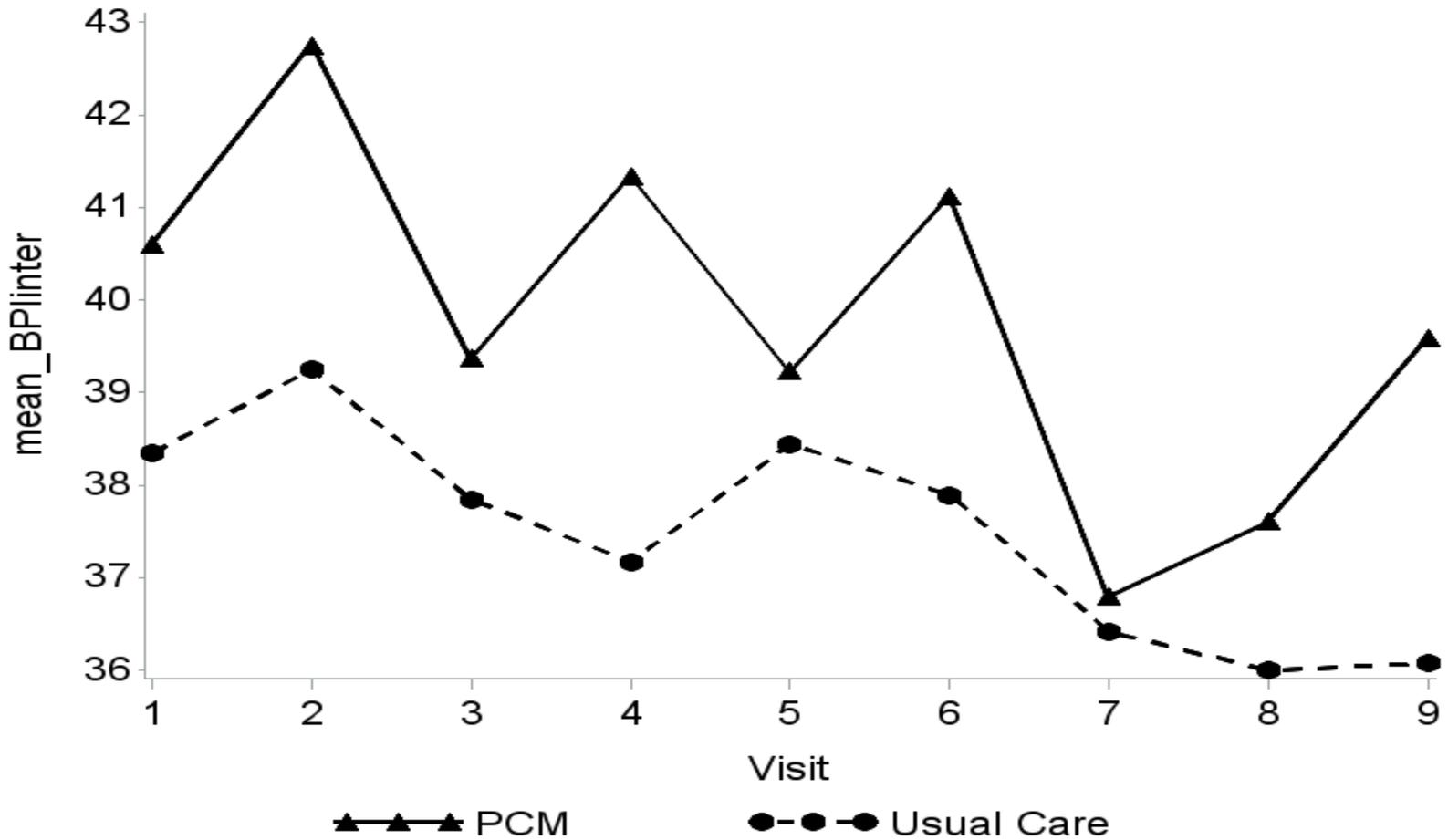
# Participant Characteristics: Psychological Variables

PHQ-9 Depression Score, %	
Moderately-Severe & Severe	49.5
Moderate	27
AUDIT-C score $\geq 6$ , %	9
GAD-7; % Severe	33
Depression, Anxiety, Stress, %	
Mod-Extremely Severe	
Depression	24
Anxiety	32
Stress	16

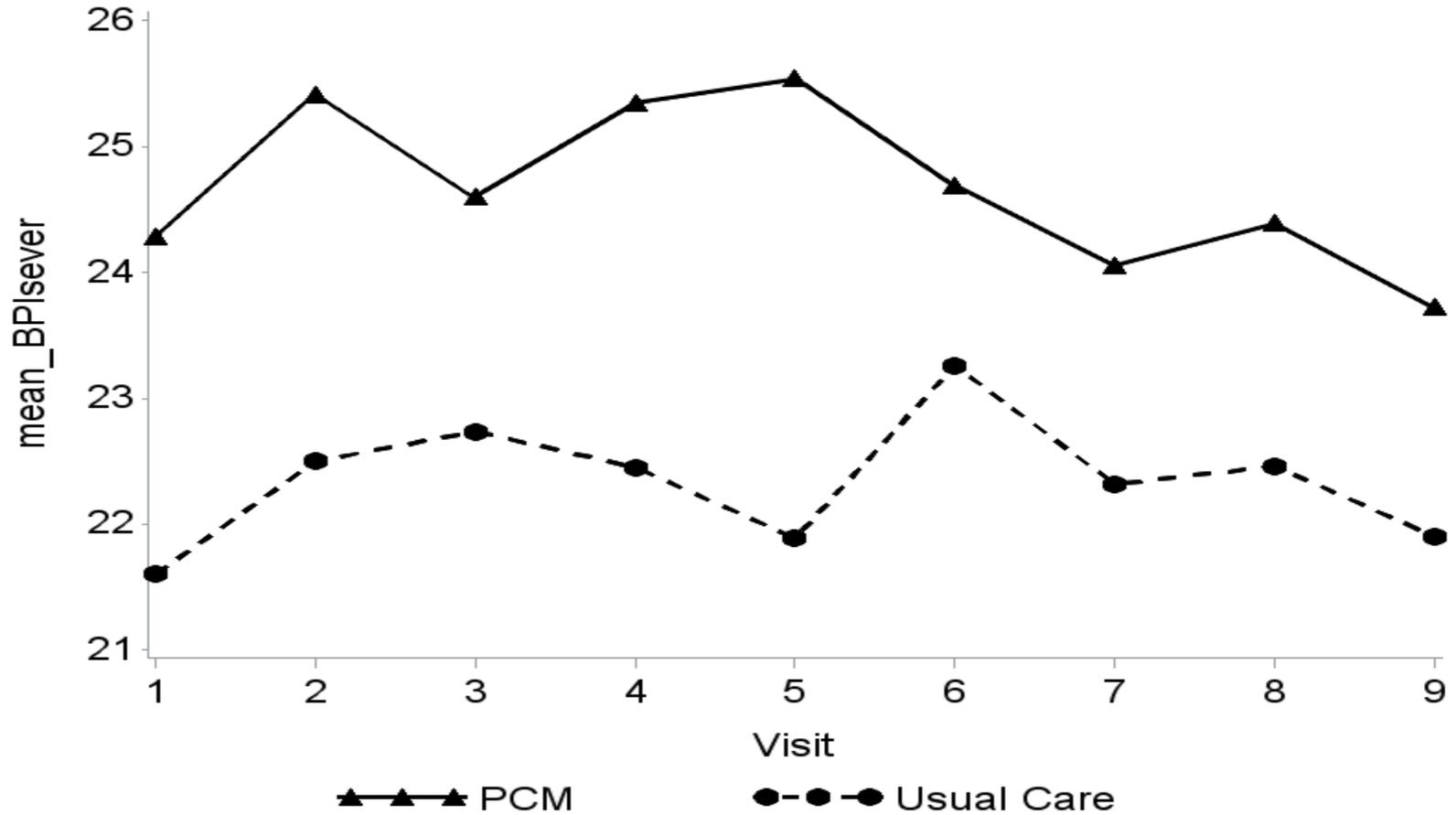
# Preliminary Results

- No differences between groups
  - Pain variables
  - Psychological variables
- Both groups improved over time

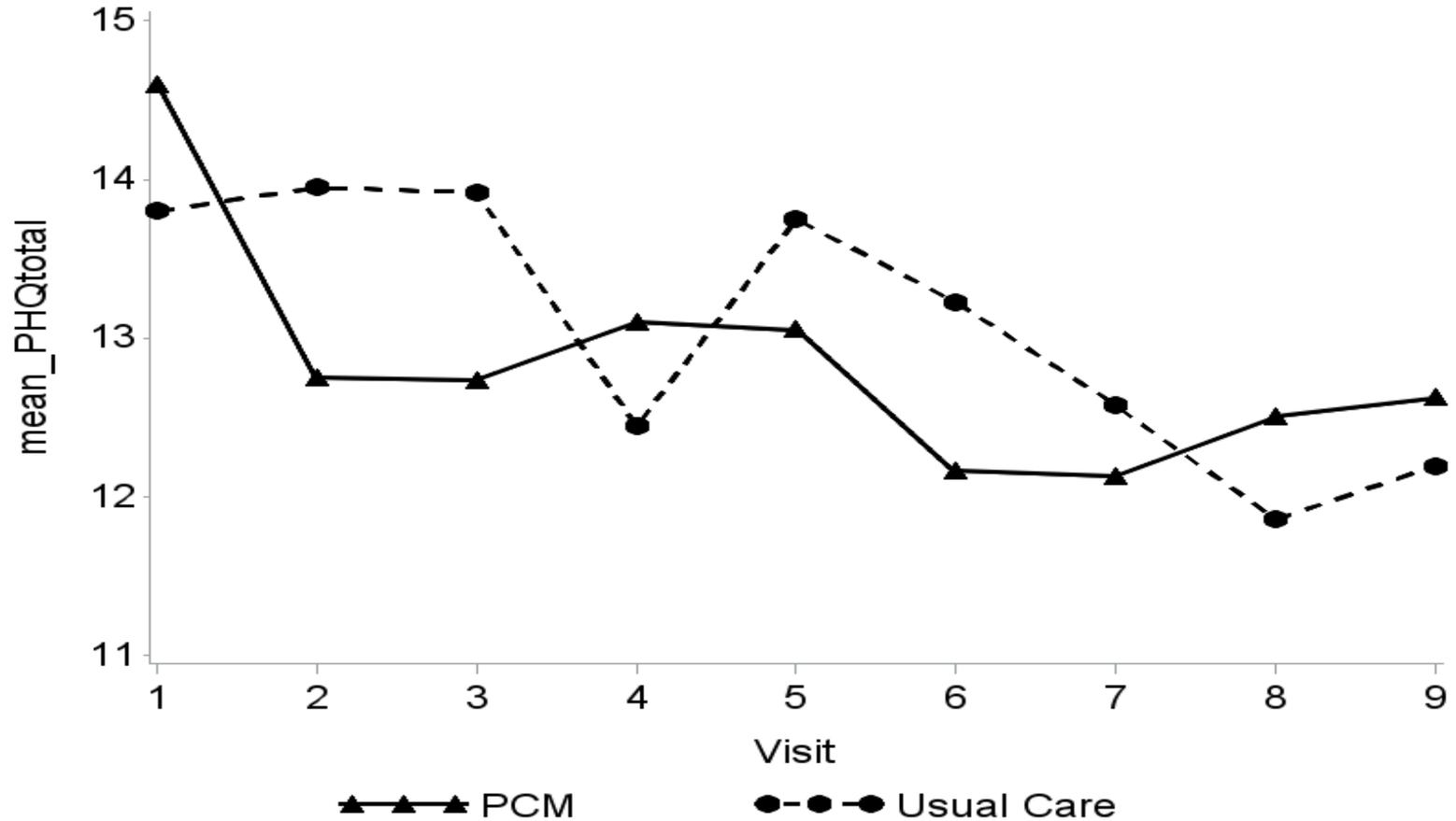
# Pain Interference



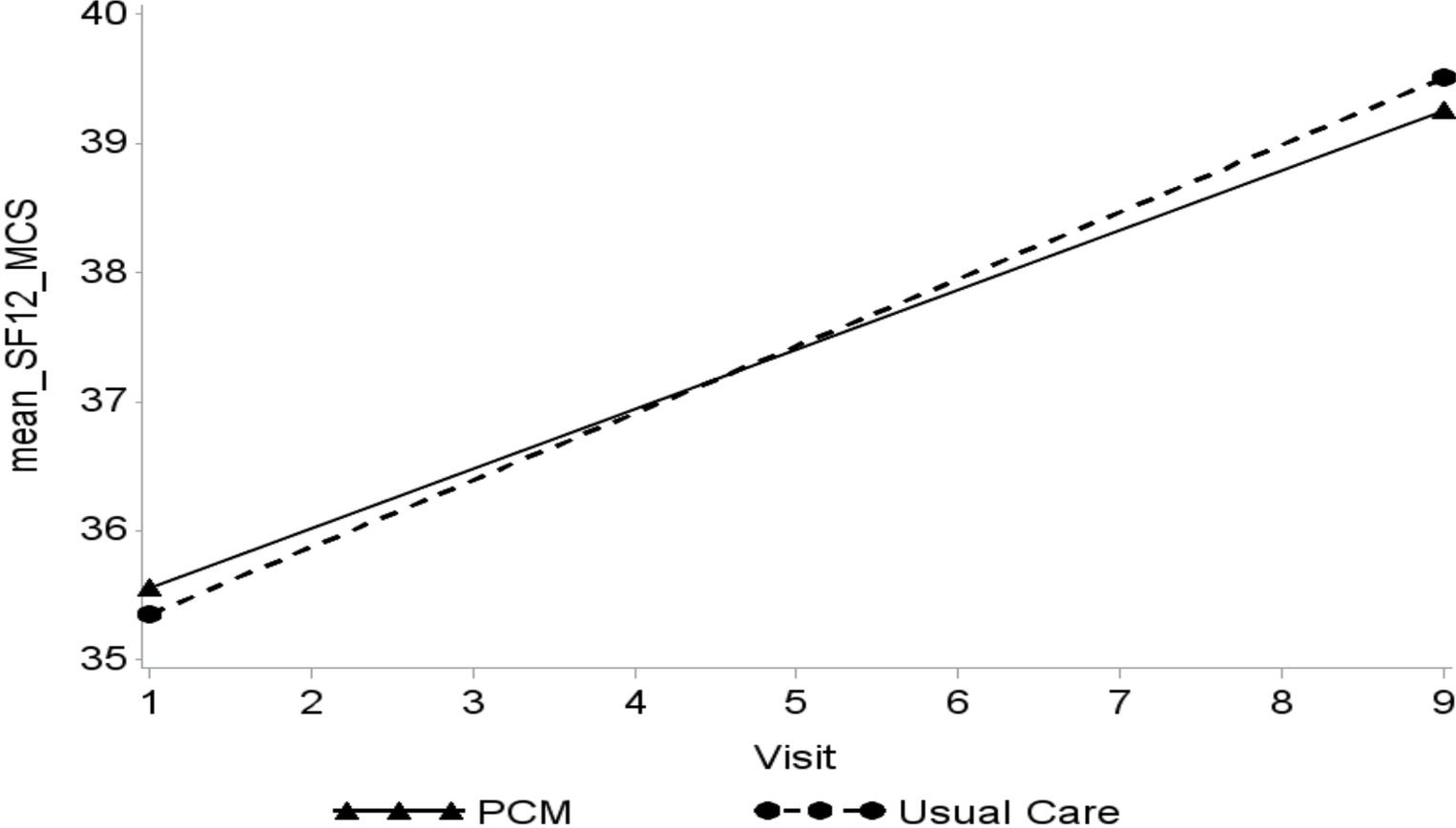
# Pain Severity



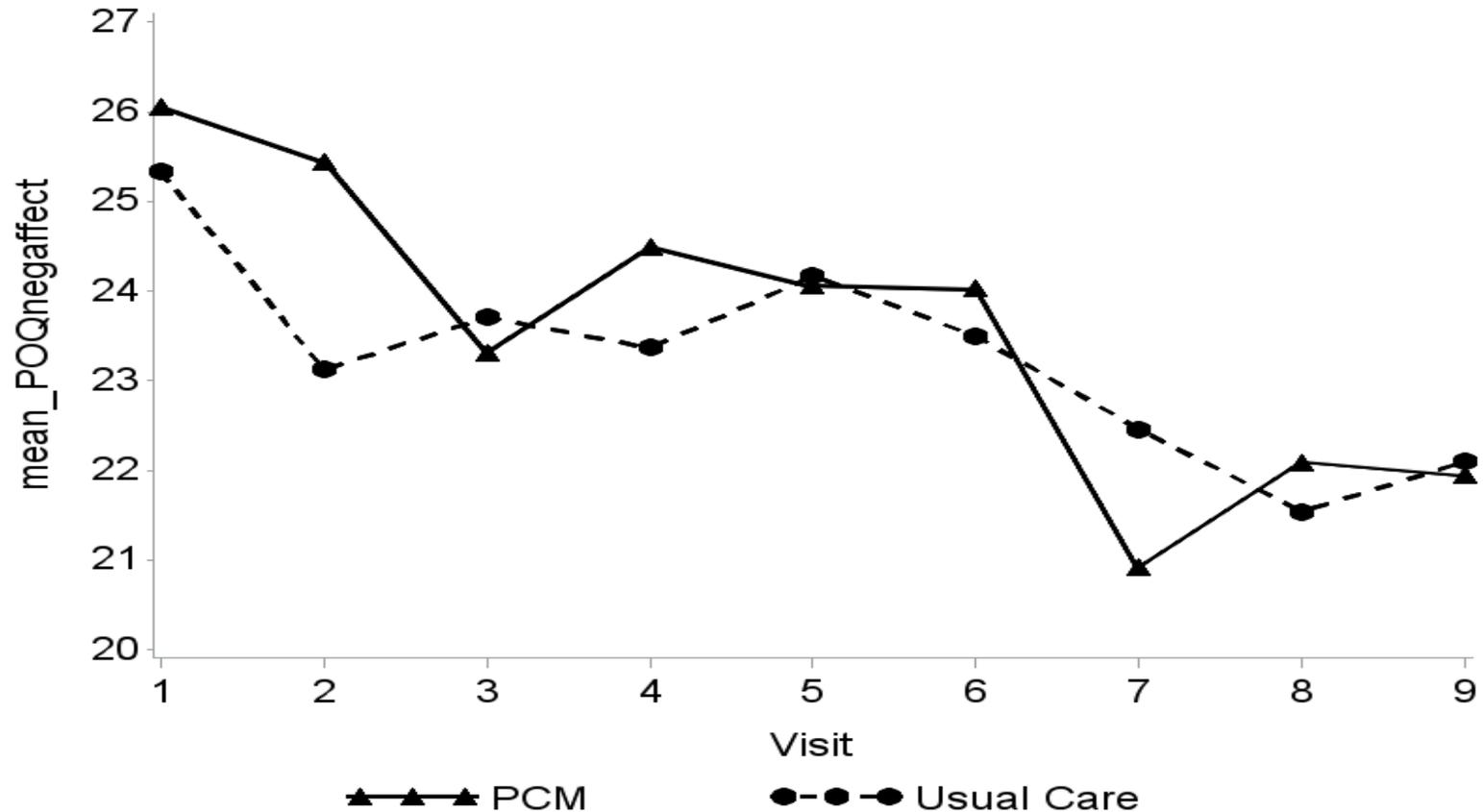
# Depression



# Quality of Life: Mental Health



# 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?

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