Leveraging Partnerships to Develop Brief Cognitive Behavioral Therapy for Chronic Pain (Brief CBT-CP): Addressing the Needs of the System, Provider, and Patient

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Faculty Disclosure

The presenters of this session have NOT had any relevant financial relationships during the past 12 months.
Conference Resources

Slides and handouts shared in advance by our Conference Presenters are available on the CFHA website at http://www.cfha.net/?page=Resources_2018

Slides and handouts are also available on the mobile app.
Learning Objectives
At the conclusion of this session, the participant will be able to:

1. Describe the content and goals of Brief Cognitive Behavioral Therapy for Chronic Pain (Brief CBT-CP), a treatment designed for the Primary Care Behavioral Health setting

2. Discuss the implications of preliminary findings from a formative evaluation that addresses both implementation factors and effectiveness of Brief CBT-CP

3. Identify how operations, clinical, and research partnerships can advance the development and testing of interventions for integrated primary care
Bibliography / Reference

Learning Assessment

A learning assessment is required for CE credit.
A question and answer period will be conducted at the end of this presentation.
Disclaimer

• The information provided in this presentation does not represent the views of the Department of Veterans Affairs or the United States Government
• No conflicts of interest to declare
Overview

• Prologue
• Partnerships: How Brief CBT-CP Began
• Part 1: Brief CBT-CP Protocol Development
• Part 2: Brief CBT-CP Clinical Demonstration Project
• Part 3: Brief CBT-CP Next Steps
• Reflections on Partnerships
• Discussion
In 2011, the Institute of Medicine released *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. Chronic pain affects about 100 million American adults—more than the total affected by heart disease, cancer, and diabetes combined.

Pain has a significant impact on the VA healthcare system with 50% or more of Veterans in primary care reporting pain.

Chronic pain has been associated with a range of disabling health outcomes:
- Diminished functional status, lower quality of life, and increased psychological distress.

Patients with chronic pain have been shown to be more frequent utilizers of primary and specialty care:
- Many opportunities to address pain from a biopsychosocial perspective.

VA Stepped Care Model for Pain

**Step 1**
- Self Care
  - Nutrition/Weight Management, Exercise/Conditioning, and Sufficient Sleep
  - Mindfulness Meditation/Relaxation Techniques
  - Engagement in Meaningful Activities
  - Family and Social Support
  - Safe Environment/Surroundings

**Step 2**
- PCBH

**Step 3**
- Secondary Consultation
  - Multidisciplinary Pain Medicine Specialty Teams
  - Rehabilitation Medicine
  - Behavioral Pain Management
  - Mental Health SUD Programs

**Step 4**
- Tertiary, Interdisciplinary Pain Centers
  - Advanced Pain Medicine
  - Diagnostics and Interventions
  - CARF Accredited Pain Rehabilitation

**Risk**
- Complexity
- Treatment Refractory
- Comorbidities
Unmet Needs

• **Cognitive Behavioral Therapy (CBT) for chronic pain has a well-established evidence base in specialty settings**\(^1,2\)
  – Brief versions of CBT-CP offered in non-mental health settings are effective\(^3\)
  – CBT is the preferred treatment approach identified by VA PCBH providers\(^4\)

• **However, there has no widely accepted protocol for CBT for chronic pain that is well-suited for PCBH**

• **The gap in biopsychosocial treatment for chronic pain in primary care can have multilevel impact**
  – Patients do not receive biopsychosocial care for chronic pain (or only receive it much later)
  – PCBH providers (and primary care teams) do not have the tools/support to treat pain effectively
    • Biopsychosocial pain treatment may be de-prioritized
  – System cannot implement stepped care; difficult to contain costs, improve care quality, etc.

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Partnerships: How Brief CBT-CP Began
Partnerships: The Brief CBT-CP Bunch
Getting Started: Roles, Goals, Challenges, and Opportunities

• Operations partner and CIH Leadership (Andy and Laura):
  – Develop and disseminate a brief intervention for use in PCBH to address chronic pain
• CIH Role (Greg, Paul, Kathy, and Lisa):
  – As pain and integrated care experts, shape the adaptation of CPT-CP
• Initial project status (Jen):
  – Developer of full-length CBT-CP, agreed to partner with CIH

• Challenges:
  – Building new relationships
  – Resource limitations: time, staff, etc.

• Opportunities:
  – Building new relationships
  – Potential for impacting the field
  – Research, evaluation, and implementation relevance
Discussion

• Within your own systems, what specific divergent needs in pain management might be present for these stakeholders:
  – Leadership/administration?
  – Primary Care Team members (e.g., PCPs, Nursing, Interdisciplinary team members)?
  – Mental Health team members?
  – Other services (pharmacy, physical therapy, patient advocate services, etc)?
  – Patients and family members?
  – Community?

• How can you proactively attend to building collaborative partnerships across these stakeholders?
  – What facilitators need to be present?

• What barriers are present and how do you overcome them?
Part 1: Brief CBT-CP Protocol Development
Developing Brief CBT-CP: Partnership Process

• **Timeline:** November 2015 to November 2016
• **Goal:** Adapt VA’s gold standard full length CBT for pain protocol for us in integrated care

• **Key strengths**
  – Team expertise and commitment to task
  – Desire to respond to VA leadership

• **Key barrier**
  – Time required to adapt the protocol and develop new content

• **Partnership strengths and tensions**
  – Over time, shared goals and trust developed among key authors (Greg, Jen, Paul, and Kathy)
    • Negotiation regarding final content
    • Multiple discussions about the ownership of products
  – Frequent discussion with leadership (Andy, Laura) regarding scope and timelines

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Brief CBT-CP: Manual Development Process

1. **Specified the goals and scope of the manual**
   - No more than six, 30-minute sessions to align with PCBH
   - Modular approach

2. **Review of the literature to guide modifications**

3. **Identified components to add, retain without modification, adapt/condense, or remove**
   - Retained core psychoeducation, behavioral, and cognitive components
   - Condensed content by simplifying concepts/examples
   - Eliminated “optional” content, e.g., addressing sleep disturbance
   - Added implementation support for providers

4. **The team exchanged drafts for feedback from the group over the course of the year**

5. **After incorporating feedback from external reviewers, we finalized the protocol**
The Final Product: Brief CBT-CP Goals and Target Population

• **Intervention goals**
  – Promote self-management and improve pain self-efficacy
  – Reduce functional limitations
    • Secondarily, reduce self-reported ratings of pain intensity

• **Target population: Primary care patients**
  – Moderate functional impairment and distress
  – Stable analgesic medication regimen
  – No active substance use disorder
  – No severe mental health disorder impacting overall function or suggesting imminent safety risk
  – Receptiveness to non-pharmacological self-management approaches for pain
Protocol Contents

• **Introductory chapters on basics of pain/biopsychosocial model/CBT**

• **CBT content in modular format**
  – Modules 1 (education/goal-setting) and 6 (pain action-planning) are anchors
  – Modules 2-5 may be presented according to patient preference and/or clinical judgment
  – Each module follows a similar structure
    • Briefly introduce new topic
    • Check mood and complete patient outcome measures
    • Brief review of material from previous module
    • Introduce new material and at-home practice
    • Wrap-up

• **Patient handouts**
  – Derived from full length protocol

• **Appendices**
Treatment Modules

1. **Education & Goal Identification:**
   - Acute versus chronic pain, factors that impact pain, the chronic pain cycles, SMART goals

2. **Activities & Pacing:**
   - Addressing fear of movement, pacing of activities, and avoiding withdrawal or disengagement

3. **Relaxation Training:**
   - Deep breathing exercises and progressive muscle relaxation

4. **Cognitive Coping 1:**
   - Identifying Automatic Negative Thoughts (ANTs) and their role in chronic pain

5. **Cognitive Coping 2:**
   - Modifying ANTs and using coping statements

6. **Pain Action Plan:**
   - Reviewing progress made, skills acquired, and determining needs for future success
Protocol Feature: Therapist Guides

- Therapist guides provide a step-by-step outline of how to approach each module in session with Veterans

- Guides include several components:
  - **Scripting**: To illustrate how to convey core module content or key steps in treatment to the patient
  - **Key points**: Brief descriptions of the critical concept or principle to relate to patients
  - **Notes to the provider**: Practical suggestions/recommendations

Activities and Pacing
Therapist Guide and Patient Handouts

Note to providers: Scripted statements are provided below as suggestions, rather than rules, of how to introduce topics to patients. Scripting can be especially helpful for those providers who are new to the content of CBT for pain. Feel free to modify the scripting as needed so you become more comfortable with core elements of each module.

1. Introduce Module and Confirm the Agenda
   Scripting includes:

   - “Today we will discuss how to safely engage in activities through pacing. This topic is important because it helps us to keep active but avoid “overdoing it.” As you may have experienced, over activity can often lead to pain flare-ups that can last for days. It’s also very important for individuals with pain to stick with enjoyable or pleasant activities, or find new ones, because this helps lower our level of distress and makes life more fulfilling.”

   - “First, I will ask you to complete our usual measures about your pain and related issues so we can continue to track your progress. Next, I would like to do some follow-up from our last module, then move into our new topic about activity pacing. How does that sound to you? Are there other things relevant to our pain work that you want to be sure to cover today?”

   Note to providers: If the patient is inclined to add items to the agenda that are not related to pain management, the first effort on behalf of the therapist may be to link the topic back to pain. For example, a statement such as the following may be helpful to refocus the patient: “That sounds like it was stressful. Did you notice that your pain worsened during that time?”

2. Check on Mood and Complete Patient Measures (Table 4)
   - PES
   - PSEQ

   Note to provider: If this is the midpoint of care for this patient, also include the MPI-INT
Measurement-based Care

• Routine use of brief, patient-reported outcome measures was explicitly incorporated
  – Essential for identifying patients who are/not responding to treatment, facilitate “stepping up” to a higher level of care\(^1,2\)

• PEG\(^3\)
  – Assess pain intensity (P), interference in enjoyment of life (E) and general activity (G)

• PSEQ-2: Pain Self-Efficacy Questionnaire-2 Item \(^4\)
  – Confidence in performing activities despite pain

• WHYMPI-INT: West Have Yale Multidimensional Pain Inventory-Interference \(^5\)
  – Interference of pain in various areas such as work, daily activities, and relationships
Part 2: Brief CBT-CP Clinical Demonstration Project
Protocol Complete! Now what?

• One year later, it was time to evaluate our team goals, specific roles, and response to leadership

• Research goal: Begin grant applications, conduct pilot studies, etc.
  – We need funding to conduct this research
  – We want to evaluate to evaluate Brief CBT-CP feasibility, effectiveness, etc. before implementation

• Leadership/Operations partner goal: Disseminate!
  – Patients need care now, yesterday, a few years ago;
  – PCBH providers need support/materials/etc.

• The compromise: Clinical demonstration project with two components
  – Targeted implementation process (disseminate)
  – Collect data on processes and outcomes (evaluate)
Leveraging Partnerships to Ensure Success During Implementation

• Our core workgroup (Greg, Paul, Kathy, Jen) developed a solid working relationship
  – Lisa joined to add Education support

• These partnerships, and our connections to leadership (Andy and Laura), were a must for continued success
  – Greg and Kathy: Implementation plan and specific strategies
  – Greg and Paul: Evaluation plan, including assessments and data collection strategies
  – Greg, Jen, Kathy, and, Lisa: Subject matter expertise for training providers
  – Andy and Laura: Marketing and engaging the field

• In response to a request from leadership, find the opportunity to achieve personal and professional goals
  – E.g., Creating a manual pushed forward a line of pain research

• Partnership and good working relationships engender communication and opportunities to negotiate
Clinical Demonstration Project: Timeline and Participants

- **Timeline: December 2016 to January 2018**
  - December 2016
    - We selected PCBH providers (n=62) who were already trained in full length CBT-CP
  - January and February 2017
    - We conducted webinars to introduce Brief CBT-CP
  - February through November 2017
    - We conducted provider surveys and Community of Practice Calls
  - January 2018
    - Final data collection
Implementation Approach: EBSIS

- Strategies for implementation were adapted from the Evidence-based System for Innovation Support (EBSIS) (Wandersman, et al., 2012)
- Tools
  - Brief CBT-CP treatment manual and standardized note templates for the electronic medical record
- Training
  - Orientation calls were 60-minute webinars and included:
    - Introduction to goals/rationale, manual content and structure, themes for integrated care success, and evaluation process
- Technical Assistance
  - Community of Practice (CoP) Calls
    - Included brief didactics following by in-depth discussion/Q&A
    - The format changed based on the needs of the group
  - Email and phone consultations
- Quality Improvement
  - Program evaluation process
• While engaged in implementation activities, we were also capturing data from both providers and patients

• Evaluation goals:
  – 1) Determine feasibility of delivering Brief CBT-CP, and
  – 2) Assess patient satisfaction and effectiveness of Brief CBT-CP

• Design: Elements of process and outcome evaluation
  – Process evaluation: On-line surveys regarding strengths, weakness, barriers, facilitators
  – Outcome evaluation: Patient reported outcomes collected during each session; anonymous patient survey
“If you have encountered any barriers to recruiting and retaining patients in Brief CBT-CP, please select the most prominent barrier to date from the list below...”

<table>
<thead>
<tr>
<th>Barrier</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with chronic pain are too complex to address in primary care</td>
<td>11 (26.8%)</td>
</tr>
<tr>
<td>I did not receive enough referrals from primary care teams</td>
<td>9 (22.0%)</td>
</tr>
<tr>
<td>Patients were not receptive to the intervention</td>
<td>8 (19.5%)</td>
</tr>
</tbody>
</table>

n=41 providers (67% response)
Results: Key Qualitative Feedback

• Several approaches were identified that increased the likelihood of more/better referrals
  – Chart review to identify patients (i.e., case finding)
  – Collaborating with primary care pharmacists
  – Flyers/advertising

• Requests for additional products
  – Patient workbook
  – One-page overview of sessions
  – Group protocol
Patient Outcomes (n=118)

- We supplied providers with an Excel file in which to record patient reported outcome data for the PEG, PSEQ-2, and WHYMPI-INT

- **Patient Characteristics**
  - Average age was 51.4 years ($SD = 12.7$)
  - Primarily male (75%)
  - Baseline Numeric Rating Scale for pain score was 7.2 ($SD = 1.5$)
  - Majority of pain concerns were due to musculoskeletal conditions of the back and/or neck (60%)
  - Majority of patients (84%) had at least one diagnosed co-morbid mental health disorder (e.g., depression)
  - Patients completed 4.9 sessions ($SD = 1.6$) of Brief CBT-CP
Patient Outcomes

- Patient reported outcome data showed statistically significant improvement in pain-related activity interference as measured by the PEG (d = 0.65) and PSEQ-2 (d = 0.22)
• When completing their final session of Brief CBT-CP, clinicians provide Veterans with a satisfaction survey and a business reply envelope
  • Patient demographics, treatment information, usefulness of treatment, and overall satisfaction
• The survey was voluntary and anonymous
### Results: Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>Age</em> (Mean (SD))</em>*</td>
<td>55.6</td>
<td>9.9</td>
</tr>
<tr>
<td>Male</td>
<td>21</td>
<td>67.7</td>
</tr>
<tr>
<td>White race</td>
<td>17</td>
<td>54.8</td>
</tr>
<tr>
<td>Married</td>
<td>18</td>
<td>58.1</td>
</tr>
<tr>
<td>Currently employed</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School or less</td>
<td>8</td>
<td>26.0</td>
</tr>
<tr>
<td>College</td>
<td>15</td>
<td>48.8</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>8</td>
<td>25.8</td>
</tr>
<tr>
<td>Service-connected disability</td>
<td>26</td>
<td>83.9</td>
</tr>
<tr>
<td>Ever prescribed opioids</td>
<td>22</td>
<td>71.0</td>
</tr>
</tbody>
</table>

*Mean (SD)
**Results:** To what extent was the content easy to understand?

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Moderately</th>
<th>Completely</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education/Goals</strong></td>
<td>0</td>
<td>0</td>
<td>3 (10.3)</td>
<td>25 (86.2)</td>
</tr>
<tr>
<td><strong>Activities/Pacing</strong></td>
<td>0</td>
<td>0</td>
<td>2 (6.7)</td>
<td>26 (86.7)</td>
</tr>
<tr>
<td><strong>Relaxation</strong></td>
<td>0</td>
<td>1 (3.3)</td>
<td>3 (9.7)</td>
<td>25 (80.6)</td>
</tr>
<tr>
<td><strong>Cognitive</strong></td>
<td>0</td>
<td>0</td>
<td>4 (12.9)</td>
<td>26 (83.9)</td>
</tr>
<tr>
<td><strong>Action Planning</strong></td>
<td>1 (3.3)</td>
<td>0</td>
<td>5 (16.7)</td>
<td>24 (77.4)</td>
</tr>
</tbody>
</table>

Values presented as *n (%)*
## Results: Appointments

<table>
<thead>
<tr>
<th></th>
<th>Too few</th>
<th>Just right</th>
<th>Too many</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of appointments</strong></td>
<td>4 (12.9)</td>
<td>27 (87.1)</td>
<td>0</td>
</tr>
<tr>
<td><strong>Length of appointments</strong></td>
<td>5 (16.1)</td>
<td>26 (83.9)</td>
<td>0</td>
</tr>
</tbody>
</table>

Values presented as \(n\) (%)
## Results: Utility/Satisfaction

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all</th>
<th>Somewhat</th>
<th>Moderately</th>
<th>Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>How useful was the content of Brief CBT-CP?</td>
<td>1 (3.2)</td>
<td>2 (6.5)</td>
<td>9 (29.0)</td>
<td>19 (61.3)</td>
</tr>
<tr>
<td>How satisfied were you with Brief CBT-CP?</td>
<td>1 (3.2)</td>
<td>3 (9.7)</td>
<td>6 (19.4)</td>
<td>21 (67.7)</td>
</tr>
</tbody>
</table>

Values presented as n (%)
Summary

• **Key factors impacting front line implementation**
  – System-level: Limited referrals from PCPs suggest that the success of implementing Brief CBT-CP may be impacted, in part, by degree of clinic/system integration
  – Provider-level: PCBH providers questioned how to address patient complexity in integrated care
  – Patient-level: Buy-in/engagement can be a challenge
  – Protocol-level: Modular approach was useful; Six sessions may be too lengthy for PCBH

• **Patient outcomes**
  – Patient acceptability and satisfaction with treatment was moderate to high
  – Changes in key patient outcomes as measured during routine care suggest potential for an effective intervention
Part 3: Brief CBT-CP Next Steps
Next Steps: VA-funded RCT

• VA Rehabilitation Research & Development funded RCT
  – Aim 1: Conduct a pilot RCT primary care TAU plus Brief CBT-CP compared to TAU only to assess feasibility
    • Exploratory sub-aim: Examine changes in pain-related activity interference and secondary patient outcomes
  – Aim 2: Explore primary care stakeholders’ (patients, PCPs, and PCBH providers) perceptions of acceptability and appropriateness of Brief CBT-CP

• Currently recruiting
Next Steps: 2018 Clinical Demonstration Project

- **Immediate goal:** Train a cohort of PCBH providers who have limited experience with pain management
- **Secondary goal:** Provide evidence that non-experts can administer Brief CBT-CP
- **N=28** PCBH providers
  - Completed the baseline and 3-month assessments of VA’s National PCMH Competence Training program
  - Prior training in CBT, but limited prior experience with CBT-CP
- Orientation call was held in September 2018
- Mid-point and final surveys in November 2018 and January 2019
Next Steps: CIH Protocol Portal

- Brief CBT-CP is being disseminated throughout VA via CIH’s Brief Evidence Informed Interventions Portal
- Launched October 2018
- Contact us for more details!
Next Steps: More Partnerships

• Brief CBT-CP has been modified for implementation at Department of Defense integrated care sites
• Currently sharing lessons learned and identifying opportunities for collaboration
Brief CBT-CP: Reflections on Requests and Relationships
“Our experience supports the need for partnerships between these groups to close the gap between implementation knowledge and its use in clinical initiatives that foster adoption and spread of evidence based practices. Our experiences are one of how this can be done and confirm that partnering relationships are most effective when they include two-way communication, negotiation and a common understanding of partnership issues, and attention to meeting partners’ needs, timelines, and limits.”

• Partnerships emerge over time
• Each group should inform the work of the other partner
• The product is better when it evolves through iterative conversations:
  – Highly responsive to the needs of the field and partners
  – Increased dissemination and field-familiarity with evidence-informed product
  – Continues to help guide education and implementation efforts, which will in turn, provide feedback for continued development and refinement of products
What Makes Collaborations Work?

- Dedication to the topic
- Collaboration and conversation
- Correct mix of expertise, and flexibility to seek out additional expertise when needed
- Recognizing an opportunity and being inclusive from the beginning
- Implementation Science as common ground
- Identified Need
- Responding to the field, increasing likelihood of update
Summary: Meeting the Needs of System/Operations

• Our Operations partner requested rapid implementation of a non-pharmacological intervention for pain in PCBH
• The challenge: With limited resources, move quickly to develop and implement an intervention
• Response:
  – Develop the protocol based on existing work: Use it now, and learn as you go
  – We developed a feasible implementation process by capitalizing on the strengths of our team members
  – We emphasized evaluation in lieu of research
    • Gather data that impacts further protocol development
Summary: Meeting the Needs of System/Research

• The larger research community could benefit by answering whether or not chronic pain can be treated effectively in PCBH
• The challenge: Research is slow and requires funding
• Response:
  – Work towards goals concurrently: Meet the need of the field, but apply for funding
  – Our Clinical Demonstration Project findings contributed to our research questions
    • Selection and schedule of patient assessments
    • Implementation factors to address
    • Preliminary evidence of effectiveness and acceptability
Summary: Meeting the Needs of PCBH Providers and Patients

• Both patients and providers needed resources for addressing chronic pain in integrated care
• The challenge: Developing a protocol that is high in acceptability and utility
• Response:
  – Start with an evidence-based approach; Develop a user-friendly protocol
  – Use content experts to address both chronic pain and PCBH requirements
  – Heavy emphasis on prevention and identifying patients early in the trajectory of chronic pain
• More work to be done:
  – Brief CBT-CP was NOT developed with direct patient input
  – Address patient feedback with RCT and local Veterans Research Engagement Board
Discussion
• This project was supported with resources provided by the VA Center for Integrated Healthcare and the VA Western New York Healthcare System.
CIH Postdoctoral Fellowship

• 2-year research and clinical training program in Primary Care-Mental Health Integration
  – Research training is individualized; Fellows work with mentorship team on grants, manuscripts, and building a program of research
  – At minimum, 25% protected time for clinical rotations and supervision
• Positions available in Buffalo, NY (APA-accredited) and Syracuse, NY (non-accredited)
• Select start dates (July-October) and competitive salary and benefits package
• For more information, contact Paul.King2@va.gov, see our UPPD profiles, or visit program websites:
Contact Information

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Session Evaluation

Use the CFHA mobile app to complete the evaluation for this session.

Thank you!