Primary Care Behavioral Health
Defense Health Agency

Brief Cognitive Behavioral Therapy for Chronic Pain: *BHC Manual (2nd ed)*

In partnership with:

Center for Integrated Healthcare
VA Western New York Healthcare System
Buffalo, NY 14215

Authorship and Acknowledgements

Brief Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) Training Manual Revisions Workgroup

Chair and corresponding author:

Anne C. Dobmeyer, PhD, ABPP
CAPT, US Public Health Service
Program Director, Primary Care Behavioral Health
DAD-Medical Affairs/Clinical Support Division
Assistant Director for Healthcare Administration
Defense Health Agency

Workgroup members:

Gregory P. Beehler, PhD, M.A.
Associate Director for Research and Clinical Research Psychologist
VA Center for Integrated Healthcare
VA Western New York Healthcare System

Christopher L. Hunter, PhD, ABPP
CAPT (Ret), US Public Health Service

Jennifer S. Funderburk, PhD
Clinical Research Psychologist
VA Center for Integrated Healthcare
Syracuse VA Medical Center

Contributing authors:

Jennifer L. Murphy, PhD
Pain Section Supervisory Psychologist
VACO CBT-CP Master Trainer
James A. Haley Veterans' Hospital
Tampa, FL

Katherine M. Dollar, PhD
Associate Director for Implementation
VA Center for Integrated Healthcare
Department of Veterans Affairs
Syracuse, NY

Paul R. King, PhD
Clinical Research Psychologist
VA Center for Integrated Healthcare
Department of Veterans Affairs
Buffalo, NY

Suggested citation:
Beehler, G. P., Dobmeyer, A.C., Hunter, C. L., & Funderburk, J. S. (2024). *Brief Cognitive Behavioral Therapy for Chronic Pain: BHC Manual (2nd ed)*. Silver Spring, MD: Defense Health Agency.

Acknowledgments:
This treatment manual was adapted for the Department of Defense (DoD) with permission and assistance from the Department of Veterans Affairs (VA) Center for Integrated Healthcare (CIH). We would like to thank Gregory P. Beehler, PhD; Jennifer L. Murphy, PhD; Paul R. King, PhD, and Katherine M. Dollar, PhD, who authored the *Brief Cognitive Behavioral Therapy for Chronic Pain: Therapist Manual* (Beehler, Murphy, King, & Dollar, 2017 and 2021, Version 2.0) on which this DoD-adaptation was based.

Project support:
Support for developing the original VA treatment manual was provided by the VA Center for Integrated Healthcare; Office of Mental Health Services, VA Central Office; use of the facilities and resources at the VA Western New York Healthcare System at Buffalo, and James A. Haley VA Medical Center (Tampa, FL). Support for developing the DoD version of the manual was provided by the Psychological Health Center of Excellence and the Defense Health Agency.

Questions, comments, concerns may be addressed to:

Anne C. Dobmeyer, PhD, ABPP *(DoD Project Lead)*
CAPT, US Public Health Service
Program Director, Primary Care Behavioral Health
DAD-Medical Affairs/Clinical Support Division
Assistant Director for Healthcare Administration
Defense Health Agency
Phone: 571-217-0569
Email: anne.c.dobmeyer.mil@health.mil

Or

Gregory P. Beehler, PhD, MA *(VA Project Lead)*
Associate Director for Research and Clinical Research Psychologist
VA Center for Integrated Healthcare
VA Western New York Healthcare System
Phone: 716-862-7934
Email: gregory.beehler@va.gov

Contents

List of Tables

List of Figures

PART I
OVERVIEW OF CHRONIC PAIN AND COGNITIVE BEHAVIORAL TREATMENT

RATIONALE FOR DEVELOPMENT OF BRIEF CBT-CP

The full course of CBT-CP treatment in tertiary specialty care typically requires eleven 50-minute sessions delivered by therapists with specialty training in behavioral medicine or by providers specially trained as part of a specific evidence-based care training program for chronic pain. This approach of treating chronic pain as a specialty behavioral medicine intervention is time and resource intensive. Because of the widespread occurrence of chronic pain among the Veteran and military health system populations, there is increased interest among DoD and VA providers in offering briefer CBT-CP treatment that can be used in more flexible formats in a wider variety of settings, including integrated primary care settings. **Thus, this manual serves the immediate goal of making CBT-CP more widely available in a briefer format.** Our hope is that by offering Brief CBT-CP, the overarching goal of improving patient outcomes through chronic pain self-management will be met more effectively.

EVIDENCE THAT BRIEF TREATMENTS MAY WORK FOR CHRONIC PAIN

There are multiple additional factors that underlie the rationale for developing the Brief CBT-CP intervention. First, because chronic pain is a common condition, multiple types of interventions are necessary to treat pain in a sufficiently patient-centered way across diverse settings and populations. A briefer version of cognitive behavioral therapy (CBT) may be especially well suited for addressing pain early in the trajectory of chronicity with the goal of preventing functional disability and distress. Second, prior research has suggested that briefer versions of CBT-CP offered in various non-behavioral health settings are effective (Ahles et al., 2006; Buszewicz et al., 2006; Moore et al., 2000; Smith & Torrance, 2011; Von Korff et al., 1998; Wetherell et al., 2011, Martinson et al., 2020). For example, a well-conducted primary care based trial found that individual assessment followed by six sessions of group CBT for chronic pain was a cost-effective approach to reduce pain and functional limitations (Lamb et al., 2010). A BCBT-CP demonstration project found significant decreases in pain intensity and functional limitations as well as significantly improved pain-related self-efficacy starting at the third appointment (Beehler, Murphy, et al., 2019). A survey of patient experiences with BCBT-CP indicated that 91% found the content to be useful and 89% were satisfied with the intervention overall, including appointment length, frequency of encounters, and comprehensibility of the content. On average, patients experienced somewhat better to moderately better pain-related functioning following treatment (Beehler, Loughran, et al., 2021). Third, providing psychological intervention in primary care in particular is especially important given that over half of patients in primary care report chronic pain (Kerns et al., 2003). Primary care providers find pain management especially challenging (Matthias et al., 2010) and have reported dissatisfaction with their ability to provide optimal pain relief for their patients (Dobscha et al., 2008). Fourth, chronic pain commonly co-occurs with behavioral health conditions such as depression, anxiety, and posttraumatic stress disorder (PTSD). Chronic pain is often co-morbid with psychiatric conditions/symptoms: up to 65% of patients experience recurrent depressive episodes (Li, 2015); up to 35% of patients have a comorbid anxiety disorder (Kim et al., 2021); over two-thirds of patients report sleep problems (Finan et al., 2013); and 34-50% of patients have

comorbid PTSD (Otis et al., 2010). Thus, integrated behavioral health providers may be especially well-suited for addressing chronic pain and associated distress given the common CBT-based model of intervention. Finally, local availability of pain resources and interventions may vary considerably across clinics. Thus, Brief CBT-CP provides an additional, more accessible alternative.

BRIEF CBT-CP: ADAPTED FROM THE VA EVIDENCE-BASED PRACTICE (EBP) CBT-CP

As noted previously, Brief CBT-CP as described in this manual has been adapted from the full-length VA EBP treatment for pain. The authors, who are subject matter experts in the areas of chronic pain management and integrated care, based the development with several factors in mind. Research suggests that CBT-CP is an effective treatment for chronic pain, but dismantling studies do not provide sufficient guidance to suggest which specific components of CBT are responsible for effective treatment. Thus, Brief CBT-CP includes an adapted version of each key CBT-CP element: psychoeducation/goal setting; behavioral skills: activities, pacing, and relaxation training; cognitive coping; and relapse prevention. Brief CBT-CP mirrors the full-length CBT-CP.

The evidence base for the original CBT-CP protocol is strong, and the results of adapting the intervention to a brief format are promising. Plans for testing the intervention empirically through additional research are underway.

BRIEF CBT-CP EMPHASIZES PATIENT-REPORTED OUTCOMES

A key component of this protocol is the use of patient-reported outcome measures throughout the intervention. Use of brief validated measures to capture patient-reported outcomes (e.g., routine assessment of pain intensity, distress, functional interference, and others) at each appointment are required in order to inform both patient and provider about patient response to treatment. Previous research has indicated that routine outcome monitoring is important for identifying patients who are not responding to treatment, with continued monitoring useful for capturing patients' response to treatment modifications (Carlier et al., 2012; Scott & Lewis, 2015). Routine outcome monitoring will also aid the provider in identifying patients who need a "step up" to a higher level of care.

BRIEF CBT-CP IS DESIGNED FOR PRIMARY CARE

Although Brief CBT-CP is not designed exclusively for primary care settings, efforts were made to adapt CBT-CP to the Primary Care Behavioral Health (PCBH) model of service delivery that has relatively unique features, such as appointments of 30 minutes or less, focused assessments, an emphasis on improving functional outcomes, and early detection and prevention.

Brief CBT-CP is not intended to replace full-length CBT-CP. Rather, Brief CBT-CP is designed to introduce patients to self-management, improve pain management self-efficacy, reduce functional limitations, and potentially reduce self-report ratings of pain and negative impacts of pain. Brief CBT-CP may be used in a variety of ways depending on the clinical context, provider, and patient. For example, a behavioral health consultant (BHC) may wish to use brief CBT-CP for primary care patients with distress and functional limitations that stem from chronic pain. Specialty behavioral health providers, behavioral medicine providers, or those in consultation-liaison roles may wish to use Brief CBT-CP alone or as an adjunct to other medical or psychological therapies. Similarly, a pain specialist who usually provides full length CBT-CP in tertiary specialty care may wish to use the brief version to meet the needs of patients who prefer or could benefit from a shorter treatment.

After a course of Brief CBT-CP, there are several options for patient disposition. For some, no additional treatment will be necessary. Other patients may benefit from occasional follow up or booster appointments over the subsequent months to help with fine-tuning the application of skills developed in Brief CBT-CP. Some patients may choose to continue with their routine behavioral health treatment focused on depression, anxiety, or other psychiatric concerns. Other patients may ultimately benefit from continuing on with a full course of CBT-CP or additional pain-related psychosocial and rehabilitative interventions. Additional strategies for determining patient disposition are provided later in this manual.

FACTORS TO CONSIDER WHEN SELECTING BRIEF CBT-CP

BEFORE BEGINNING BRIEF CBT-CP

Selection of Brief CBT-CP assumes that primary care managers (PCMs) and BHCs have identified that brief intervention for pain-related issues is clinically indicated. Because detailed training in the foundational and functional elements of CBT clinical skills are beyond the scope of this manual, we recommend that providers who wish to implement Brief CBT-CP have completed prior training in the basic principles of CBT and are comfortable with applying brief behavioral health measurement tools that are available to them (e.g., *Patient Health Questionnaire-9*; PHQ-9).

ADDING BRIEF CBT-CP TO YOUR CURRENT PRACTICE: PROVIDER AND SETTING FACTORS

Adopting a patient-centered stance is important for conducting Brief CBT-CP. Following the biopsychosocial model, a patient-centered approach is required so that the BHC can use patient-specific factors in assessment, formulation, and development of patient-identified goals to direct the course of care. Patients may have a variety of concerns based on their chronic pain experience. Thus, it is important to determine their primary concerns. This facilitates Brief CBT-CP being applied in a way that will be most useful for the patient.

This protocol has been designed to meet the needs of generalist behavioral health providers functioning as BHCs in primary care. It is therefore important to consider that, at times, additional support from specialists may be necessary. We advise that you identify your clinic's, facility's, or Service's behavioral medicine or chronic pain specialist(s) who can provide you with additional clinical support or act as a referral source should your patient wish to engage/benefit from a specialty level of care. It is also important to coordinate care with the patient's PCM who will play a key role in medical management of pain.

DETERMINING WHO MIGHT BENEFIT FROM BRIEF CBT-CP

Brief CBT-CP will not be suitable for all patients so clinical judgment must be used when determining who might be best served by Brief CBT-CP. Patients who are particularly likely to benefit from Brief CBT-CP include those with one or more of the following characteristics:

- Chronic pain (defined as pain lasting three months or more)*
- Mild to moderate functional impairment and distress
- No active substance use disorder
- No severe behavioral health disorder impacting overall function or suggesting imminent safety risk (e.g., severe Major Depressive Disorder)
- Patient receptiveness to non-pharmacological self-management approaches for pain

Note: The above characteristics are comprised of suggestions only and should not be interpreted as a list of inclusion criteria.

* Some **patients with acute pain** not yet meeting the criteria for chronic pain (e.g., back pain for two months) **may benefit from interventions included in the Brief CBT-CP protocol** (e.g., relaxation, activity pacing, cognitive coping). If components of the protocol are used with patients with acute pain, BHCs will need to make appropriate modifications (e.g., goals for treatment, rationale for interventions, clinical examples, etc.).

BRIEF CBT-CP CASE EXAMPLE: PCBH SETTING

Capt Susan Jackson is a 29-year-old Active Duty USAF officer. Routine depression screening with the *Patient Health Questionnaire-2* (PHQ-2) yielded a score of 3, which was followed by a PHQ-9 screening yielding a score of 13. This resulted in her PCM referring her to the BHC for additional assessment and treatment recommendations for depressed mood. Further evaluation by the BHC identified the patient had recurrent low back pain stemming from a prior car accident that was a significant contributor to her irritability, and that over-the-counter analgesics have offered limited pain relief. Capt Jackson noted that her back pain was an average of five over the past 24 hours (rated with the Defense and Veterans Pain Rating Scale, DVPRS; 0-10 scale of increasing severity) and had increasingly interfered with her sleep, ability to stand for extended periods at work, and interactions with her husband. She has become increasingly concerned

that pain will impact her ability to remain in the USAF. She is frustrated by what she describes as a near constant dull ache over the past two years, and wonders if it will improve. In light of her endorsement of moderate chronic pain and its interference with daily activities, the BHC discusses both mood and pain management options with Capt Jackson and her PCM. Though the patient has never attempted cognitive behavioral self-management of her pain symptoms, she appeared eager to learn more about managing pain, in particular through use of techniques that she could use on her own. Further, she is amenable to receiving the bulk of her care in the primary care clinic.

INTRODUCTION TO CHRONIC PAIN

WHAT IS PAIN?

According to the International Association for the Study of Pain (IASP), pain is defined as *an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage* (IASP, 2020). This definition stresses that pain is both a subjective physical experience (i.e., unpleasant bodily sensations) and emotional experience (i.e., distress related to bodily sensations).

THE DIFFERENCE BETWEEN ACUTE AND CHRONIC PAIN

Pain can be either **acute** or **chronic** in nature (National Academy of Medicine, 2011).

Acute pain typically starts suddenly as a warning sign of an identifiable injury or disease and has a short duration (a few minutes to less than six months). Some acute pain is expected to occur in response to health events, such as childbirth or following surgery. Acute pain usually subsides over time as the body heals, and often responds to standard medical treatments. Examples of acute pain include recent musculoskeletal injury (e.g., sprained ankle), burns, infections, recent surgery, childbirth, periodic headaches, etc.
Chronic pain is an ongoing or recurrent pain lasting beyond the usual course of acute illness or injury. Chronic pain typically lasts more than three to six months and adversely affects the individual's well-being. There may not be a clear underlying physiological cause to chronic pain. Examples of chronic pain include persistent musculoskeletal disorders (e.g., low back pain that has lasted beyond three months), neuropathic pain (e.g., post-shingles, diabetic neuropathy), irritable bowel syndrome, fibromyalgia, arthritis, chronic/persistent headache, etc. A detailed listing of many additional pain conditions is located in Appendix 1.

Although it is important to adequately treat both acute and chronic pain, this manual focuses on the treatment of chronic pain. A comprehensive treatment plan to address the psychosocial aspects of chronic pain is important given the well-established connection between chronic pain and diminished quality of life, functional limitations, and psychological distress.

ADDRESSING CHRONIC PAIN IN THE DoD: THE STEPPED CARE MODEL FOR PAIN MANAGEMENT

There is a wide array of treatments for individuals with chronic pain. The DoD is adopting a stepped care model for pain (Figure 1; Defense Health Agency, 2018). Stepped care is designed to adjust the intensity of intervention based on patient presentation and response to care.

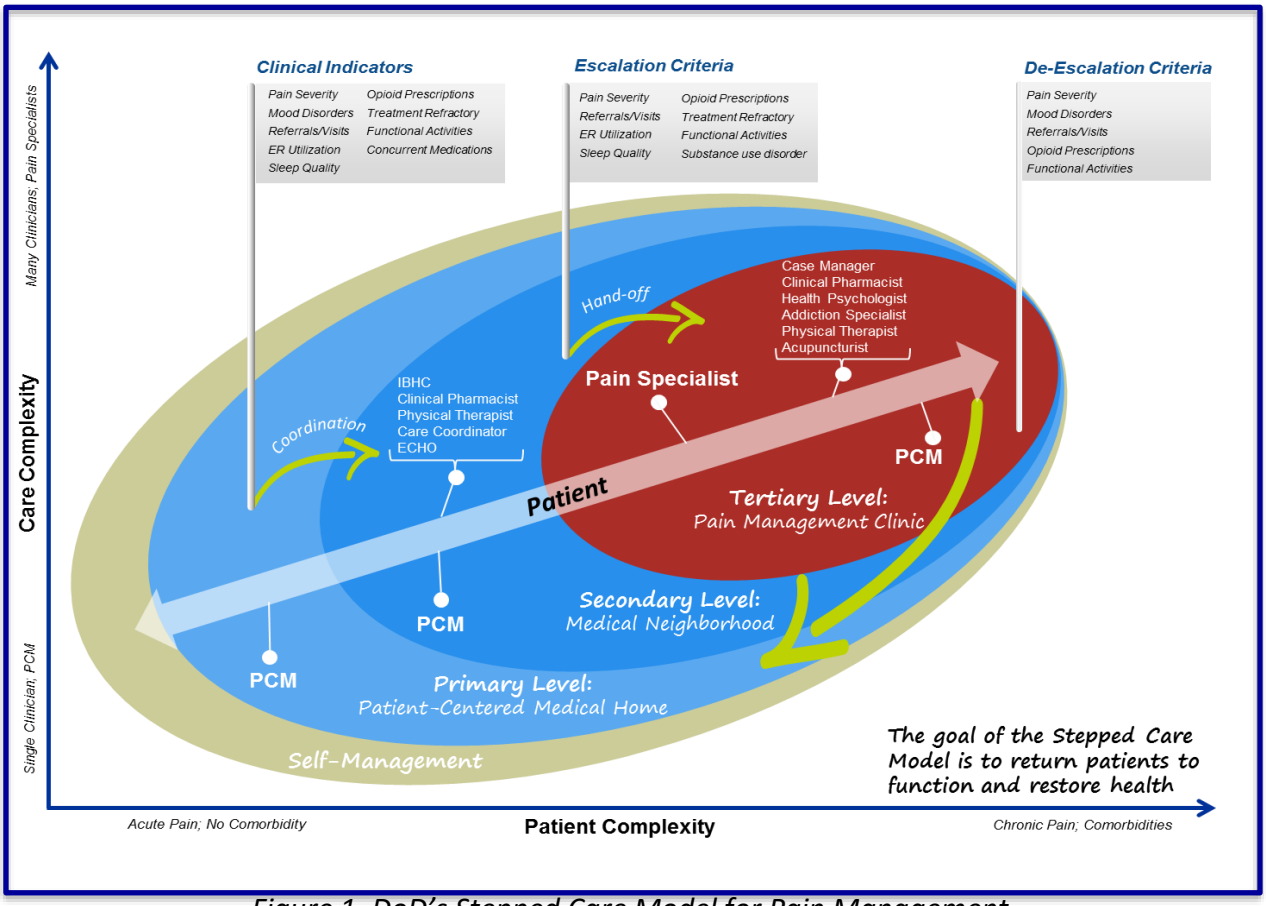


Figure 1. DoD's Stepped Care Model for Pain Management

The first step of the DoD model reflects the importance of engagement in routine self-care and self- management, from weight management, to being engaged in a safe and supportive social and physical environment, to taking appropriate self-care steps in response to injuries or pain.

Step 2, the Primary Level: Patient-Centered Medical Home (PCMH) includes care from PCMs who manage the majority of patients with chronic pain. When clinical indicators suggest that additional pain management resources are indicated, patients may move to the Secondary Level: Medical Neighborhood. This could involve care from a BHC, clinical pharmacist, physical therapist, dietitian or nutrition expert, PCM with complementary integrative health and medicine expertise (e.g., acupuncture), or care coordinator within the PCMH. Additionally, it might include additional Military Treatment Facility or community resources such as massage therapy or classes in yoga or tai chi.

Patients who meet criteria for further escalation of care receive care at the Tertiary Level: Pain Management Clinic, which adds a pain specialist to the care team. Additional health care providers may also be involved at this level of care, including a case manager, clinical pharmacist, health psychologist, addiction specialist, physical therapist, acupuncturist, etc.

The PCM remains engaged in the care of the patient throughout each level in the Stepped Care Model. At all levels, stepped care for chronic pain stresses a biopsychosocial perspective which considers not only traditional biomedical factors (underlying pathology, pharmacological treatment, brief advice administered by a medical provider) but also the psychological, behavioral, and social factors that impact individuals with chronic pain. Furthermore, stepped care at all levels endorses team-based approaches to care with an increasing emphasis on patient self-management approaches.

Although the DoD stepped care model suggests certain services for each step, the actual availability of these services may vary by location. For example, Secondary Level: Medical Neighborhood includes support from the BHC in primary care. BHCs at a given facility may or may not be prepared to provide support specifically for chronic pain management. However, most are likely able to assist patients in adjusting to their pain condition or by addressing comorbid behavioral health conditions. Alternatively, some BHCs will have behavioral medicine backgrounds that will allow them to take a more diverse role in chronic pain management at this step. This manual is well-suited to BHCs who are either new to chronic pain management or who desire to implement a brief treatment for pain adapted from an evidence-based protocol.

UNDERSTANDING CHRONIC PAIN

Chronic pain is a complex phenomenon. Currently, the biopsychosocial model (Engel, 1977) is the most widely accepted approach to understanding chronic pain. The biopsychosocial model (Figure 2) suggests that the experience of pain is multifactorial, with a wide array of physical, psychological, social, and other environmental factors that may play a role in maintaining pain. For example, the biopsychosocial model suggests that in addition to the physiological basis of pain, an individual's thoughts, behaviors, and social relationships are all important contributors. Importantly, this model suggests that there are multiple points of intervention for addressing chronic pain, from medical treatments, to psychological interventions, to modifications in one's social environment.

TREATING CHRONIC PAIN

Chronic pain can be treated through a wide array of modalities. Some of the most common biomedical approaches are summarized in Table 1, with additional details and descriptions of

these approaches available in Appendix 2. Although treatments that address the physiological contributors to pain are important to pain management, individual responses to these treatments may vary considerably. Often, patient and providers will need to work together to identify the best approaches for optimal pain care.

In addition to these biomedical-based treatments that address the physical domain, applying self-management and relevant psychological and physical therapies are essential since all dimensions of the biopsychosocial model must be addressed.

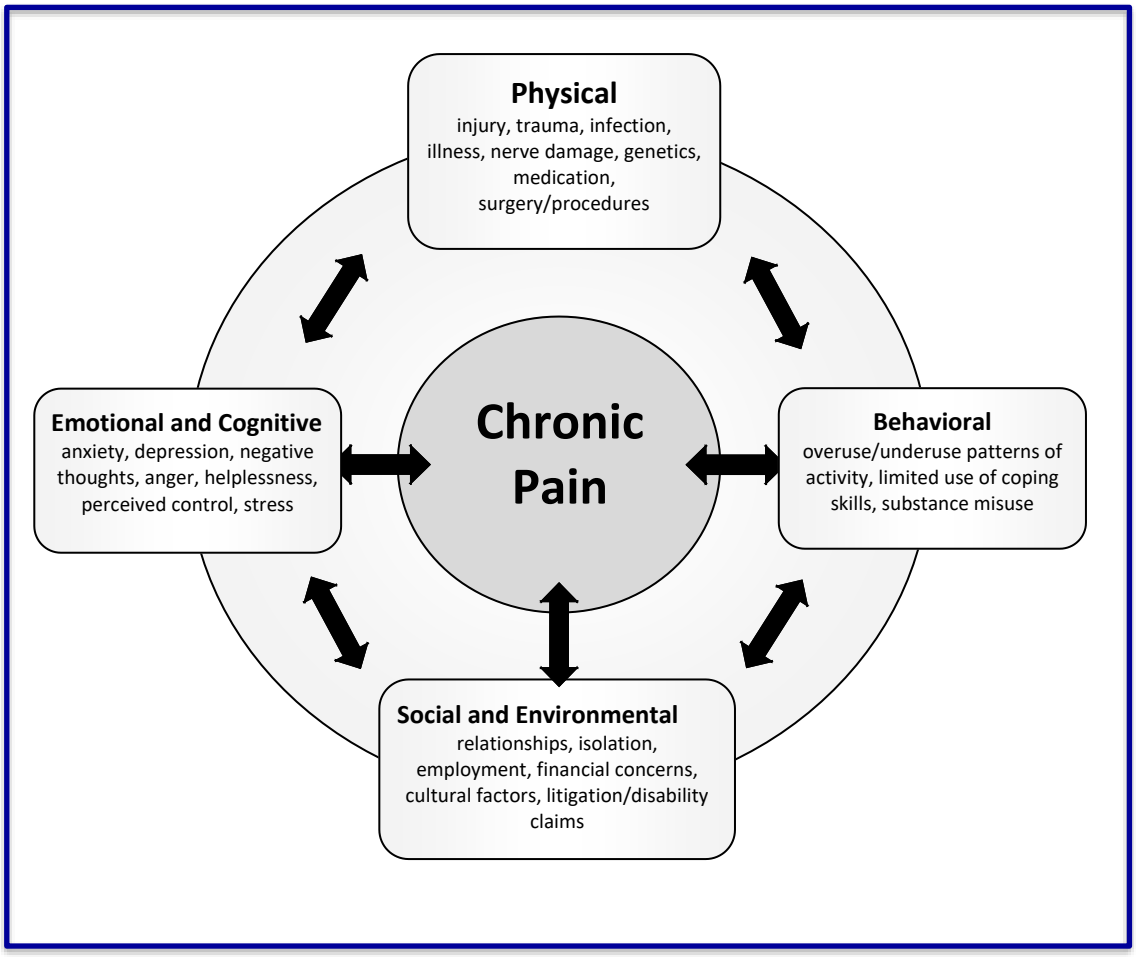


Figure 2. The Biopsychosocial Model

CBT-CP

There are several evidence-based psychological therapies that have been shown to improve outcomes for patients with chronic pain. Among these, CBT is a widely researched, time-limited psychotherapeutic approach that has been shown to be efficacious across a number of mental and behavioral conditions.

CBT involves a structured approach that focuses on the relationships among cognitions (or thoughts), emotions (or feelings), and behaviors. Treatments based on cognitive behavioral theory have been successfully applied to the management of chronic pain, either delivered alone or as a component of an integrated, multimodal, and interdisciplinary pain management program. Evidence suggests that CBT-CP improves functioning and quality of life for a variety of chronic pain conditions (Hoffman et al., 2007; Williams et al., 2020).

Table 1: BIOMEDICAL MODALITIES FOR TREATING CHRONIC PAIN

Biomedical Modalities for Treating Chronic Pain
Pain-relieving medications (i.e., analgesics)
• Non-opioid analgesics • Opioid analgesics • Topical analgesics • Muscle relaxants • Adjuvant analgesics • Headache-specific analgesics
Invasive medical treatments
• Epidural steroid injections • Nerve blocks
Non-invasive treatments
• Physical therapy • Cold/heat • Transcutaneous Electrical Nerve Stimulation (TENS) • Complementary and Alternative Medicine (CAM)

CBT-CP is an approach rooted in the development of a strong working relationship that encourages patients to adopt an active, problem-solving approach to cope with the challenges associated with chronic pain (Burns et al., 2015).

The value of CBT-CP is its focus on improving patient self-management to positively impact the chronic pain cycle. The suffering associated with chronic pain often leads to a maladaptive disengagement from people, places, and activities. The pain cycle see (Figure 3) illustrates how the experience of pain can lead to maladaptive changes in behavior that ultimately lead to increased distress, decreased activity, and a chronic course of pain. The experience of pain

often leads to decreased activity out of fear of increased pain associated with movement. Limiting one's otherwise beneficial activities can lead to physical deconditioning and disengagement from pleasurable or otherwise meaningful activities and life events. The persistence of chronic pain and disengagement from valued activities can lead to increased emotional distress, negative thinking, and decreased motivation that result in further disengagement. The resulting state of disability is reinforced by ongoing maladaptive coping.

CBT-CP can provide patients with both a new perspective and new coping skills to increase self-efficacy and break the cycle of chronic pain. The goal of CBT-CP is to identify and modify maladaptive thoughts and behaviors that perpetuate pain-related distress and dysfunction. CBT-CP is based on cognitive behavioral theory which focuses on the impact of thought processes on emotional states and resulting behaviors (Beck, 1995).

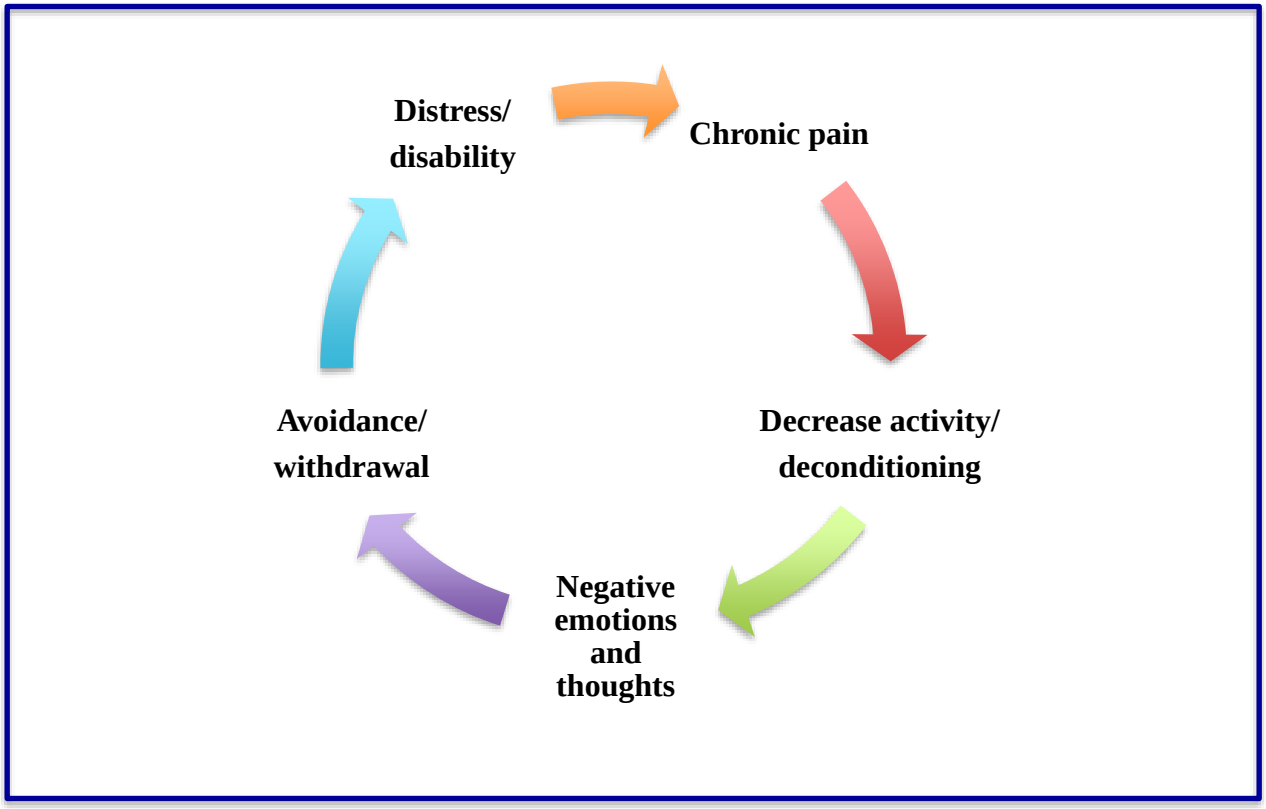


Figure 3. The Chronic Pain Cycle

Like all CBT approaches, CBT-CP draws from both behavioral theory and cognitive theory. Behavioral theory is based on the premise that distressed individuals get a very low rate of positive reinforcement from their environment. Because they experience limited/few benefits of engaging in activities (and engaging in certain activities may lead to more pain), they tend to disengage. As they disengage from activities and people, they become more distressed and may enter into a cycle of inactivity and spiraling depression.

Clinical Highlight: A key target of behavioral intervention is behavioral activation (i.e., helping people to re-engage in pleasurable events or find new activities).

In the case of chronic pain, certain physical movements or activities can lead to increased pain. Pain may also be interpreted as a warning sign that certain movements or activities are unsafe and resulting in harm or damage. It is not difficult to see why people with chronic pain stop participating in certain events/situations. Thus, they must find new ways of engaging in favorite activities that will be less pain-producing.

Clinical Highlight: Ways of addressing physical inactivity, such as pacing, are a key behavioral component of CBT-CP, as well as relaxation training skills.

According to cognitive theory, the way we perceive, think about, or interpret an event impacts our emotional experiences. **Therefore, monitoring and understanding our thoughts is essential to producing change.** Automatic thoughts are those that occur immediately in response to an event/situation but often go unnoticed. Sometimes automatic thoughts occur in relation to internal events, such as increased pain. If the automatic thought is unhelpful or maladaptive, it may lead to emotions, physiological responses, and/or behaviors that increase distress or difficulty in the long term.

A particularly common type of automatic negative thought around pain is known as catastrophizing or alarming thinking. Catastrophizing is a distorted thought process of imagining or assuming that pain will lead to the worst or most intolerable outcome, such as “My pain will never get better” or “My pain will ruin my life.” Treating the cognitive components of chronic pain includes teaching patients to self-monitor and ultimately modify their maladaptive negative thoughts in favor of more balanced thinking.

SUMMARY

The key operational components of CBT-CP involve breaking the chronic pain cycle by:

- Improving self-efficacy regarding management of pain symptoms
- Increasing engagement in healthy and pleasurable activities
- Enhancing positive pain coping skills, such as pacing and relaxation activities
- Correcting faulty assumptions and thoughts about pain

CLINICAL CONSIDERATIONS WHEN WORKING WITH PATIENTS WITH CHRONIC PAIN

Patients who have chronic pain present with various levels of functional impairment, and all have their own pain story. In addition to the physical strain of managing chronic pain each day, their suffering may have significant emotional and social dimensions as well. Often times, patients with pain have seen numerous healthcare providers regarding their condition and may feel frustrated with not receiving answers that they find satisfying regarding the etiology or treatment of their pain. Perhaps most importantly, those with chronic pain may feel as if they have not been "heard" adequately by providers. Various patient reactions can be driven by the perception that insufficient time, attention, or care has been paid by health care professionals when they are suffering each day.

As with all therapies, using CBT for the management of chronic pain requires the development of a strong working relationship. While patients may be skeptical about the team bringing in another team member to assist, especially one in the behavioral health field, creating an environment where the patient is heard and believed fully is an important aspect to success. It is not the role of the BHC to determine the veracity of the physiology of the pain complaint; pain is a subjective experience that is affected by various factors. The functional impacts (e.g., decreased work performance, decreased social engagement, decreased involvement in valued activities) experienced by the patient should be the focus of treatment, with clear information and specific treatment interventions (e.g., behavioral activation, questioning unhelpful thoughts, relaxation, distraction) considered as ways to positively alter the pain experience.

While there are many challenges that may arise when treating patients with chronic pain, some common topics that may impede treatment progress, along with ideas for how to address these issues, are reviewed in this section.

LOSS, GRIEF, AND ACCEPTANCE

Patients may display certain responses to their pain condition and it can be beneficial to help them identify how these responses are helping (or not helping) them manage their symptoms and maximally function. For many, adjusting to pain-related losses is one of the biggest barriers to treatment progress. Loss of identity, confidence, well-being, and relationship/vocational roles are frequently recurring issues. Since it is challenging to cope with and accept that the "old me" is gone, it is important to normalize this response when working with patients since they have experienced a difficult and unexpected shift.

It may be useful for both patient and provider to conceptualize the advent and experience of chronic pain as a significant loss. Kubler-Ross's well-known and non-linear five stages of grieving (Kubler-Ross, 1972) can be applied to better process the emotional process. The denial stage may involve being "stuck" in the biomedical model with cognitions such as, "there must be

something to fix this." Anger is common throughout the chronic pain experience. Individuals may feel frustrated with the perception that doctors are not helping them or loved ones do not understand. They may also feel anger about the perceived injustice of their situation: dealing with pain every day that is not their fault, not being able to do what they want, finding little relief in treatments. Those reactions may be even more extreme in those who are younger, since it feels particularly unfair. Bargaining and "if only" thoughts as well as feelings of depression around the reality of living with pain are often present.

Acceptance, the final "stage," does not imply that it is "okay" to have chronic pain or that the person is "fine with it." Patients may react negatively to the word "acceptance," and it is important to differentiate an active acceptance versus a passive giving up. Quite the opposite, actively accepting that life has changed and may be very different than what was previously hoped for or planned is critical in moving forward. There is no suggestion in these stages that one should "get over it" but instead be able to eventually ask themselves, "Now what?" "How do I need to think and what do I need to do that will allow me to live my life better with meaning, grace, and dignity?"

Acceptance is a process, and it takes time. While there is no right way to grieve the losses that accompany life with a chronic medical condition, it may be helpful to encourage patients to concentrate on living the life they have instead of focusing on the one that used to be. These are difficult concepts to discuss but being open about them helps individuals feel better understood, less alone in their experience, and better able to take steps toward self-management. Life can still be meaningful and fulfilling even when someone has pain, even if it looks different than what was originally imagined.

Use of measures such as the Chronic Pain Acceptance Questionnaire (Kim & Kratz, 2021) may provide helpful information regarding where someone is in the grieving and acceptance process as well as evidence of positive progress during treatment.

MEDICATION MANAGEMENT

Issues frequently arise around medications and medical procedures. Some patients may be focused on obtaining a particular medication or treatment or they may be frustrated by pills being "pushed" on them without alternatives offered. Regardless of the issue, because medications are typically a first line treatment for pain, they are often an integrated part of daily life.

One frequent medication-related issue that arises is the use of opioid analgesics. Opioids have increasingly been prescribed to treat chronic pain in recent years, but an increased risk of adverse events, including accidental overdose, has led to heightened regulation around their use. A lack of evidence supporting long-term opioid therapy as well as side effects such as sedation, constipation, and the possible need for tolerance-related dose escalation are all areas of concern. Patients who have had opioids decreased or discontinued may be opposed to these

changes and may feel upset and/or angry. When this is the case, the patient may become focused on the topic of medications, which leaves clinicians feeling a sense of helplessness and desire to “resolve” the issue.

Not specific to opioids is the more general belief by patients that "there must be something" that can reduce their pain. This manifests in many forms, from a medication that they have seen advertised on television to a firmly held conviction that they “need” surgery because a physician mentioned it many years ago. Regardless of the details, this supports a belief that pain is unidimensional and that a medically driven “fix” exists.

Helping patients learn about the biopsychosocial approach to pain and the many factors that can impact the pain experience can be helpful. Allowing patients to communicate their medical frustrations and helping to normalize those frustrations may be useful at times and can allow the patient to feel understood and transition to a focus on how they can proceed with medical services and their life in a way that works better. At the same time, allowing appointments to primarily focus on frustrations can be problematic, leaving the patient stuck in a recurring, unproductive loop. BHCs should acknowledge patient frustrations, encourage them to speak to a prescriber, and then redirect the focus back to the skills that can be addressed in this treatment. While BHCs sometimes feel as if they are being insensitive or unsupportive by providing such clear redirection, it is most therapeutic for patients to focus on what they can change and control versus external factors.

OPIOID USE DISORDER

Opioid Use Disorder (OUD) is a *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) diagnosis signifying a problematic pattern of opioid use associated with impairment and distress. Due to the nature of opioid analgesics, developing physiological dependence over time as one does with nicotine is expected and does not indicate problematic use by patients. However, once opioids become a focus of attention with various related adverse consequences, patients should be evaluated for OUD.

Some patients on opioids may struggle with suggested changes in their medication regimen. They may resent feeling labeled as “drug seeking” when they request increased doses to feel better, often a result of tolerance. They may be angered with suggestions to decrease or discontinue opioids for risk mitigation, even when these effects do not include significant pain reduction. Furthermore, since opioids were typically initiated by a prescriber, patients may feel “punished” with alterations in dosing schedules.

For patients struggling with these concerns, it is important to acknowledge and normalize their feelings. Patients experiencing maladaptive thoughts related to opioid medication decisions or changes may benefit from assistance in applying the cognitive strategies included in the Brief CBT-CP protocol. Ultimately, the BHC and PCM will want to reinforce the message that pain is multidimensional and must be addressed from various approaches. While medication may

provide limited relief, the skills being learned in Brief CBT-CP can help improve overall quality of life. When patients are fixated on idealizing medications, it may be useful to return to the facts that have been gathered from them regarding their less-than-ideal level of functioning. Finally, it may be helpful to remind patients that they are in control of using the skills in this treatment; they do not need to rely on a provider and can self-manage their symptoms.

SLEEP

Poor sleep is among the most common complaints voiced by individuals with chronic pain, and the relationship between sleep and pain is complex. The presence of pain may make falling and staying asleep more difficult and disturbed. Insufficient sleep may increase next-day pain. Sleep conditions such as insomnia are linked with inflammatory processes, which may also impact the bidirectional relationship between sleep and pain. It is not unusual for poor sleep to be identified as a frustrating issue for those with chronic pain due to its negative physical and emotional effects. Given this, it is important to discuss sleep and evaluate the needs of the patient related to this topic.

While basic education around stimulus control, sleep restriction and sleep hygiene may be discussed and incorporated into treatment, as it often would be in the primary care setting, it is important to determine if triage is necessary. For example, if sleep disordered breathing (e.g., obstructive or central sleep apnea) may be present and has not been assessed, a consult for a formal sleep study might be needed, particularly as the prevalence of apnea is significant in the chronic pain population. If sleep issues are severe enough to meet the diagnostic criteria for insomnia, a course of Brief Behavioral Treatment for Insomnia (BBTI) with the BHC in primary care or a referral for Cognitive Behavioral Therapy for Insomnia (CBT-I) with a specialty behavioral health provider, may be indicated. The *Insomnia Severity Index* (ISI) should be used as part of an assessment to differentiate whether a consult for more intensive sleep intervention is appropriate. Completion of BBTI or CBT-I prior to engaging in Brief CBT-CP may increase successful outcomes, but determining the preferred order should be evaluated and determined individually with the patient's preferences in mind.

WORKING WITH RESISTANCE

Those with chronic pain may be resistant to psychological interventions for pain for a variety of reasons. One strategy that may be beneficial when encountering resistance is the use of Motivational Interviewing (MI) approaches. MI can be used to facilitate patients' motivation to make positive health behavior changes. Because it assumes that individuals are ambivalent about change, it seeks to help them recognize their own personally meaningful motivation to change. Using open-ended questions so that they can share about pain openly, affirming their strengths, reflecting empathically, and summarizing their perspective and the next logical steps may help minimize resistance to treatment.

As always, it is important to remember that patients with chronic pain are hurting, often emotionally as well as physically. Although they may exhibit defensive attitudes initially, acknowledging the difficulty of their situation including potential lack of compassion they may have experienced by providers can help establish a more open and collaborative working partnership.

AN OVERVIEW OF BRIEF CBT-CP MODULES

This section provides a broad overview of the Brief CBT-CP modules, as well as a description of the organizational structure common across modules. Detailed outlines and BHC guidelines for each module are found in Part II of this manual; patient handouts are included in Part III.

TREATMENT MODULES

Brief CBT-CP consists of seven available modules (A through G) that may be selected for use with each patient. The brief protocol requires that patients receive a **minimum of three modules**: the first two modules (A and B) plus at least one additional module (from C through G) are required. Although not all modules need to be used with every patient, **it is strongly recommended that BHCs encourage patients to complete all the modules they might need (not just the minimum). Many patients will benefit from completion of all seven modules.** Modules C through G can be presented in any order depending on the preference of the patient or best clinical judgment of the BHC. If there is no alternative order preference expressed, the modules may be delivered as listed in Table 2.

Table 2: BRIEF CBT-CP MODULES

Brief CBT-CP Modules	
Module	**Content**
A	**Assessment, Engagement, and Goal Setting:** Focused biopsychosocial assessment of pain; describing and engaging patient in CBT-CP; and developing treatment goals
B	**Education and Relaxation Training 1:** Education on chronic pain; overview of relaxation and instruction in diaphragmatic breathing relaxation
C	**Activities and Pacing:** Importance of engagement in activities using a planned approach
D	**Relaxation Training 2:** Progressive muscle relaxation and guided imagery relaxation
E	**Cognitive Coping 1:** Recognize unhelpful thoughts that negatively impact the pain experience
F	**Cognitive Coping 2:** Modify thoughts that are unhelpful when managing pain
G	**The Pain Action Plan:** Plan for independent implementation of CBT-CP skills and identify additional follow-up needs

Because CBT-CP is based on a model of intervention that emphasizes education and skill development, educational handouts have been developed for use within the modules and to be applied during home practice. **Handouts and patient education materials are an integral component of this protocol.** These patient materials are included in Part III.

The "Step-by-Step Guide" for each module contains sample scripted statements. **Scripted statements are provided 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. Scripting may be modified as needed as you become more comfortable with core elements of each module.

MODULE STRUCTURE

The structure of the Brief CBT-CP protocol is relatively similar across modules and includes:

- Check on mood and risk, review patient measures
- Review material from the previous module, including home practice
- Introduce new material
- Discuss home practice

Check on Mood and Risk; Review Patient Measures

Outcomes measurement is an essential part of patient-centered, evidence-based care. Measurement allows the BHC to better understand the patient's experience of pain and the functional domains that are impacted as well as assess progress throughout treatment and make potential changes that are indicated.

Completion of patient-reported outcome measures is an essential component of this protocol. Consistent with a stepped care approach, it is recommended that two measures be completed by patients at each appointment with the BHC:

- ***Behavioral Health Measure-20*** (BHM-20; Kopka & Lowery, 2002): A 20-item self-report measure of well-being, psychological symptoms, life functioning, and personal effectiveness. It can be used to screen for behavioral health concerns and health problems in primary care settings. The DoD has obtained written permission to use the BHM-20 in primary care clinics.

- ***Defense and Veterans Pain Rating Scale*** (DVPRS; Buckenmaier et al., 2013): A six-item self-report scale and graphic tool to assess pain intensity and the biopsychosocial impact of pain on activity, sleep, mood, and stress. This measure is in the public domain.

As always, additional measures can be used to inform the biopsychosocial assessment. For example, if the sleep item on the DVPRS is elevated, BHCs may want to administer the ISI. If additional depth of information is wanted on mood, the BHC may consider administering the PHQ-9.

Review Material from Previous Modules, Including Home Practice

Providing a brief review of material covered in the prior module can create continuity between modules and allow the patient to raise questions as needed. Although Brief CBT-CP is designed to be completed in brief modules, taking a moment to discuss potential questions reinforces the collaborative nature of the intervention and reduces the chance of important messages being misconstrued. Review of home practice is an essential component of Brief CBT-CP and serves to build competencies in the use of adaptive pain coping strategies. It should also enhance patients' sense of self-efficacy to manage their chronic pain condition by implementing acquired skills in the "real world."

Introduce New Material

The majority of each module should be spent introducing and discussing the new material for the module. Provide a clear rationale to the patient for each topic. To ensure understanding, frequently elicit reactions from the patient to material covered. Through discussion that involves active listening, cuing, and reinforcing learning in a supportive and collaborative environment, the patient is able to acquire adaptive pain management skills.

Plan Home Practice

After a new topic has been reviewed in the module, it is important for the patient to be able to practice building and implementing the skill independently. Discuss helpful areas for home practice with the patient. It is important that the patient understands the potential benefits of engaging in the coping technique and how it is related to better managing the effects of chronic pain. Practice should be discussed collaboratively to ensure that it is manageable for the patient.

MEASUREMENT-BASED CARE (MBC) WITH THE DVPRS

WHY MBC?

Limiting excessive use of assessment tools in the context of everyday PCBH model practice is critical given time constraints; however, outcomes measurement is essential. Measurement allows the BHC to better understand the patient's experience of pain and the functional domains that are impacted. Measurement also allows assessment of progress throughout treatment and suggests changes that are indicated. MBC refers to the use of screening and ongoing symptom monitoring to guide treatment selection and treatment modifications to improve outcomes for chronic health conditions (Kearney et al., 2015). The aim of MBC is to

rapidly and precisely assess condition severity in order to improve treatment planning between providers and patients (Harding et al., 2011). The information from MBC can facilitate shared decision making, which includes exploring options with the patient, weighing pros and cons of potential choices, and making informed decisions in line with patient preference. MBC typically guides treatment for common medical conditions in primary care, such as hypertension and diabetes, and has demonstrated effectiveness in improving patient outcomes for these and other disorders (Klonoff et al., 2011; Pickering et al., 2005). Similarly, routine monitoring of patient outcomes for mental health conditions (Carlier et al., 2012) is associated with improvement in provider documentation of diagnosis, more rapid treatment modifications, improved communication between patients and providers, and improvement in patient mental health symptoms. Also, in a study of MBC in an integrated health care setting, patients who received feedback from MBC showed improved outcomes and engagement in treatment (Duncan et al., 2021). The DoD strongly endorses MBC for medical and behavioral health concerns and has been promoting the use of MBC across treatment settings.

USE OF THE DVPRS

The DVPRS (Buckenmaier et al., 2013) should be verbally administered at every pain-related appointment with adult and adolescent patients (13+). It should also be administered at other times when the BHC determines that pain should be assessed, whether or not the focus on the visit is pain. The DVPRS includes two items to assess pain intensity and four supplemental items to assess pain-related interference (i.e., activity, sleep, mood, and stress), and patients should complete the entire DVPRS, including all supplemental questions, each time the DVPRS is administered. Note that the DVPRS is not included in the manual but is available as a supplemental document.

Case Example: Using the DVPRS in Everyday Practice

A case example will be used to illustrate how to use the DVPRS as part of Brief CBT-CP. SGT Jeff Smith is a 26-year-old Active Duty Army E-5. His PCM has been treating him for chronic low back pain stemming from his deployment nine months previously. The PCM encouraged SGT Smith to see the clinic's BHC to help better manage chronic pain with non-pharmacological approaches and to assist with learning strategies for decreasing his irritability and depressive symptoms that appear related to his chronic pain. He reports that pain negatively impacts his sleep, ability to participate in unit physical training (PT), and interactions with his young son. He is concerned that pain will impact his ability to remain in the Army.

Establishing a Baseline DVPRS and Communicating Findings

At SGT Smith's first appointment with his BHC, his DVPRS baseline scores are as follows:

Item	Score
Pain Intensity (current)	7
Pain Intensity (past week)	7
Interfered with Activity	6
Interfered with Sleep	8
Affected Mood	6
Contributed to Stress	6

Note that the DVPRS items are not summed or averaged into an overall score; rather, each item is interpreted separately.

In this case, SGT Smith's baseline score for pain intensity in the past week is a 7 out of a possible 10, with 10 indicating the greatest severity. To interpret Jeff's score, a general rule of thumb for interpreting 0-10 pain scales like the DVPRS includes the following:

DVPRS score ranges	Qualitative description of level of pain/interference
1-4	Mild
5-6	Moderate
7-10	Severe

Part of establishing a useful baseline for SGT Smith is to utilize the scores to enhance communication with both the patient and the PCM. Scores at baseline (or any point in time), can convey current status:

"SGT Smith, your score of seven on the DVPRS pain intensity item is in the severe range. Your responses also suggest that your pain is interfering with your usual activities to a moderate degree, is affecting your mood and stress level to a moderate degree, and is severely interfering with your sleep. These scores, along with the information you provided during our discussion, indicates that you could benefit from starting Brief CBT-CP…"

A discussion that incorporates patient-reported outcomes can also help fuel **motivation to engage in treatment:**

"Over the next several weeks, we will use the DVPRS again to monitor any changes. These scores will help us plan our next steps together. We will aim to have your scores go down over time as you apply new skills as part of Brief CBT-CP …"

The DVPRS should be administered at each appointment, and each of the DVPRS items should be reviewed and documented in the EHR separately. It is recommended that the changes in the pain intensity (average in past week) score be monitored over time and discussed with the patient at each appointment. For the four supplemental items, it is recommended that BHCs and patients engage in shared decision making to prioritize which one (or more) of the four will be prioritized as a focus for change. Changes in the score(s) should be monitored over time and discussed with the patient. In this example, the BHC and SGT Smith jointly decided that they would prioritize tracking the sleep-related item, since this was an area of significant concern for the patient and was in the severe range at baseline.

In addition to discussing the scores with the patient, conveying DVPRS scores to the PCM is also important. This type of communication not only improves flow of information between providers, but also ideally prompts the PCM to reinforce your plan for using Brief CBT-CP when the PCM interacts with the patient. The PCM may also consider adjusting their own treatment

plan (e.g., medication changes) depending on the information you convey. Additionally, the PCM may consider adding adjunctive services (e.g., referral to physical therapy) based on your work with the patient (e.g., motivating the patient to re-engage in balanced, structured physical activity to avoid de-conditioning).

Assessing Change over Time

As mentioned previously, a primary reason for engaging in measurement at each appointment is to be able to assess for meaningful changes in scores. Stability or changes in scores are important for assessing response to treatment and can suggest times when modification to a treatment plan is necessary. Assessing for change in a DVPRS item between two time points is simple and can be computed quickly as follows:

To compute change in DVPRS scores	
Formula	$\frac{\text{(DVPRS item score at time 1 – DVPRS item score at time 2)}}{\text{DVPRS item score at time 1}}$

Multiplying the resulting figure by 100 will provide an estimate of percentage change in scores. As a rule of thumb, a 30% change (improvement) in pain-related scores, including the DVPRS items, is considered clinically significant in response to a course of treatment. Although a 30% drop is ideal, other meaningful patterns are also important to consider given the relatively short time frame inherent to integrated care settings. In Brief CBT-CP, which includes three standard modules along with optional modules, less dramatic but potentially meaningful changes have been identified in pilot work in the VA (Beehler et al., 2019).

Assessing for change can be done at any time, including when comparing the first and third required modules. For example, note SGT Smith's scores across three appointments:

Module	Current Pain	Past Week Pain	Activity	Sleep	Mood	Stress
A (Assessment, Goals)	7	7	6	8	6	6
B (Education & Relaxation 1)	7	7	6	8	5	7
E (Cognitive 1)	6	6	5	6	5	7

The percent improvement on the pain intensity (past week) item from the first to the third appointment, would be calculated as follows:

(7-6)/7 = 0.14 * 100 = 14% improvement in pain intensity (past week) item

Similarly, we could calculate the improvement in the sleep item from the first to the third appointment as follows:

(8-6)/8 = 0.25 * 100 = 25% improvement in sleep item

Other scores can be calculated in the same manner.

During this relatively short time frame common in the PCBH model, these measures suggest no dramatic changes, but a decreasing trend for all the items with the exception of stress. This trend is encouraging in that there are no large fluctuations in DVPRS scores suggesting a broad worsening of symptoms. If SGT Smith were to continue on this course with additional Brief CBT-CP modules, the following pattern could emerge:

Module	Current Pain	Past Week Pain	Activity	Sleep	Mood	Stress
A (Assessment, Goals)	7	7	6	8	6	6
B (Education & Relaxation 1)	7	7	6	8	5	7
E (Cognitive 1)	6	6	5	6	5	7
F (Cognitive 2)	6	8	6	7	5	6
C (Pacing)	5	6	5	6	4	5
D (Relaxation 2)	5	5	4	6	4	5

In this case, additional improvements in DVPRS scores were realized by adding optional Brief CBT-CP modules to the course of treatment. Having reached a 29% drop in DVPRS pain intensity (past week) score suggests a clear, clinically significant improvement in outcome. Additionally, the patient experienced some improvement (25% reduction) in the impact of pain on sleep. As noted below, it is important to then discuss these changes with both the patient and PCM in determining next steps. For example, the patient and providers may agree that sleep is an area in need of additional improvement; they may determine to initiate a course of Brief Behavioral Therapy for Insomnia (BBTI) with the BHC. In other cases, the BHC, PCM, and patient may agree that a course for full CBT for chronic pain in specialty care is indicated to further reduce the impact of pain on functioning and quality of life. Patients' goals for improvement, their willingness to engage in additional care, and their preferences regarding targets of treatment should weigh heavily in these decisions.

USING THE DVPRS TO IMPROVE SHARED DECISION-MAKING

Discussing DVPRS scores, including changes in scores over time, can facilitate shared decision making in which the provider (or providers) work collaboratively with the patient to determine the best course of treatment. Although a full description of the nature of shared decision making is beyond the scope of this chapter, there are a few general principles that should be considered. According to Elwyn and colleagues (2012; 2017), shared decision making is a process that includes three general areas: working as a team to identify choices in light of patient goals; discussing alternatives, such as the advantages and disadvantages of each option; and making an informed decision that aligns with patient preference. DVPRS scores can help to initiate the process of decision-making when the data indicate that change (or lack of change)

in symptoms is evident during or at the conclusion of treatment. Some general guidelines for using DVPRS scores to generate options for treatment decisions follow. When DVPRS scores show sufficient, meaningful improvement over time (i.e., 30% improvement in scores), first confirm if the patient concurs with this assessment. If the patient's experience of pain or disability does not appear to be reflected by the DVPRS scores, additional assessment may be necessary to determine why there is a discrepancy. However, if the patient feels that sufficient improvement has been achieved and treatment goals have been met, no additional treatment may be necessary. Explore with the patient what an end of Brief CBT-CP means in terms of follow-up options.

> *"One of the options for us to consider includes wrapping up your treatment with me at this time. Based on the improvement we've seen in your DVPRS scores and the fact that you are meeting you main goals, you are likely in a good position to begin applying these skills on your own. If you would like, we could plan an appointment in about two months to see how you are doing and further solidify your skills. If we decide to wrap up for now, my door remains open should you need to reconnect with me. If, on the other hand, you'd like to pursue further improvements now, we can talk through other options…"*

For many patients, knowing that they can return to the BHC as needed is sufficient. Other patients may prefer to address additional concerns with you or another provider outside of primary care, now that their pain-related interference is under control.

In situations where DVPRS scores suggest that no meaningful change is evident, again confirm if this finding is consistent with the patient's experience. Again, additional discussion may be necessary if the patient's verbal report of response to treatment differs from DVPRS scores. If the patient agrees that insufficient progress is being made, first discuss potential treatment barriers and other factors that could have impacted patient adherence (e.g., not engaging in home practice, change in patient goals for treatment). If the patient has had a difficult time learning or using CBT skills, consider if revisiting prior modules would be valuable for enhancing skills development.

> *"Let's talk a little bit more about what might be getting in the way of moving forward. It sounds like it's been a challenge to find the time to apply the strategies we've discussed in session. One option for us to consider is spend a moment to find times during the day that might be best to apply one or more skills…"*

Also consider if optional modules of Brief CBT-CP are an appropriate fit. If additional discussion suggests that Brief CBT-CP was not effective despite sufficient patient adherence and interest, consider stepping up the level of care for the patient to include referral to a pain specialty provider or behavioral medicine expert.

When DVPRS scores suggest the patient is getting significantly worse over time, be certain to confirm if this trajectory is consistent with the patient's experience. Discrepancies should be explored with the patient to determine why declines in DVPRS scores may not be reflective of the patient's experience. Depending on the extent of the decline, first consider issues related to patient safety and well-being. Additional suicide risk assessment should be conducted with appropriate follow up action taken as needed. Further assessment should be focused on determining the cause of increased pain and disability, which may be transient (e.g., temporary but repeated pain flair-ups due to overexertion) or stable (e.g., significant re-injury, new medical or mental health diagnoses, negative life event/psychosocial factors). Such factors likely suggest that stepping up to a higher level of care or adding additional services (e.g., to the current course of treatment) may be indicated.

> *"As you know, your DVPRS scores show that your pain and its negative impact has become more significant since we first started working together. I'd like to take a minute and talk a bit more about what might be contributing to this situation from your perspective. I'd also like to ask some questions about your safety and well-being given how low you've been feeling. We might want to consider adding some additional supports to our current approach with Brief CBT-CP or consider referring you to another provider who can offer more intensive support…"*

PART II
BRIEF CBT-CP PROTOCOL:
BHC MATERIALS

Part II contains the BHC's materials for each module. Each module contains three sections:

1. Overview/background content
2. Detailed step-by-step guide
3. One-page quick reference guide

Patient handouts for each module are included in Part III of the manual.

Of note, throughout the manual, **scripted statements are provided 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. BHCs should feel free to modify the scripting as needed as they become more comfortable with core elements of each module.

MODULE A: ASSESSMENT, ENGAGEMENT, AND GOAL SETTING

MODULE AGENDA

- Conduct focused biopsychosocial assessment of chronic pain
- Review patient measures (BHM-20 and DVPRS)
- Describe and offer Brief CBT-CP (if appropriate)
- Introduce new material (Goal Setting)
- Plan home practice (Goal Setting)

BACKGROUND CONTENT FOR THE BHC

Regardless of the referral problem encountered, the BHC's initial appointment with any patient includes verbally describing who they are and what they do in the clinic (introductory script), distributing an informational pamphlet that includes what is covered verbally, conducting a focused biopsychosocial assessment, reaching agreement with the patient on a plan for care, beginning an intervention, and providing recommendations to the PCM. These tasks remain the same when BHCs work with patients referred for chronic pain. This manual assumes the BHC already has a solid grasp on these general tasks, which also includes scoring and interpretation of the BHM-20 and DVPRS, conducting a risk assessment, documenting care, and providing PCM feedback. Only factors specific to chronic pain will be emphasized and outlined in detail here. The basic structure of the Brief CBT-CP modules described in Part I is modified slightly in Module A, due to the significant focus on assessment and treatment engagement. The information below contains step-by-step guidance for this initial appointment.

Biopsychosocial Chronic Pain Assessment

In conducting a focused biopsychosocial assessment for chronic pain, it is recommended that BHCs use the assessment prompts embedded in the BHC template of the DoD's EHR to guide assessment of symptoms and functioning. BHCs should follow standard procedures for other routine aspects of the assessment (e.g., BHM-20, suicide risk assessment, mental status assessment).

Pain-Specific Assessment Measures

To supplement information obtained from the functional assessment and the BHM-20, all patients seen by the BHC for pain should complete an additional pain-specific measure, the DVPRS. The BHC should verbally administer the DVPRS to the patient near the start of the appointment. BHCs should score and document BHM-20 and DVPRS results in the EHR and provide feedback on scores to the patient.

Appropriate Level of Care

Many patients referred to BHCs for assistance with pain management will be appropriate for PCBH model intervention using Brief CBT-CP. Consistent with a stepped care model, patients who do not show improvements in symptoms and/or functioning with a trial of Brief CBT-CP can be referred for a higher level of behavioral health care at any point in time.

A smaller number of patients might be best served by a referral for a higher level of behavioral health care after the initial assessment by the BHC. BHCs should consider referral to a specialty behavioral health provider if the following indications are present:

- Elevated risk of harm to self or others
- Current substance use disorder
- Current opioid prescription in the context of past substance use disorder
- Severe psychiatric symptoms (e.g., severe major depressive disorder) that would interfere with ability to engage in Brief CBT-CP

Consistent with standard PCBH model practice, BHCs may provide care for patients experiencing delays with access to specialty behavioral health care and can "bridge" gaps in care until patients have successfully engaged with a new provider.

Engagement in Brief CBT-CP

The goal of offering an orientation to Brief CBT-CP is to provide the patient with a roadmap for what can be expected during treatment and to establish clear expectations for both the BHC and the patient. Brief CBT-CP can be introduced to patients any time chronic pain management surfaces as a key concern for the patient's well-being, provided that safety-related concerns (e.g., lethality, significant neurocognitive disorder, psychosis) are absent or otherwise addressed. Regardless of when Brief CBT-CP is introduced, it is helpful to provide a persuasive but honest portrayal of the nature of the intervention and its potential to benefit the patient as well as key concepts about chronic pain management.

Taking five minutes for this conversation during the 30-minute initial BHC appointment can enhance motivation for treatment**.** Of course, conversations about Brief CBT-CP may need to be modified based on the level of patient receptivity.

If the patient decides not to engage in Brief CBT-CP, it is valuable to consider other available treatment options. At times, some patients simply need more time to consider their treatment options. For this situation, we include a two-page patient handout entitled ***Before You Go: Additional Information about Chronic Pain Treatment Options***. This handout includes the following: a quick summary of Brief-CBT; a short relaxation exercise; links to freely available mobile apps that can address health and wellness topics; space for the BHC to summarize next steps regarding chronic pain management, such as referrals to other clinical services; and a space for the provider's contact information.

Goal Setting

The general objectives of CBT for chronic pain are to improve quality of life through the steps listed in Table 3:

Table 3: IMPROVING QUALITY OF LIFE

Reducing the negative impact of pain on daily life
Improving physical and emotional functioning
Increasing effective coping skills for managing pain
Reducing pain intensity

Reducing the negative effects of pain on daily life by engaging in more activities, improving mood, and increasing coping skills should be highlighted. While decreased pain intensity may occur, try to help **patients shift** their preoccupation away **from pain and towards functioning**. The hope is to make life more full so that pain feels less overwhelming.

The identification of individualized, patient-centered goals is critical for tailoring modules and for helping the patient increase motivation for treatment engagement. Developing personally meaningful treatment objectives that are achievable provides a framework to guide the intervention. It can be introduced to the patient with a simple statement such as:

- *"Let's get you back to doing more of what is important to you."*

It is sometimes difficult for individuals to produce specific goals on their own, so it can be helpful to ask questions to guide the discussion, such as:

- *"What is something specific that you would like to see change in your life in the weeks to come?"*
- *"What would you like to be able to do (better, more of, etc.)?"*
- *"If this treatment were successful, how would that look in your day-to-day life?"*
- *"Are there relationships that you would like to improve?"*

In order to assist in goal setting, the SMART model will be used to develop individualized goals that are outlined in Table 4.

Table 4: INDIVIDUALIZED SMART GOALS

Components of SMART Goal Setting	
Specific	Identifies a specific action or event that will take place.
Measurable	Should be quantifiable (countable) so progress can be tracked.
Achievable	Should be attainable and realistic given resources.
Relevant	Should be personally meaningful.
Time-Bound	States the time period for accomplishing the goal.

Adapted from Doran, 1981

The ***SMART Goal Setting* handout** should be introduced to the patient during the appointment. This worksheet includes prompts for developing short-term goals that can be accomplished over the course of the brief CBT-CP treatment timeline, as well as long-term goals that may span over the next year but are important in serving as a motivator. While engaging in Brief CBT-CP requires time and effort, these goals should help illuminate why the long-term benefits outweigh the short-term investment. As time permits, BHCs can work with the patient during the appointment to begin identifying and writing down SMART goals on the worksheet.

Home Practice

Following SMART goal setting, principles, home practice for patients will focus on further considering and writing down both short- and long-term goals before the next appointment. While the general CBT-CP objectives (Table 3) provide the framework for the modules, the patient's individualized goals can help motivate them to engage in activities that will improve the quality of their life and reduce the negative consequences of pain.

STEP-BY-STEP GUIDE: MODULE A
ASSESSMENT, ENGAGEMENT, AND GOAL SETTING

Step 1: Conduct Standard BHC Assessment; Review Patient Measures

BHCs should conduct their assessment in accordance with standard BHC assessment practices, including the "introductory script" as part of informed consent, suicide risk assessment, and focused biopsychosocial assessment of referral problem. BHCs should use the assessment prompts within the BHC chronic pain section of the EHR to guide their focused assessment of chronic pain.

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient to identify areas of significant concern/distress.

Conduct assessment of suicide risk in accordance with (IAW) Service-specific policies.

Step 2: Engagement: Describe and Offer Brief CBT-CP to Those Appropriate

Based on information obtained in the assessment, BHCs should make a determination regarding whether a patient might benefit from Brief CBT-CP in primary care, or whether a referral to a specialty behavioral health provider is indicated. While most patients can be treated in primary care, factors that suggest a patient may need a higher level of care include:

- Elevated risk of harm to self or others
- Current substance use disorder
- Current opioid prescription in the context of past substance use disorder
- Severe psychiatric symptoms (e.g., severe major depressive disorder) that would interfere with ability to engage in Brief CBT-CP

For patients who appear appropriate for Brief CBT-CP, describe the intervention to increase interest in engaging in care. This would occur as you are in the "Advise" phase of the five major steps of an appointment ("5A's": Assess, Advise, Agree, Assist, Arrange), and you would lay this out as one of the options for treatment.

Overview of Biopsychosocial Approach to Chronic Pain

- The experience of chronic pain is best understood as an interaction between physical pain, our thoughts, behaviors, and emotions.
- Brief CBT-CP targets thoughts, emotions, and behaviors in order to improve functioning and promotes a problem-solving approach that emphasizes personal responsibility.

- Brief CBT-CP promotes the adoption of self-managed tools by patients so that they can take an active role in effectively addressing chronic pain and its associated negative effects.

- Use the ***Cognitive Behavioral Approach to Chronic Pain*** **handout** to illustrate cognitive and behavioral aspects of the biopsychosocial model and to introduce the goals of Brief CBT-CP.

Scripting includes:

- *"Living with chronic pain can be very challenging. It can negatively impact how we live our lives, including our ability to participate in activities and important relationships with others. Often individuals with chronic pain struggle to find ways to manage their pain and feel that they lack the know-how to move forward with their lives."*

- *"Brief cognitive behavioral therapy, or CBT, for chronic pain is designed to help us respond more adaptively to chronic pain so that we can live a more fulfilling life. It helps us learn new pain management skills that can keep us connected to the people and daily routines that we value."*

- *"This intervention is designed to be brief; it's not a long-term commitment. Of course, if we decide that additional services would be helpful, then I will help connect you to those services."*

What Does Brief CBT-CP Include?

- The treatment structure of Brief CBT-CP includes a minimum of three appointments that can last up to 30 minutes each. Patients may have more than three appointments, depending on which specific interventions the patient and BHC agree to include (Refer to ***Brief Cognitive Behavioral Therapy for Chronic Pain*** **handout**).

- Covered topics reflecting the key components of full-length CBT for pain include:

  - Pain education and goal setting
  - Activities and pacing
  - Relaxation training (covered in two appointments)
  - Cognitive coping (covered in two appointments)
  - The Pain Action Plan

Scripting includes:

1. *"Brief CBT for chronic pain involves a minimum of three 30-minute appointments covering three core modules. If you agree to move forward with this intervention, I ask that you commit to a minimum of three appointments, including today's visit. Some patients may benefit from more than three appointments; there are a total of seven possible modules available. We can decide to include additional modules if it seems useful in your case. We will cover a new pain management skill at each appointment (usually every other week) based on your preference. This means that we will work closely and stay focused to make the most of our time together."*

2. *[Refer to* ***Brief Cognitive Behavioral Therapy for Chronic Pain*** **handout***] "Our first two modules will provide some important background information about chronic pain itself and setting some new goals for moving forward. I will help you learn a brief relaxation exercise that many patients with chronic pain find useful. Then we will decide together about which of the remaining topics we will cover. We may choose activity planning and pacing, which helps patients avoid a common pitfall of overexerting themselves and causing a pain flare up. Advanced relaxation training covers additional ways to reduce tension in the body and decrease feelings of distress. Cognitive coping helps address unhelpful thought patterns. We learn to feel better by changing the way we think about pain and ourselves. A final module focuses on reviewing the skills we learned and developing a plan for how best to use those skills in the future."*

3. *"At the end of each module, we will talk about ways you can begin to practice each skill. Practice is very important as we want these new approaches to become good habits. We will find a way to make practice doable even during a busy day."*

4. *"I will be talking with your PCM about the work we're doing together and sharing any recommendations I might have for your care. This communication is important since care for chronic pain is best managed as a team approach."*

What are the Advantages of Brief CBT-CP?

There are a number of advantages to applying Brief CBT-CP, both practical and research-supported. Based on what you know about the patient, it is helpful to emphasize the match between patient needs/goals and what Brief CBT-CP can offer.

Scripting includes:

1. *"CBT for pain has been studied by researchers for many years. Overall, the results of these studies show that patients experience less distress and disability after using what they learn in CBT. Some patients even report that their pain intensity has reduced."*

2. *"CBT for pain is safe for almost anyone. There are no known negative side effects and the focus is educational and skill-building."*

3. *"The brief version of CBT for pain that we will use is usually just a few hours of face-to-face time and is spread out over several weeks. This minimizes the amount of travel and time you spend in treatment."*

What are the Limitations of Brief CBT-CP?

Discussing the limitations of Brief CBT-CP can be helpful in setting realistic expectations about what treatment can and cannot accomplish.

Scripting includes:

1. *"CBT for pain is primarily about helping with pain management. This does not mean eliminating your pain but responding to your pain in a more helpful way so that it feels less overwhelming."*

2. *"Sometimes during treatment we may need to talk about any difficult experiences you may have had in relation to pain so that you are able to respond more adaptively in the future. Over the course of treatment, the goal will be to use the skills you learn to help prevent and cope with distressing pain-related experiences."*

Agree on a Plan of Care

- Ask patients if they are willing to begin CBT-CP. If they would like to proceed, move on to Goal Setting (Step 4 below).

- If patients do not want to begin CBT-CP, discuss alternate options that might be appropriate for the patient. You may also consider using motivational interviewing approaches to increase readiness. Use the patient handout **Before You Go: Additional Information about Chronic Pain Treatment Options** to guide this discussion. Assist patient with referrals or linking to other services, as needed.

Step 3: Introduce New Material

Goal Setting

Use information gained during the assessment, along with the ***SMART Goal Setting*** **handout**, to identify patient-specific goals for change. Identify at least one short-term goal and supporting rationale within this appointment (with additional goals completed as home practice).

Scripting includes:

1. *"CBT will provide you with several new strategies to help you manage your chronic pain. Overall, these tools are designed to help reduce the negative impact of pain on daily life, improve your physical and emotional functioning, and increase effective coping skills. CBT may also reduce your pain over time."*

2. *"It's important that we make sure that CBT is addressing the areas of your life that you find important. So, let's get you back to doing more of what is important to you. The first step will be to identify some short-term goals and then some long-term goals. We'll use the SMART goals format you see here."*

Key point: Be certain that goals identified are relevant to chronic pain management.

Key point: It is sometimes difficult for individuals to produce specific goals on their own, so it can be helpful to ask questions to guide the discussion, such as:

1. *"What is something specific that you would like to see change in your life in the weeks to come?"*
2. *"What would you like to be able to do (better, more of, etc.)?"*
3. *"If this treatment were successful, how would that look in your day-to-day life?"*
4. *"Are there relationships that you would like to improve?"*

Step 4: Plan Home Practice

SMART Goals

Emphasize the value of identifying clearly specified goals (using SMART elements) for ensuring that Brief CBT-CP will address areas of concern for the patient. Any short- or long-term goals not identified during this appointment should be completed by the patient as outside practice.

Scripting includes:

1. *"Today we've identified one (or more) SMART goals that will guide our future appointments. By completing the remaining short-term (and/or long-term) goals at home and bringing them with you to our next appointment, we will be able to review them together and move more quickly into learning new skills for chronic pain management."*

2. *"Do you see any barriers to completing this before our next appointment?" (If so, work with patient to problem-solve potential barriers).*

ONE-PAGE GUIDE: MODULE A
ASSESSMENT, ENGAGEMENT, AND GOAL SETTING

MODULE MATERIALS:

- BHM-20 and DVPRS
- *Cognitive Behavioral Approach to Chronic Pain* handout
- *Brief Cognitive Behavioral Therapy for Chronic Pain* handout
- *Before You Go…* handout (for those who may not pursue CBT-CP)
- *SMART Goal Setting* handout

1. Conduct Standard BHC Assessment; Review Patient Measures (15 min)

- Use chronic pain section of EHR to guide focused assessment of chronic pain; assess risk
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Engagement: Describe and Offer Brief CBT-CP to Those Appropriate (5 min)

- *Note:* For those appropriate for Brief CBT-CP, proceed with remainder of module. For those who need a higher level of care, use remainder of appointment to link with care and increase willingness/ability to access care. Plan to bridge care if needed
- Explain biopsychosocial model (Use ***Cognitive Behavioral Approach to Chronic Pain*** **handout**)
- Provide overview of Brief CBT-CP modules (Use ***Brief CBT-CP*** **handout**)
- Discuss advantages and limitations of Brief CBT-CP
- Agree on plan of care
    - Obtain confirmation that patient is willing to commit to three or more appointments
    - If the patient is not interested in Brief CBT-CP, discuss ***Before You Go: Additional Information about Chronic Pain Treatment Options*** **handout**

3. Introduce New Material (5 min)

- Discuss the value of setting goals for chronic pain management using SMART principles
- Assist patient in developing at least one short-term SMART goal related to pain management (Use ***SMART Goal Setting*** **handout**)

4. Plan Home Practice (1-2 min)

- Jointly develop plan for patient to complete additional short-term and long-term SMART goals related to pain management (**Use *SMART Goal Setting* handout**)

MODULE B: EDUCATION AND RELAXATION TRAINING 1

MODULE AGENDA

- Check on mood and risk; review patient measures
- Review previous module and home practice (SMART Goal Setting)
- Introduce new material (Pain Education and Relaxation)
- Plan home practice (Deep Breathing Relaxation)

BACKGROUND CONTENT FOR THE BHC

Chronic Pain Education

Acute versus Chronic Pain. Understanding the difference between acute and chronic pain is the beginning of effective management of persistent pain. While *acute pain* is a symptom and requires adjustments in behavior so that appropriate healing can take place, *chronic pain* is an ongoing condition that no longer signifies that damage or harm is actively occurring. Even though these two different types may *feel* exactly the same, the *meaning* has changed. While withdrawing from what causes pain is adaptive in acute pain as it allows the healing process to occur, that response is maladaptive in chronic pain. Even in the case of conditions such as arthritis where there is a gradual degeneration occurring, pain is not a sign of an acute injury and there are no expectations of resolution or healing; thus, it must be addressed in the same way.

Because of these differences, chronic pain must be managed as a chronic condition in much of the same way as other disorders such as diabetes or heart disease. The biomedical model, which may work well with problems that resolve, such as a broken arm, does not work well with chronic pain. Since chronic pain has not responded adequately to treatment and resolution is no longer expected, a different model for understanding it must be applied: the biopsychosocial model. The biopsychosocial model may also prove useful for treatment of acute pain.

Acute Pain	Chronic Pain
Lasts less than three months	Lasts more than three months
Responds to treatment and diminishes with healing	Persists despite treatment
Typically has an identified cause; body's response to injury	May develop after incident; cause may or may not be known
Is a symptom	Is a condition

Figure 4. Typical Distinctions between Acute and Chronic Pain

Biomedical Approach	Biopsychosocial Approach
Focus primarily on biological factors of illness/disease	Focuses on biological, psychological, and social factors of pain that interact
Assumes that pain resolution or cure is possible	Assumes that management of pain is key, since complete resolution of pain is unlikely
Often used with acute pain problems; may be sufficient for some acute pain	Can be helpful approach to management of some acute pain conditions
Typically, insufficient to address chronic pain	Most useful approach for chronic pain

Figure 5: Biomedical and Biopsychosocial Approaches to Pain

Effects of Pain. Chronic pain affects many different areas of life. The interaction between biological/physical (pain and medical issues), psychological (cognition and affect/emotion), and social influences helps to explain the variability between individuals and their reports of pain. Figure 6 shows the overlap between these areas.

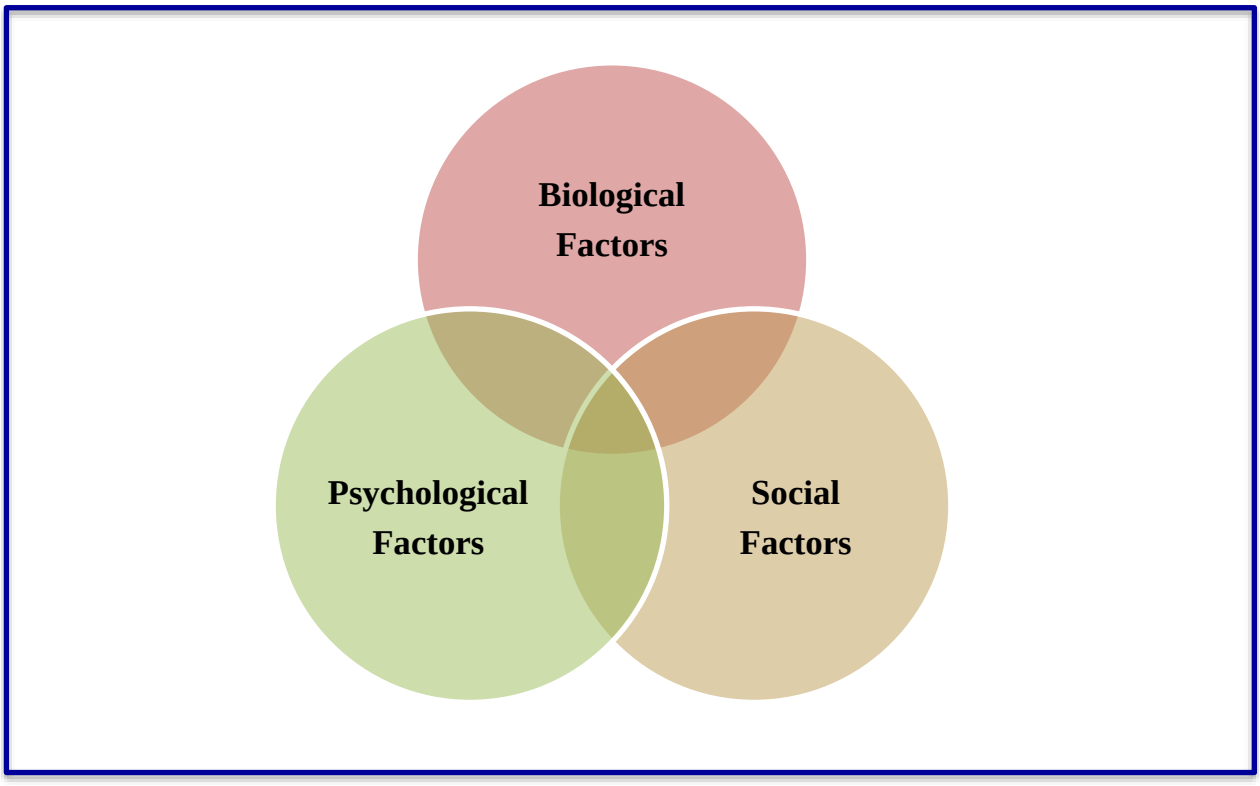


Figure 6. The Biopsychosocial Model

Use the ***Factors That Impact Pain* handout** to review some of most important biological, psychological, behavioral, and social variables that may influence chronic pain. Discuss with patients how pain has impacted their lives from all aspects:

- Biological or medical factors (e.g., pain condition, comorbidities)
- Psychological factors (e.g., negative mood, lowered self-esteem)
- Social factors (e.g., relationships, employment)

Explain that since chronic pain is a complex problem, it must be approached in a comprehensive way. While some factors such as previous injuries cannot be changed, emphasize that many of the factors that impact pain can be adapted with the assistance of CBT-CP. This intervention helps patients change the way that they *respond* to pain so that it has a less detrimental impact on their lives.

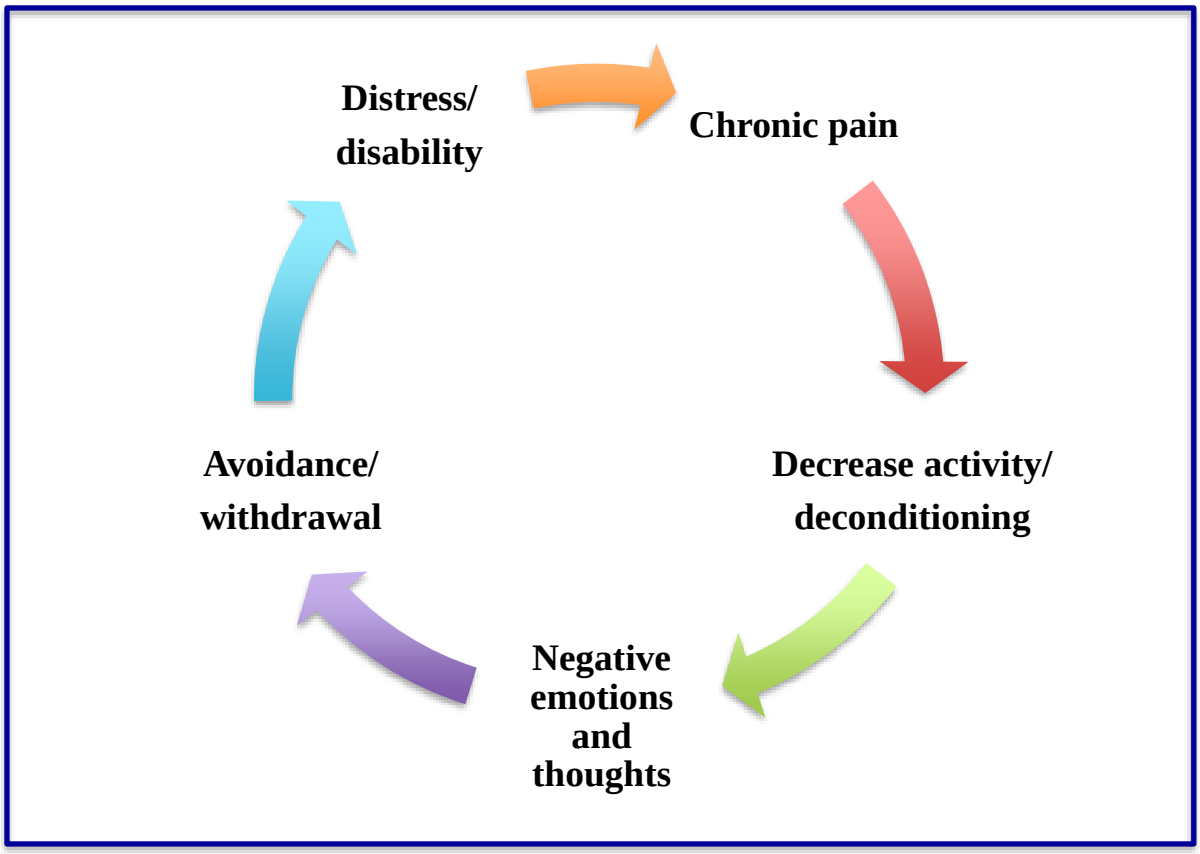


Figure 7. Chronic Pain Cycle

Now that the various areas of life that pain affects have been identified, use the ***Chronic Pain Cycle* handout** (see Figure 7) to discuss the process and stages that may occur over time for those with chronic pain. As the figure illustrates, the onset of chronic pain often leads to a decrease in activities, which leads to physical deconditioning. Dealing with constant pain may

also lead to negative thoughts ("I can't do anything when I have pain like this") and emotions such as frustration and depression. These factors contribute to increased avoidance of family and friends, and anything that involves movement since it hurts to move. This combination means more distress and disability, leading to increased pain. Many patients will be able to recognize this pattern in their own lives.

RELAXATION TRAINING IN CHRONIC PAIN

Relaxation Rationale. Relaxation techniques are fundamental skills for managing chronic pain. However, the notion of relaxation in the service of pain management is an unfamiliar concept to most individuals with chronic pain. The rationale behind the use of relaxation techniques for pain management can be explained most easily by focusing on chronic pain as a chronic stressor, both physically and psychologically.

When patients experience chronic pain, their bodies react with a "fight or flight" response. This *stress response*, controlled by the sympathetic nervous system, is critical to survival when individuals face a dangerous or threatening situation. While the response in acute pain is adaptive, with chronic pain the response is stuck in an "on mode" and creates additional wear and tear on the body. Since the body is continuously stressed due to persistent pain, it does not have the chance to recuperate (Benson & Klipper, 1975).

Patients with chronic pain may hold certain areas of their bodies rigidly to brace or protect against pain. They may tense their necks or shoulders in anticipation of or in response to pain. While these types of reactions are perfectly natural and often done unconsciously, they usually result in increased tension levels and pain intensity. In addition, coping with the chronicity of the pain condition, not feeling understood by others, reduced involvement in enjoyable activities, and negative thoughts may also increase the stress related to pain. Since stress and pain have a bidirectional relationship – pain influences stress and stress influences pain – gaining greater control over the response to stress can help to better manage pain.

The good news is that the opposite physiological process, known as the *relaxation response*, slows down and stops the fight or flight reaction. This parasympathetic nervous system has the effect of reversing physiological arousal and bringing the body back to a calm state. Human beings are capable of developing control over this relaxation response and engaging it as a means of managing physical and emotional stress. With practice, the skill of using relaxation techniques to return the body to a relaxed state can be developed, thereby closing the pain gate and reducing the intensity of pain. We are retraining the body and mind to respond in a more adaptive way to stress and tension.

Relaxation Implementation. As with any new skill, practice of relaxation techniques should be done daily to gain mastery. It can be helpful to offer an analogy such as learning to play the guitar. While at first it may be difficult and uncomfortable with little noticeable improvement, regular practice helps a person become a skilled musician over time. In fact, fingers may begin to play certain songs on "autopilot" as the body develops a memory for the movements. This is

the case with practicing and learning relaxation as well. Over time, relaxation exercises become easier to implement, with less thought, and will result in greater benefit with regard to managing stress and pain. Daily practice is required to develop these skills.

Some hints that may be helpful are included in Figure 8.

- Pair relaxation with a daily activity such as having a meal or making coffee/tea.
- Use a relaxation "app" on a smart phone (See Appendix 3 for examples).
- Select a phrase or mantra that serves as a cue such as "calm, peace, or positivity."

Figure 8: Relaxation Tips

Introduce the handout on ***Relaxation: Benefits and Tips*** in this module, which further outlines the advantages to developing the skill of relaxation and ways to implement it successfully.

Relaxation Technique: Deep Breathing. While there are various relaxation techniques that are effective, all include a unique mental state of passive attention to a stimulus that decreases the inner dialogue and the sympathetic nervous system arousal. They combine a focusing tool (e.g., breath, area of body, image) with a quiet and accepting disregard of everyday thoughts when they occur in order to return to the focus of attention.

Steps to take to prepare for relaxation practice are outlined in Figure 9.

One relaxation technique, deep breathing, will be introduced and practiced with the BHC in this module. Other forms of relaxation (e.g., brief progressive muscle relaxation, imagery relaxation) are included in Module D.

1. Sit in a comfortable chair or on a mat (Unless you are using the technique to aid sleep initiation, sitting or lying in bed is not recommended because you may fall asleep).
2. Lower the lights.
3. Take off your shoes and loosen tight clothes.
4. Close your eyes (If you want to keep your eyes open, then focus them on one spot).
5. Turn off your phone, TV, and radio.
6. Put pets (if a distraction) in another room.
7. Let others in the house know you need some time alone to focus on your health.

Figure 9: Get Prepared

Diaphragmatic breathing, often called “deep breathing,” is the foundation for all other relaxation techniques. It involves contracting the diaphragm by expanding the chest cavity and allowing more room for the lungs to fill with air. This serves the purposes of slowing breathing, increasing oxygen intake, and even increasing energy.

Diaphragmatic breathing is a brief and portable strategy that can be done anywhere, at any time, and usually without others becoming aware that it is being done. It involves normal breathing, but uses breaths that are intentionally smoother, slower, and deeper than the breaths usually taken throughout the day. It is one of the easiest, most effective ways to decrease tension in the body.

The steps for teaching this exercise are detailed here. The BHC can help model effective technique by engaging in the exercise along with the patient.

Steps for Deep Breathing

1. Establish good posture.
2. Explain chest/shallow versus belly/deep breathing.
3. Have the patient place one hand on chest and one hand on abdomen.
4. Determine if the patient is “chest breathing” or “belly breathing.”
5. Close eyes completely or look downward and fix gaze on one spot.
6. Observe the hands and ensure they are free of tension.
7. Have the patient keep one hand on chest and one hand on abdomen and keep eyes closed or fixed on one spot.
8. Have the patient inhale slowly through the nose (if possible), causing the abdomen to expand, extending inhale to three to five seconds in duration.
9. Instruct the patient to exhale slowly and completely through mouth, extending exhale to three to five seconds in duration.
10. Continue this exercise for three to five minutes.

During the exercise, the BHC may wish to coach the patient with statements such as: “Feel your body become more and more relaxed with each exhalation,” or “Each time you exhale, think of the word *relax*,” or “Breathe in feelings of relaxation and breathe out any tension.” Please also refer to Figure 10 and to the ***Deep Breathing Relaxation* handout** for a sample script of this exercise, which will be provided to the patient.

TALKING TIPS: Mini-Breathing (Cue-Controlled Relaxation)

One idea is to try and use mini sessions of deep breathing during the day. Incorporating brief sessions of breathing will help with frequent practice and because this exercise is so portable and easy, it can help any time you are “on the go.”

For example, when you are standing in a line at the store, you may find yourself becoming increasingly tense or impatient. Instead of focusing on that:

1. Take a deep breath in; as you breathe out imagine the tension and negativity leaving your body.

2. On your next breath, imagine breathing in feelings of calm and relaxation.

3. Count to six taking a slow, deep breath; breathe out slowly, again to a count of six.

Figure 10: Mini-Breathing

STEP-BY-STEP GUIDE: MODULE B
EDUCATION AND RELAXATION TRAINING 1

Step 1: Check on Mood and Risk; Review Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with patients about their home practice since the last appointment (SMART goal setting).

Scripting includes:

1. "Before we get started on new material, let's take a couple of minutes to review the SMART goal setting from last time. Did you bring your goal setting worksheet with you today?"

Note to provider: It is common for patients to have not completed their home practice work. In these cases, it is important to briefly explore barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Collaboratively review the patient's goals identified in Module A and on the *SMART Goal Setting* handout. Recall that as a modular approach to treatment, the selection and order of future treatment modules can be modified based on patient and/or provider preference.

Scripting includes:

1. *"You have identified some excellent personal goals. Based on what you would like to achieve, it would be helpful for us to review the module topics so that you can help decide how we approach treatment."*

2. *"Today we will cover Module B, which focuses on education about chronic pain and an introduction to relaxation training. For future appointments, we will want to select one or more modules that will help you achieve your goals. As we review this list of modules*

together, which seem to fit your goals?" (Discuss further; arrive at plan for next appointment).

Perhaps the patient is most interested in learning tools for relaxation so that they can reduce muscle tension and manage their family stressors more effectively. Maybe the BHC has determined that the patient's level of maladaptive thinking suggests that focusing on cognitive coping skills immediately will likely lead to better outcomes. There is no incorrect order by which to use the remaining modules, assuming that Module A, B, and at least one additional module are covered.

Step 3: Introduce New Material

Chronic Pain Education

Scripting includes:

1. *"Today, I would like to discuss some background on chronic pain itself and teach you a relaxation strategy that you can use at home to help with pain management. How does that sound to you?"*

2. *"To get started, I want to talk a bit about what makes chronic pain different from pain that goes away after an injury heals."*

    - Compare and contrast chronic pain with acute pain.
    - Explain why these pains may <u>feel the same</u> but must be <u>treated differently.</u>

Effects of Pain

- Use ***Factors that Impact Pain*** **handout** (Figure 6) to explain: 1) the biopsychosocial model and 2) factors that impact pain.

Scripting includes:

1. *"Chronic pain impacts many areas of our lives. You can see in this diagram that the chronic pain you experience can be impacted by the interaction of biological or medical factors, psychological factors, or social factors."*

2. *"These factors can impact our chronic pain in either a negative way, a beneficial way, or both and vary from person to person. They can turn up the volume on pain or turn down the volume. What factors impact you the most?"*

Key point: Asking patients about what factors impact them the most will help you to identify potential treatment targets (i.e., aligned with their SMART goals).

Key point: Emphasize that Brief CBT-CP is designed to help patients manage the impact of chronic pain across these three domains.

- Use the ***Chronic Pain Cycle*** **handout** (*Figure 7. Chronic Pain Cycle* to explain how chronic pain may negatively impact life over time.

Scripting includes:

1. *"Chronic pain can take a toll on our behaviors, thoughts, and feelings. It's shown here how pain may lead us to stop participating in activities that we enjoy which leads to negative thoughts and feelings. As our mood gets worse, we might withdraw from routine activities and even our relationships. The less engaged we are in life, the more distress we may feel. And without enough physical activity, we might become deconditioned or disabled, making our pain worse."*

Key point: Review the costs of inactivity noted on the handout.

Note to provider: Be aware that some patients may not be avoiding or under-engaging in activities, but may be dealing with negative ramifications of pain nonetheless. Some individuals may also be overactive, which can exacerbate their pain. The primary goal, in this regard, is to achieve balance in activities. The module regarding Activities and Pacing will address this concern in detail.

Key point: Brief CBT-CP can help break the chronic pain cycle.

Relaxation Training Education

Scripting includes**:**

1. *"I'd like to provide a little bit of background on why relaxation techniques are valuable tools to manage chronic pain."*

Discuss that chronic pain is a stressor for both the body *and* mind that triggers and subsequently maintains the fight or flight response.

Explain that relaxation skills are more than just resting or enjoying a hobby and are specifically designed to counteract the fight or flight response by reducing both bodily and psychological tension/stress.

Implementing Relaxation Training

Scripting includes:

1. *"Taking time to relax and recharge your batteries is good for your health for a variety of reasons, including that it can help improve your mood, energy level, sleep, and blood pressure, as well as pain. Though there are many different types of relaxation skills, they each have common features, and importantly, all require practice."*

Use the ***Relaxation: Benefits and Tips*** **handout** to explain the 1) benefits of relaxation training, and 2) provide an overview of basic tips to enhance relaxation skill practice**.**

Provide a brief overview of **Deep Breathing** relaxation training:

Scripting includes:

1. *"Deep breathing is the foundation for all other relaxation techniques. Very deep breaths expand the chest cavity, contract the diaphragm, and make more room for your lungs to fill with air. This helps to slow your rate of breathing and increase oxygen intake, among other things. It is a brief, easy to learn, and portable strategy, but is also one of the most effective ways of quickly decreasing tension in your body."*

Use the script found in the ***Deep Breathing Relaxation*** **handout** to guide patients through in-vivo practice of this relaxation technique.

Key point: Be sure to establish good posture and re-orient the patient to the specific relaxation activity before starting**.**

Key point: A key point of relaxation training is that the patient is retraining the body and mind to respond differently to stressors, so that it becomes automatic and more adaptive.

Key point: Reinforce the importance of at-home practice and use of mini-modules of practice throughout the day.

Step 4: Plan Home Practice

Provide patients with copies of the skills handouts ***Relaxation: Benefits and Tips*** and ***Deep Breathing Relaxation*****.** Encourage patients to pick a time and place each day to practice for at least 5 to 10 minutes (more if possible). For patients who would benefit from use of a mobile app to address general health and wellness in addition to this module, see Appendix 3 for a handout that lists a variety of free mobile apps that can address sleep, mood management, and other concerns that commonly accompany chronic pain.

ONE-PAGE GUIDE: MODULE B
EDUCATION AND RELAXATION TRAINING 1

MODULE MATERIALS

- Brief patient self-report measures (BHM-20 and DVPRS)
- *Factors That Impact Pain* handout
- The *Chronic Pain Cycle* handout
- *Relaxation: Benefits and Tips* handout
- *Deep Breathing Relaxation* handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review patient's short-term and long-term SMART goals related to pain management
- Use goals to help collaboratively select future modules (plan next appointment)

3. Introduce New Material (15 min)

- Provide education on biopsychosocial model, the effects of pain, and the chronic pain cycle (Use ***Factors that Impact Pain*** **handout** and ***Chronic Pain Cycle*** **handout**)
- Discuss rationale for relaxation training in chronic pain and provide a general overview of relaxation strategies (Use ***Relaxation: Benefits and Tips*** **handout**)
- Train the patient in deep breathing relaxation method (Use ***Deep Breathing Relaxation*** **handout**) and practice during appointment

4. Plan Home Practice (1-2 min)

- Jointly develop plan for home practice of deep breathing relaxation. Patient should identify specific times and places for practicing at least 5-10 minutes per day

MODULE C: ACTIVITIES AND PACING

This module focuses on the importance of engaging in activities and how to safely do so through the use of time-based pacing. Unlike many other behavioral health interventions, behavioral activation and guidance on how to properly pace activities are particularly important with managing chronic pain so it is typically introduced early in the intervention.

MODULE AGENDA

- Check on mood and risk; review patient measures
- Review previous module and home practice
- Introduce new material (i.e., Hurt vs. Harm, Pleasant Activities, and Time-Based Pacing)
- Plan home practice (Pleasant Activities and Pacing Activities)

BACKGROUND CONTENT FOR THE BHC

Hurt Versus Harm

Often times, one of the greatest challenges for those with chronic pain is the belief that they no longer can engage in life fully or do the things that they want to do. Patients with chronic pain may believe that activity will lead to increased pain while also causing physical damage. This belief, while typically true in acute pain, is inaccurate in chronic pain and may lead to maladaptive responses such as avoidance. By avoiding activity, chronic pain worsens over time.

Inactivity leads to issues such as decreased flexibility and stamina, increased weakness and fatigue, and even spasms from tight muscles. The problems related to deconditioning often lead to increased risk of injury and weight gain (adding strain to the body) as well as feelings of sadness, frustration, or boredom, which only encourage more general withdrawal from people and places.

The avoidance response or fear of movement may develop to varying degrees in those with chronic pain. Unfortunately, it can become a pattern or habit of not moving which only makes the patients' next attempts to engage in activity more difficult and painful, reinforcing this fear/avoidance. For patients who have lower levels of fear/avoidance and are more active, the manner in which they approach situations (e.g., overdoing) may also have detriments such as new injuries or exacerbating frequency and duration of intense pain episodes.

Flare-ups, relatively brief increases in pain intensity, are a central concern of those with chronic pain. Patients do not want to induce a flare-up with movement and are concerned with how to

manage flare-ups when they occur. Lack of movement, avoidance, or approaching activities without thoughtful planning makes the occurrence of flare-ups more likely. Another common response is avoiding an area that hurts by favoring another area. If a patient has pain in the right knee, they may begin compensating by adding additional pressure to their left side when walking. In these cases, not only may the initial area of pain become deconditioned, the area that is now absorbing additional stress may begin to develop new pain.

Use the ***Chronic Pain Cycle*** **handout**, introduced in Module B, to discuss the negative consequences that often result from responding in a maladaptive manner to pain.

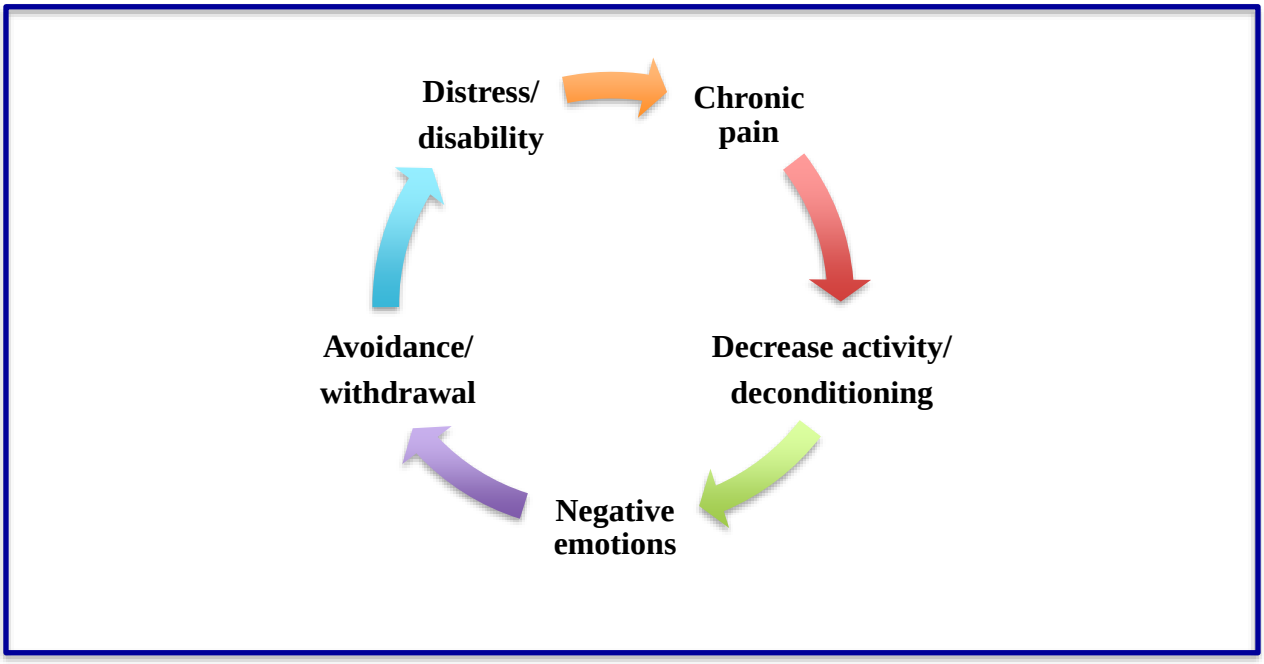


Figure 11: Chronic Pain Cycle

Pleasant Activities

For those with chronic pain, decreasing fear and engaging in activity is key to improved functioning but can be challenging. One way to increase re-engagement and decrease avoidance is to participate in pleasant activities. Many with pain may have stopped participating in hobbies, spending time with others, or engaging in physical outings. For those that do engage in activities more regularly, they may have given up some of their favorite hobbies or are less comfortable when around friends and family. Many may feel that they physically cannot do the things they want, are "no fun" to be with because of pain, or are worried about experiencing a pain flare-up that might interfere with plans. The benefits of engaging in pleasant activities are included in Figure 12.

Identifying pleasurable activities for those with chronic pain may be challenging for several reasons. Pain-related negative moods such as depression and irritability may lessen the ability to identify such activities or lessen the motivation to engage in them. Psychosocial challenges such as limited resources may be a barrier. Chronic pain and poor sleep may leave patients feeling too tired or fatigued to participate in activities. Primarily, however, patients may mention things that they would like to do but "can't" because of pain limitations.

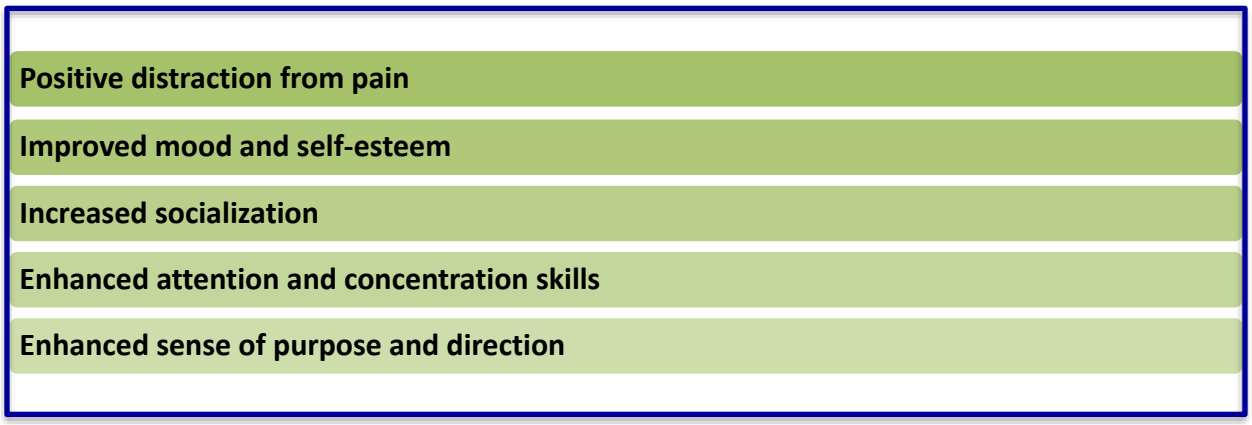


Figure 12: Benefits of Pleasant Activities

Use the ***Pleasant Activities List*** **handout** to explore options. This discussion will likely generate a forum for examining creative alternatives for previously enjoyed hobbies. For example, if patients report that they used to enjoy bowling but are now unable to, inquire about their willingness to teach bowling to children or adolescents or to play an adapted version of bowling through a gaming system.

Time-Based Pacing

Some people are prone to "pushing through" pain in the name of accomplishing a task and will not stop until it is complete, while others may be preoccupied with fears about harming themselves and avoid activity altogether. Often, those with chronic pain use a "good pain day" when they are feeling better to try to complete one or more rigorous activities that have fallen by the wayside. For example, they clean the garage or mow the grass without excessive pain – but wake up the next day feeling like they cannot move and thus are "laid up" for several days in a row.

This cycle of overactivity, increased pain, increased rest, and decreased pain (seen in Figure 13) often happens on a recurring basis. This boom-bust pattern of overuse and underuse can lead to various negative consequences such as pain flare-ups, increased stress and anxiety, decreased efficiency, lowered self-esteem, and avoidance of any activity.

Overdoing or not planning activities carefully can lead to flare-ups lasting from minutes to weeks. Minimizing the occurrence of flare-ups as well as knowing how to manage them when they do occur is a critical component of successful CBT-CP.

Engaging in a moderate, safe level of activity on a regular basis is how to avoid this maladaptive cycle. Using the skill of pacing, where time is the guide for activity engagement, can be a helpful strategy. It allows patients to consistently and thoughtfully engage in activities without causing detrimental consequences. Pacing is often about balancing activities and planning ahead or working "smarter not harder."

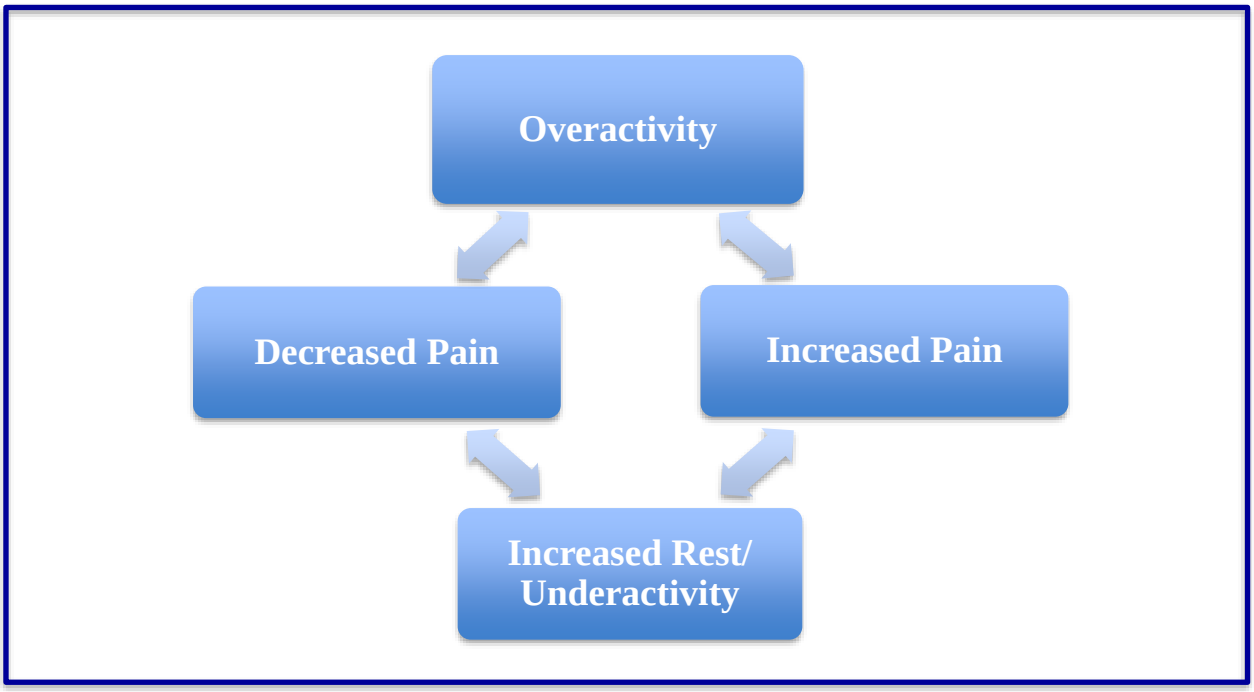


Figure 13: Overactivity Cycle

Breaking tasks into "chunks" such as painting a room for 45 minutes per day over four days over a week instead of for three hours on a single day is one example of pacing. Alternating between standing to do dishes for ten minutes and sitting to fold laundry for five minutes may be a way to avoid standing longer than is comfortable, avoiding a flare, but also engaging in an "active rest" period where something is still being accomplished. Being more thoughtful about activity allows patients to get more done on a more consistent basis, which also encourages mood improvements brought about by accomplishment. Without pacing, the cycle of being sedentary or over-active with pain flare-ups can be very discouraging.

During this module, use the ***Pacing Activities* handout** to explore how to pace an activity with the patient. Use examples to illustrate how pacing can enable patients to consistently carry out activities while minimizing the likelihood of increased pain. It is the middle ground between doing nothing and over-exertion that enables patients with chronic pain to engage in reasonable amounts of activity and improve quality of life. It is important to remember to take a break *before* an exacerbation occurs, and not wait until the pain is increasing. Asking a patient

how long they can engage in an activity before they begin to experience an increase in discomfort should be the guide.

Once the concept of pacing has been reviewed, it is important to discuss how patients will apply it to their own lives. Ask the patient to choose an activity where they can use pacing over the next week such as washing the dishes or doing yard work. With the worksheet and sample provided, use the steps to develop a plan for incorporating the activity into the week. It is important to emphasize that pacing is a primary means to avoid flare-ups. While pacing may be a difficult concept to implement, highlight its critical role in effective pain management and the need for practice.

If questions arise regarding how a patient's physical capabilities, activity restrictions or modifications may impact the activity pacing plan, BHCs should seek guidance from the patient's PCM and/or physical therapist.

STEP-BY-STEP GUIDE: MODULE C
ACTIVITIES AND PACING

Step 1: Check on Mood and Risk; Review Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with patients about the material from the prior module and their home practice since the last appointment.

Scripting includes:

1. *"Before we get started on new material, do you have any questions about what we covered last time?"*

2. *"Last time we discussed <previous topic> which included some outside practice for you to complete. Do you have your practice work from last time?"*

Note to provider: It is common for patients to have not completed their home practice work. Therefore, it is important to briefly explore barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Step 3: Introduce New Material

Scripting includes*:*

1. *"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 levels of distress and makes life more fulfilling."*

Hurt Versus Harm. Use the ***Chronic Pain Cycle*** **handout** introduced in Module B to explain that acute and chronic pain may feel the same but must be addressed differently.

Scripting includes:

2. *"It is important to remember that the pain we experience with a chronic pain condition does not indicate that we are harming ourselves. Rather, this pain is like an annoying alarm we can't trust: unpleasant but not an indication of damage. Similarly, like leaving bread in the toaster too long, smoke may set off the smoke detector. Even though the alarm is going off and some action on our part is required, it's not an emergency. There's no need to call the fire department."*

3. *"Individuals with chronic pain can begin to stop participating in certain activities out of fear that they will experience a pain flare-up. Although we probably can't avoid all flare-ups, finding a balance between activity and rest is important when managing chronic pain."*

4. *"As you can see in the chronic pain cycle, when we experience pain we often decrease our activity too much. This leads to lack of strength and flexibility, as well as an increase in distress. As we feel worse, we might withdraw from even more activities. This cycle can be broken by finding a balance in safe activities and rest."*

Key point: Managing chronic pain requires balance between safe, appropriate activity and rest to avoid both inactivity that leads to deconditioning and overuse that typically results in pain flare-ups.

Pleasant Activities. Use the ***Pleasant Activities List*** **handout** to help identify enjoyable or meaningful activities, particularly if the patient has a difficult time generating ideas without assistance.

Explain that pleasant activities take many shapes and forms, including those that require varying levels of physical activity, from walking to playing board games.

Scripting includes:

1. *"One of the best ways to avoid inactivity is to get reconnected with your hobbies or social activities. Pleasant activities are very helpful because they can distract us from pain, improve our mood, give us a chance to socialize, and even help give us a sense of purpose."*

2. *"Individuals can stop certain activities because they no longer seem possible when living with chronic pain. While this is true in some cases, at other times, we can modify the*

activity itself, or how we participate. What pleasant activities or hobbies would you like to go back to?"

3. *"It's clear that chronic pain has had a negative impact on your activities lately. Sometimes it's helpful to also explore some new options for the first time. Is there anything on this list of Pleasant Activities that we might talk about further?"*

Key point: If the patient is highly committed to an activity that is no longer feasible, engage in a conversation about what they found enjoyable about the activity (e.g., being outside, social aspect of a running group, etc.) and go from there. The "essence" of that activity that they enjoyed might be found in other more feasible activities. Alternatively, help them find ways to remain active in a similar activity in a new capacity.

***Examples include**: "It sounds like one of the parts about [your running group] that you loved was the opportunity to [meet with friends on a weekly basis]. Even though you are no longer able to [run with them for the full time], how might you continue to [see your friends]?"*

***Or**: "It's clear that you really enjoyed the [teamwork] aspect of [playing basketball]. Is there a way to keep [helping the team], even if you don't [play as frequently]?"*

Key point: It is often helpful to identify a range of activities, including those that may require fewer resources (e.g., activities inside the home), can be completed alone (e.g., gardening), with friends (e.g., lunch at a favorite restaurant), those where physical activity is the main focus (e.g., playing sports), and those that are important because they are personally meaningful (e.g., volunteering for a charitable organization).

Based on your discussion, ask the patient to begin filling out the ***Pleasant Activities Schedule* handout** with at least one pleasant activity they will do in the upcoming week. Encourage them to select the day(s) of the week they plan to do this activity, and indicate on the form when they have accomplished the activity. Encourage them to identify additional activities in the upcoming week, add them to the schedule, plan the date, and note when they have completed it.

Time-Based Pacing. Refer again to the ***Chronic Pain Cycle*** **handout** to explain how chronic pain negatively impacts life over time, with a particular emphasis on the role of activities in this chronic pain cycle.

Scripting includes:

1. *"Chronic pain can take a toll on our behaviors, thoughts, and feelings. It's shown here how pain often leads us to stop participating in activities that we enjoy which leads to*

negative thoughts and feelings. As our mood gets worse, we might withdraw from routine activities and even our relationships. The less engaged we are in life, the more distress we may feel. And without enough physical activity, we might become deconditioned, making our pain worse."

Key point: Review the costs of inactivity noted on the ***Chronic Pain Cycle*** **handout**.

Key point: Brief CBT-CP can help break the chronic pain cycle.

Use the ***Pacing Activities*** **handout** to describe the goals of planning activities and to illustrate the process of planning activity and rest.

Scripting includes:

1. *"The goal of activity planning, or pacing, is to take a larger job and break it into smaller pieces to make it more manageable. For example, an individual might plan to paint a room in their house. Trying to paint the room in one day may be too strenuous whereas making progress each day for several days may help avoid overexertion that can cause a pain flare-up."*

2. *"Balance applies to everyday activities as well. For example, you could take a break from standing every 10 minutes while doing the dishes. During a 5-minute break, you can remain active with other tasks that don't require standing, like folding laundry or paying your bills online."*

3. *"Whatever the activity, the main goal of pacing is to engage in routine moderate activity. Using a bit of planning to guide our activities helps us avoid situations where we "push through" the pain throughout the day, which often leads to several days of being "laid up" due to a pain flare-up."*

4. *"This worksheet will help us break down a larger activity into pieces to ensure that we are finding a balance between activity and rest. It may seem unusual at first to make an activity longer than you are used to, but it will help to avoid unnecessary pain in the long run."*

5. *"Pacing helps us stay balanced because it reminds us to start being active as well as stop or take breaks. Relying on a pre-determined schedule means we do not need to rely only on our internal signals about the need for movement and rest."*

Key point: To find the optimal balance of activity and rest, it's important to estimate the degree of active time and rest time in advance. The active versus rest time will vary depending on the task. These time estimates can be adjusted as needed.

Key point: Be sure to identify at least one activity to illustrate pacing and include a pleasurable or personally meaningful activity (e.g., playing games with grandchildren) in addition to other activities (e.g., washing dishes).

6. *"Let's use the worksheet to sketch out how to apply principles of pacing using active and rest time. What activity should we focus on first?"*

Step 4: Plan Home Practice

Home practice for this module involves: 1) planning and increasing pleasant activities, using the ***Pleasant Activities List*** and ***Pleasant Activities Schedule*** **handouts,** and 2) implementing time-based activity pacing for at least one activity. Patients should record their engagement in pacing cycles on the ***Pacing Activities*** **handout**, noting both their active time and rest time. Additional activities can be identified by the patient as part of outside practice.

Scripting includes:

1. *"Today we've discussed the importance of activities and pacing in better management of chronic pain. We started identifying some activities that you might find pleasant or enjoyable. Staying active in things we enjoy is a good way to avoid inactivity, which can worsen pain, and improve quality and enjoyment of life, despite pain. We started planning pleasant activities on the* ***Pleasant Activities Schedule.*** *Using this handout, I'd like you to keep track of the pleasant activities you complete, and bring it with you to the next appointment."*

2. *"We also discussed the importance of pacing to keep active while reducing the likelihood of overexertion. On the* ***Pacing Activities*** **handout***, we've identified (one, two, three) activities and estimated the amount of rest and active time for each. The next step will be for you to record the number of cycles you complete for each activity. By completing this at home and bringing them with you to our next appointment, we will be able to review the sheet together, identify any areas of concern, and move into learning the next skills."*

ONE-PAGE GUIDE: MODULE C
ACTIVITIES AND PACING

MODULE MATERIALS

- Brief patient self-report measures (BHM-20 and DVPRS)
- *Chronic Pain Cycle* Handout (also included in Module B)
- *Pleasant Activities List* Handout
- *Pleasant Activities Schedule* Handout
- *Pacing Activities* Handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review home practice since last appointment
- Identify strengths; address barriers

3. Introduce New Material (10-15 min)

- Hurt versus harm. Use the ***Chronic Pain Cycle*** **handout** to explain that acute and chronic pain may feel the same but must be addressed differently
- Pleasant activities. Explain rationale for pleasant activities. Note that pleasant activities may take many forms, including those that require varying levels of physical activity. Use the ***Pleasant Activities List*** **handout** to help identify enjoyable or meaningful activities, particularly if the patient has a difficult time generating ideas without assistance
- Time-based pacing. Use the ***Chronic Pain Cycle*** **handout** to explain how chronic pain can negatively impact life over time, with an emphasis on the role of activity in this cycle. Use the ***Pacing Activities*** **handout** to describe the goals of planning activities and to illustrate the process of planning activity and rest

4. Plan Home Practice (3 min)

- Develop plan for home practice of increasing pleasant activities using ***Pleasant Activities Schedule*** **handout**. Ideally, patient will plan/record a minimum of 2 per week
- Develop plan for time-based pacing of activity. With at least one activity identified, patients should record their engagement in pacing cycles on the ***Pacing Activities*** **handout**, noting both their active time and rest time. Additional activities can be identified by the patient as part of outside practice

MODULE D: RELAXATION TRAINING 2

This module builds upon the relaxation information and skills introduced to the patient in Module B. The module reviews two specific techniques: brief progressive muscle relaxation (PMR) and guided imagery relaxation. Since these are used in the management of various behavioral health and medical conditions, many providers may already be familiar with them. Emphasize that practicing these techniques regularly between appointments is critical to mastery and effective application.

MODULE AGENDA

- Check on mood and risk; review patient measures
- Review previous module and home practice
- Introduce the new material (PMR and Imagery Relaxation)
- Plan home practice (PMR and Imagery Relaxation)

BACKGROUND CONTENT FOR THE BHC

Patients will be taught two additional relaxation methods to supplement their use of deep breathing relaxation learned in Module B. They should be encouraged to practice both of these methods over the next two weeks. Over time, they may develop a preference for a particular form of relaxation and continue with primary focus on that method.

Brief Progressive Muscle Relaxation

The first technique introduced in Module D is brief PMR. This exercise is focused on systematically tensing and relaxing specific muscle groups. The underlying explanation for the utility of this technique is that a muscle group cannot be both tense *and* relaxed at the same time. By deliberately tensing the muscles and then relaxing them, patients can learn to observe the difference between these two sensations; the body can then learn to notice tension in muscles and to release that tension.

Gentle contraction (i.e., mild to moderate tension) of each muscle group is required, not severe tension. Tensing the muscle should not hurt, but it may feel unfamiliar and thus slightly uncomfortable on the first practice of PMR. Muscle groups that are particularly tense may be repeated, if desired.

For patients who fear that contracting a particular muscle will increase pain in that location, encourage them to approach that area gently. If there is a spasm or any undesirable effect, patients can visualize the muscle and imagine tensing that area when they get to that part of the body. Patients should continue to contract the other muscles as the PMR exercise continues.

Major Muscle Groups. Please refer to the ***Progressive Muscle Relaxation*** **handout** for a sample script of this exercise (Hunter et al., 2024). The following are the muscle groups to be tensed and relaxed:

- Legs
- Arms and hands
- Shoulders and stomach
- Face and neck

Steps for Brief PMR. The following list summarizes the key steps for brief PMR:

1. Start with relaxed, deep breathing.

2. Systematically tense and relax each major muscle group.

3. Tension should last about five seconds then relax for about one minute.

4. May spend additional time on muscles that are difficult to relax (repeat tension/ relaxation cycle in step three).

5. Conduct a mental scan of the body.

6. Mentally scan the body in systematic order of muscle groups, looking for remaining tension.

7. Focus on relaxing any residual tension by repeating the tension/relaxation cycle in step three for that area.

Guided Imagery Relaxation

The second relaxation technique introduced in this module is guided imagery relaxation. This technique is designed to train the patient to create mental images that foster a relaxed state. The patient should choose a location to mentally visit during the exercise; the only "rule" is that the patient must pick a place that is peaceful and calm with positive associations. Encourage a focus on detailed images that take the patient away from stressful thoughts and bodily tension.

The key to developing a deeply immersive experience, where the patient completely engages in the imagery exercise, is to give full attention to all the specific details of the scene. It is crucial

to involve all five senses by considering specifically what would be seen, heard, smelled, felt, and tasted in this location. Provide examples such as smelling fresh-baked cookies in the air, feeling warm sand in the hand, or hearing the crush of leaves underfoot.

Once the mental scene and the details of the patient's relaxing place are gathered, guide the patient through the steps of the imagery exercise described below. Please refer to the ***Guided Imagery Relaxation* handout** for a sample script of this exercise (Hunter et al., 2024).

Steps for Guided Imagery Relaxation. The following list summarizes the key steps for guided imagery relaxation:

1. Begin with comfortable posture and relaxed breath with eyes closed or gaze fixed.
2. Imagine the "entryway" into the location (e.g., movie screen, path, door, staircase).
3. Enter the relaxing place (focus on five senses).
4. Spend 5-10 minutes in the relaxing scene.
5. Have the patient "leave" the location through the same "entryway."

Relaxation Practice

Encourage patients to practice relaxation techniques at least once per day over the next week and more, if possible. Instructions for both types of relaxation reviewed are provided. In addition, ask them to use the ***Relaxation Practice Record* handout** to track practice and progress. Ask the patient to write down a tension rating before starting the exercise and then return to the record afterward to self-assess and rate tension again. Clarify that they are rating tension, not pain intensity. Remind patients that as the skill develops, the techniques will become easier and benefits will increase.

STEP-BY-STEP GUIDE: MODULE D
RELAXATION TRAINING 2

Step 1: Check on Mood and Risk; Review Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with patients about their home practice since the last appointment.

Scripting includes**:**

1. *"Before we get started on new material, do you have any questions about what we covered last time?"*

2. *"Last time we discussed <previous topic> which included some outside practice for you to complete. Do you have your practice work from last time?"*

Note to provider: It is common for patients to have not completed their home practice work. Therefore, it is important to briefly identify barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Step 3: Introduce New Material

Scripting includes*:*

1. "Today we will build on the deep breathing relaxation you learned earlier by teaching two additional relaxation techniques: progressive muscle relaxation and guided imagery relaxation."

Relaxation Training Education Review. Review key concepts introduced in Module B.

- Review that chronic pain is a stressor for both the body *and* mind that triggers and subsequently maintains the fight or flight response.

- Remind patients that relaxation skills are more than just resting or enjoying a hobby but are specifically designed to counteract the fight or flight response by reducing both bodily and psychological tension/stress.

- Tell them that deep breathing relaxation is a building block for relaxation, and that they can continue to use deep breathing relaxation when they use the new forms of relaxation you will teach today.

Brief PMR. Introduce the patient to the key components of brief PMR and guide them through a practice PMR experience.

Scripting includes:

1. "Progressive muscle relaxation involves systematically tensing and relaxing specific muscle groups, one at a time. Naturally, a muscle cannot be both tensed and relaxed at the same time. By intentionally focusing on these alternating tensed and relaxed states, you can train yourself to notice when you are tense, and then help to alleviate it."

Use scripts found in the ***Progressive Muscle Relaxation*** **handout** to guide patients through in-vivo practice of this relaxation technique. Focal muscle groups include: 1) legs; 2) arms and hands; 3) shoulders and stomach; 4) face and neck.

Key point: Be sure to establish good posture and re-orient the patient to the specific relaxation activity before starting**.**

Key point: A key point of relaxation training is that the patient is retraining his/her body and mind to respond differently to stressors, so that it becomes automatic and more adaptive.

Key point: In PMR, patients may gently approach a painful area to avoid a flare; if they experience a pain exacerbation in the area they can alternately visualize the tension and relaxing.

Guided Imagery Relaxation. Next, introduce the patient to the key components of guided imagery relaxation and guide them through a practice imagery relaxation.

Scripting includes:

1. *"Guided imagery is designed to help us create mental images that promote a state of relaxation. Essentially, guided imagery involves creating a detailed, imaginal location to mentally visit, and attune your thoughts and senses to."*

2. *"For some people, this might involve things like smelling fresh-baked cookies, listening to birdsongs, or imagining the sensation of walking through warm sand. But no two people will create the same mental scene; the image or images that you select are up to you; the only rule is that you create a calm and peaceful scene."*

Prior to beginning the relaxation exercise, ensure the patient has selected a scene or a place (real or imaginary) that is associated with feeling relaxed and calm. Then, use scripts found in the ***Guided Imagery Relaxation*** **handout** to guide patients through in-vivo practice.

Step 4: Plan Home Practice

Provide patients with copies of the skills handouts ***Progressive Muscle Relaxation*** and ***Guided Imagery Relaxation*****.**

Encourage patients to practice at least one to two times per day for 10 to 15 minutes. They should practice both forms of relaxation over the course of the next two weeks to determine which works better for them in which situations, and to develop skills in both. Emphasize that they should *not* wait until pain levels are high before practicing the relaxation methods.

Help patients identify a specific time and place to practice each day. Review the ***Relaxation Practice Record*** **handout**. Encourage them to track progress using this form.

ONE-PAGE GUIDE: MODULE D
RELAXATION TRAINING 2

MODULE MATERIALS

- Brief patient self-report measures (BHM-20 and DVPRS)
- *Progressive Muscle Relaxation* handout
- *Guided Imagery Relaxation* handout
- *Relaxation Record* handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review home practice since last appointment
- Identify strengths; address barriers

3. Introduce New Material (10-15 min)

- Review benefits of relaxation for chronic pain
  - Chronic pain is a stressor for both the body *and* mind that triggers and maintains the fight or flight response
  - Relaxation skills are specifically designed to counteract the fight or flight response by reducing both physical and mental tension
- Use scripts in the ***Progressive Muscle Relaxation*** **handout** and the ***Guided Imagery Relaxation*** **handout** to guide patients through in-vivo practice of two relaxation techniques

4. Plan Home Practice (1-2 min)

- Provide patients with copies of the Progressive Muscle Relaxation Handout and the Guided Imagery Relaxation Handout
- Review the ***Relaxation Record*** **handout** and encourage patients to track progress using this form. Jointly develop plan for home practice. Recommend 10 to 15 minutes, one to two times per day. Encourage patients to identify a time and place for practice.

MODULE E: COGNITIVE COPING 1

This is the first of two modules that target the cognitive component of the Brief CBT-CP model by helping patients recognize thoughts that are unhelpful and develop skills for coping with those thoughts. By understanding the dynamic interplay between thoughts and pain and recognizing common maladaptive cognitions, patients will be better equipped to manage their chronic pain and the difficult emotional reactions that often accompany it.

This module will focus on identifying unhelpful thoughts while the second cognitive coping module focuses on challenging those unhelpful thoughts. Cognitive Coping 1 should be addressed before moving to Cognitive Coping 2. Although these have been divided into two modules, if you find your patient masters this content quickly, it may be feasible to address both modules in a single appointment.

MODULE AGENDA

- Introduce the module
- Check on mood and risk; review patient measures
- Introduce new material (recognizing unhelpful thoughts)
- Discuss home practice

BACKGROUND CONTENT FOR THE BHC

Relationship between Thoughts and Pain

For those with chronic pain, the impact of their thoughts on how they experience pain can be powerful. If pain fails to disappear or improve significantly over time, patients' thoughts may become increasingly negative and exert a greater influence on pain. Research shows that negative thoughts are directly associated with pain perception (Lawrence et al., 2011). Often, these thoughts are automatic and outside of a person's awareness but may still impact emotions and behaviors.

Use the previously reviewed ***Cognitive Behavioral Model of Chronic Pain*** **handout** to discuss the relationships between thoughts, pain, mood, and behaviors. Patients will often recognize that with increased stress or negative emotions, they notice an increase in pain intensity. Explain to patients that all human beings have automatic thoughts that may be helpful or unhelpful. The presence of pain, however, sets the stage for an increase in unhelpful thoughts since uncomfortable stimuli is always present. It may be important to tell patients that this is not suggesting that their thoughts have *caused* their pain; some patients may be sensitive to this as they may feel they have been accused of exaggerating pain in the past.

Assure patients that while their pain is real, it is also accurate that unhelpful thoughts can negatively impact their *pain experience* in direct and indirect ways; conversely, having more adaptive thoughts can have a positive impact and "turn down the volume" on their pain experience.

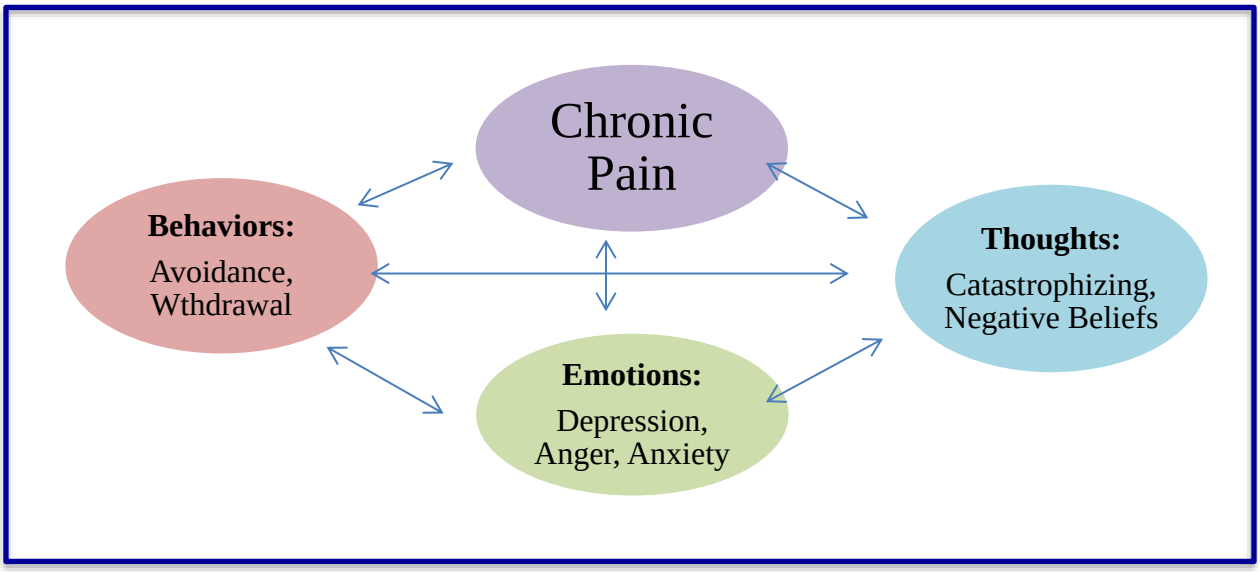


Figure 14: Cognitive Behavioral Approach to Chronic Pain

Pain Thoughts

Another method for discussing unhelpful thinking patterns and their potentially automatic nature is through a discussion of common maladaptive cognitions or *pain thoughts* that many people have. In this module, these will be introduced to patients through the use of the ***Pain Thoughts* handout**. While it is not necessary to review this entire list with patients, applying the appropriate labels to the examples on the handout and those provided by patients may be helpful.

It is important to make note of one cognitive distortion in particular: *catastrophizing*. Catastrophizing, or believing the worst, is particularly salient in the treatment of pain as it has consistently been associated with important pain-related outcomes. Catastrophizing is characterized by the tendency to magnify the threat value of pain and to feel helpless in the context of pain (Wertli et al., 2014; Schtuze et al., 2018).

Recognizing Unhelpful Thoughts

Once patients have explored the role of unhelpful cognitions in the CBT-CP model, they must now begin the process of increasing awareness of the frequency of maladaptive thoughts associated with pain or negative mood. Use the ***Catching Automatic Negative Thoughts* (ANTs) handout** to facilitate this process. Clarify to patients that since many of these thoughts happen

without conscious awareness, this initial process requires some effort. Explain that the first step in improving thoughts is to increase recognition of those that are not helpful. Use time in the appointment to generate an example of a pain-related thought that the patient has had recently that did not serve them in a positive way. If the patient is unable to identify one, use an example that has arisen in previous modules. Identify how the thought impacted their mood as well as their experience of pain. The focus should not be on whether there is a grain of truth in the thought but rather in whether it is helpful. *Does the thought serve the patient? Does it make their experience better or worse? Turn up the volume or turn down the volume?* Indicate whether the thought has been helpful or harmful to their pain experience on the handout.

Note that the next module, Cognitive Coping 2, will address ways of finding alternative ways to respond to negative stimuli by challenging these thoughts and using coping statements.

Practice

Encourage patients to review the ***Pain Thoughts*** **handout** on their own to facilitate the understanding and identification of their own unhelpful thoughts, stressing the importance of completing as many examples as possible on the ***Catching ANTs*** **handout**. Circling whether the thought had a helpful/positive or unhelpful/negative effect on their pain and/or mood will help to connect the important role of thoughts in pain management.

STEP-BY-STEP GUIDE: MODULE E
COGNITIVE COPING 1

Step 1: Check on Mood and Risk; Review Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with the patient about their home practice since the last appointment.

Scripting includes:

1. *"Before we get started on new material, do you have any questions about what we covered last time?"*
2. *"Last time we discussed <previous topic> which included some outside practice for you to complete. Do you have your practice work from last time?"*

Note to provider: It is common for patients to have not completed their home practice work. Therefore, it is important to briefly explore barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Step 3: Introduce New Material

Scripting includes*:*

1. *"Today we will focus on the relationships between our thoughts and how we experience pain. We will discuss how some thoughts can be helpful, while others can make things worse. We will also start to apply strategies to identify negative thoughts so that we can learn to cope with them better."*

Relationship between Thoughts and Pain. Use ***Cognitive Behavioral Approach to Chronic Pain*** **handout** (also used in prior modules) to discuss the relationships between thoughts and pain.

Key point: Explain that all human beings have automatic thoughts that may be helpful or unhelpful.

Scripting includes:

1. *"Everyone has thoughts that can be either helpful or unhelpful. Sometimes, we don't even realize that our thoughts are related to how we are feeling and acting. As you can see in this model, our thoughts, including negative beliefs, are linked to how we feel, our behaviors, and even how we experience pain. These thoughts are called automatic, meaning that they usually happen quickly and we often experience them as being out of our control. However, with practice we can identify these thoughts and create alternative thoughts that can be more positive or helpful."*

Key point: It may be important to tell patients that this is not suggesting that their thoughts have caused their pain.

Key point: Assure them that while their pain is real, it is also accurate that unhealthy thoughts can negatively impact their pain experience in direct and indirect ways; conversely, having more adaptive thoughts can have a positive impact and turn down the volume on their pain experience.

Scripting includes:

1. *"Your thoughts have not caused your pain and your pain is very real. When we experience pain for a long time, we may be more likely to have negative pain-related thoughts. Although our thoughts do not cause the pain, they can influence how we cope with pain. The more skilled we are at creating helpful, balanced thoughts, the better we are at coping with pain. Then we have more control over whether our thoughts turn up or turn down the volume on our pain experience."*

Pain Thoughts. Use ***Pain Thoughts*** **handout** to review 1) common pain thoughts, 2) examples of unhelpful thoughts, and 3) examples of helpful thoughts.

Scripting includes:

1. *"There are some common types of thoughts that people with chronic pain report. This worksheet provides examples of some common pain thoughts that are unhelpful and others that are helpful. Although most people experience these pain thoughts as automatic, with practice, you can become aware of them. Once you are aware of them, you can start to replace them with thoughts that are more helpful."*

Key point: It is important to make note of one cognitive distortion in particular: catastrophizing. Catastrophizing, or believing the worst, is particularly salient in the treatment of pain as it has consistently been associated with important pain-related outcomes.

Note to provider: Pick at least two examples to review with the patient, one of which should be catastrophizing, to review both the unhelpful and alternative helpful thought.

Recognizing Unhelpful Thoughts. Use ***Catching ANTs* handout** to help the patient learn to 1) identify (catch) negative thoughts, 2) determine if the thought is helpful or harmful, and 3) challenge automatic negative thoughts.

Key point: Clarify to patients that since many of these thoughts happen without conscious awareness, this initial process requires some effort.

Scripting includes:

1. *"Now that we have explored the relationship between negative thoughts and pain, the next step is to learn how to identify some of the specific unhelpful thoughts you might have. At first, this can be difficult to do and takes some practice to do it well. Remember that these thoughts often occur quickly and outside of our awareness, making them hard to identify. The first step is learning to accurately recognize and identify your thoughts. Let's look at this example and then we'll create one that is specifically for you."*

Key point: Review the example on the handout, then use time during the appointment to generate an example of a pain-related unhelpful thought that the patient has had recently. If the patient is unable to identify one, use an example that has arisen in previous modules.

Key point: Using the handout, identify how the thought impacted their mood as well as their experience of pain.

Scripting includes:

1. *"Can you think of a recent time when you had an unhelpful pain-related thought? What was happening? What was the thought? Was that thought helpful or harmful?"*

Key point: Work with the patient to identify several unhelpful thoughts and clarify the impact on mood or behavior. This skill is essential before moving on to the next module (Cognitive Coping 2) which will introduce ways to challenge negative cognitions and to use coping self-statements.

Step 4: Plan Home Practice

Encourage patients to review the ***Pain Thoughts*** **handout** on their own to facilitate the understanding and identification of their own unhelpful thoughts.

Scripting includes:

1. *"We have talked about a number of new concepts today. There are a few things that I am going to ask you to review on your own and practice before you come back. This is critical to mastering the skills and getting the most benefit from our time together. First, I would like you to take some time on your own to review the* ***Pain Thoughts*** **handout.** *As you review, think about each type of thought and ask yourself whether you have these types of thoughts or similar ones."*

Next, stress the importance of completing as many examples as possible on the ***Catching ANTs*** **handout** including circling whether the thought had a helpful/positive or unhelpful/negative influence.

Scripting includes:

1. "*Second, I would like you to work on the* ***Catching ANTs*** **handout***. It would be great if you could "catch" at least one unhelpful thought a day. The earlier we are able to catch those unhelpful thoughts, the less potentially negative impact they have on our life. Just like we did today, write down the situation and the thought, then determine if it is helpful or harmful. You do not need to complete the final column 'Challenge it!' as we will review your examples at the next appointment."*

2. *"Next time, we will learn about how to modify these thoughts to make them more balanced and helpful in our everyday lives. Although these skills can be difficult at first to learn and apply, many people find them extremely helpful as they practice the skills. Practicing these skills before our next appointment will help to improve your ability to use positive thinking in your everyday life."*

ONE-PAGE GUIDE: MODULE E
COGNITIVE COPING 1

MODULE MATERIALS

- Brief patient self-report measures (BHM-20 and DVPRS)
- *Cognitive Behavioral Approach to Chronic Pain* handout
- *Pain Thoughts* handout
- *Catching ANTs* handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review home practice since last appointment
- Identify strengths; address barriers

3. Introduce New Material (15 min)

- Relationship between thoughts and pain. Use ***Cognitive Behavioral Approach to Chronic Pain*** **handout** (Module A) to discuss relationship between thoughts and pain
- Pain thoughts
    - Use ***Pain Thoughts*** **handout** to review 1) common pain thoughts; 2) examples of unhelpful thoughts; and 3) examples of helpful thoughts
    - Pick at least two examples to review with the patient (one of which should be catastrophizing) to review the unhelpful and alternative helpful thoughts
- Recognizing unhelpful thoughts. Use ***Catching ANTS*** **handout** to help the patient learn to: 1) identify (catch) negative thoughts; 2) determine if the thought is helpful or unhelpful; and 3) challenge automatic negative thoughts. *Note: You do not have to complete this third step (challenging ANTs) if patient plans to return for Module F (Cognitive Coping 2).*

4. Plan Home Practice (1-2 min)

- Encourage patients to review the ***Pain Thoughts*** **handout** on their own to increase understanding and identification of their own unhelpful thoughts.
- Stress the importance of completing as many examples as possible on the ***Catching ANTs*** **handout**, including circling whether the thought had a helpful/positive or unhelpful/negative influence. Encourage them to complete at least one entry per day.

MODULE F: COGNITIVE COPING 2

This is the second of two modules that target the cognitive component of the brief CBT-CP model. This module focuses on modifying unhelpful thoughts identified in Module E and during the patient's outside practice. Cognitive Coping 2 is briefer in terms of its content to accommodate sufficient review from Cognitive Coping 1 as well as in-appointment practice regarding the key skill of challenging unhelpful thoughts. Taken together, the goal of these two modules is to prepare patients to identify, evaluate, and modify unhelpful thoughts related to chronic pain.

MODULE AGENDA

- Check on mood and risk; review patient measures
- Review previous module and home practice
- Introduce the new material (challenging unhelpful thoughts and using coping statements)
- Plan home practice

BACKGROUND CONTENT FOR THE BHC

Review of progress - Pain Thoughts

Depending on the degree of skill or comfort the patient demonstrates with identifying unhelpful thoughts, it may be valuable to briefly review the content from the prior module. One method for discussing unhelpful thinking patterns is by reviewing the ***Catching ANTS*** **handout** in comparison to the ***Pain Thoughts*** **handout.** This process can help patients to identify if they tend to experience certain types of negative thinking more often than others, such as a preponderance of "should statements" or emotional reasoning. Even if no specific pattern emerges, this is a good opportunity to link the patient's thoughts to the variety of unhelpful thoughts about pain that can occur. While it is not necessary to review their entire list, it can be helpful to discuss with patients which of the thoughts they found most frequent and/or distressing versus less so. This process can illustrate how thoughts can impact our mood and behavior in different ways (i.e., helpful, neutral, unhelpful).

Recognizing and Challenging Unhelpful Thoughts

Using the examples listed by the patient on the ***Catching ANTS*** **handout**, introduce the concept of challenging unhelpful thoughts. Review one of the examples in detail, including how the thought impacted their mood as well as their experience of pain. Recall that the focus should not be on whether there is a grain of truth in the thought but rather in whether it is helpful – does it serve the patient? Does it make their experience better or worse? Turn up the volume or turn down the volume?

Once the patient seems able to understand and identify unhelpful pain-related cognitions, work with them on alternative ways to respond to negative stimuli. The objective is not to create an unrealistic picture of situations but a more accurate and balanced perspective. If possible, propose a statement that reflects the role of the patient and increases self-efficacy. Review the full example on the ***Catching ANTS*** **handout** and determine if patients understand the process and rationale. It may be helpful to remind them that this is not suggesting that thoughts cause their pain, rather that we may be able to decrease the negative impact of pain by making small changes to how we interpret situations.

Coping Statements

Another technique that can be helpful in managing pain flare-ups or negative mood is to use positive coping statements. The ideal coping statement helps patients remain calm during stressful situations. Coping statements provide "go-to" phrases that can replace unhealthy thoughts or help patients cope with specific difficult situations, especially ones that may be unanticipated. A key element to the success of coping statements involves finding phrases that strongly resonate with the individual patient. While these could be pain-specific, they might also be quotations, verses (e.g., song, scripture), or a phrase that a friend has delivered – the key is personal relevance and easy access.

The ***Coping Statements Checklist*** **handout** helps patients choose statements that may be effective for them. Patients may have their own phrases or statements that they have used in the past and have served them well. Encourage them to add such statements to the list provided. One advantage of formulating effective coping statements is that they can be portable and kept handy for use at any time. They can be written on a small piece of paper and kept in a wallet or placed into a personal electronic device that is carried routinely.

Practice

Encourage patients to complete the process of challenging unhelpful thoughts using the remaining examples on the ***Catching ANTs*** **handout**. Patients should make adaptations to unhealthy thoughts by creating a more balanced and accurate cognition. Finally, ask the patient to identify several statements that they find calming and reassuring which can be used before the next module.

STEP-BY-STEP GUIDE: MODULE F
COGNITIVE COPING 2

Step 1: Check on Mood and Risk; Review Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with patients about their home practice since the last appointment.

Scripting includes:

1. "Before we get started on new material, do you have any questions about what we covered last time?"
2. "Last time we discussed <previous topic> which included some outside practice for you to complete. Do you have your practice work from last time?"

Note to provider: It is common for patients to have not completed their home practice work. Therefore, it is important to briefly identify barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Step 3: Introduce New Material

Scripting includes*:*

1. *"Today we will continue to focus on the relationships between our thoughts and how we experience pain. Last time, we discussed how some thoughts can be helpful, while others can make things worse. Today, we will review strategies to identify unhelpful thoughts but also find ways to challenge and cope with these negative thoughts."*

Pain Thoughts. It may be useful to first briefly review the concepts presented in the previous module with the help of the ***Pain Thoughts* handout**. Key areas to review, as needed, include 1) common pain thoughts, 2) examples of unhelpful thoughts, and 3) examples of helpful thoughts. This is also a good time to compare the patient's responses to the ***Catching ANTS* handout** to the prototypes in the ***Pain Thoughts* handout**.

Scripting includes:

1. *"As we discussed last time, there are some common types of thoughts that people with chronic pain report. This worksheet provides examples of some common pain thoughts that are unhelpful and others that are helpful. Let's compare your examples to those from the Pain Thoughts Handout. Looking at your examples, which thoughts have impacted you the most?"*

Key point: The amount of review and discussion about the prior module's content will vary depending on the needs if the patient. When the patient is able to identify unhelpful thoughts, introduce the new content below about challenging these thoughts.

Recognizing and Challenging Unhelpful Thoughts. Use the ***Catching ANTs*** **handout** to begin the process of challenging or modifying unhelpful thoughts.

Scripting includes:

1. *"The next step is to learn how to challenge some of the specific unhelpful thoughts you might have. At first, this can be difficult to do and takes some practice to do it well. Which of the examples you provided should we start with? Let's work to see if we can come up with a more positive or balanced thought. What might you have thought that would be more positive or helpful in that situation?"*

For example (as shown in the handout), a patient who experiences a flare of pain after cleaning the garage might have the following automatic thoughts: "This pain is killing me. I can't do anything anymore!" These thoughts are likely to have a harmful effect on pain and/or mood. A more positive or balanced coping statement could be: "I am hurting right now because I overdid it, but I know that I will feel better soon. Then I will pace myself to get the job done."

Key point: Work with the patient to challenge their cognition. If possible, propose a statement that reflects the role of the patient and increases self-efficacy. Review the full thought record and determine if patients understand the process and rationale.

Coping Statements. Use the ***Coping Statements Checklist*** **handout** to help the patient: 1) become familiar with positive coping statements, and 2) chose statements that may be effective for them.

Scripting includes:

1. *"Another technique that can be helpful in coping with pain or managing negative mood is to use positive coping statements. Coping statements help you remain calm during stressful situations. Coping statements are your "go-to" phrases that can replace*

unhealthy thoughts or help you cope with specific difficult situations. For example, telling yourself, 'I'm going to focus on what I can do, not what I can't do,' is an example of a powerful coping statement."

Key point: A key element to the success of coping statements involves finding phrases that strongly resonate with the individual. Patients may have their own phrases or statements that they have used in the past and have served them well. Encourage them to add such statements to the list provided.

Key point: For patients who struggle after repeated trails of challenging unhelpful thoughts, developing coping statements can provide an alternative approach to coping with negative thoughts.

Step 4: Plan Home Practice

Scripting includes:

1. *"We've covered some important material today. There are a few things that I am going to ask you to review on your own and practice before you come back. This is critical to mastering the skills and getting the most benefit from our time together. I would like you to continue to work on the* ***Catching ANTs*** **handout***. It would be great if you could "catch" at least one unhelpful thought a day. Just like we did today, write down the situation and the thought, then determine if it is helpful or unhelpful."*

2. *"Next, take a few moments and challenge it. Work to identify a more positive and helpful thought that would turn down the volume on pain. We will review this at our next appointment."*

Stress the importance of completing as many examples as possible on the ***Catching ANTs*** **handout** including circling whether the thought had a helpful/positive or unhelpful/negative influence and creation of a more balanced and accurate cognition.

Finally, ask the patient to identify several statements that they find calming and reassuring which can be used before the next module.

Scripting includes:

1. *"Finally, I'd like to ask you to review the list of coping statements and identify any that you find calming. I would also like you to think about other statements that you may find helpful. These could be parts of songs or poems or encouraging words from a dear friend. Basically, these can be any statements that help to calm or soothe you if you are feeling anxious or upset. What questions do you have?"*

2. *"Although these skills can be difficult at first to learn and apply, many people find them extremely helpful as they practice the skills. Practicing these skills before our next appointment will help to improve your ability to use balanced thinking in your everyday life."*

ONE-PAGE GUIDE: MODULE F
COGNITIVE COPING 2

MODULE MATERIALS

- Brief Patient Self-Report Measures (BHM-20 and DVPRS)
- *Cognitive Behavioral Approach to Chronic Pain* handout (as needed)
- *Pain Thoughts* handout (as needed)
- *Catching ANTs* handout
- *Coping Statements Checklist* handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review home practice since last appointment
- Identify strengths; address barriers
- Pain thoughts review. It may be useful to first briefly review the concepts presented in Module E with the help of the ***Pain Thoughts*** **handout.** Key areas to review, as needed, include 1) common pain thoughts; 2) examples of unhelpful thoughts; and 3) examples of helpful thoughts

3. Introduce New Material (10-15 min)

- Recognizing and challenging unhelpful thoughts. Use ***Catching ANTs*** **handout** to begin the process of challenging or modifying unhelpful thoughts
- Coping statements. Use ***Coping Statements Checklist*** **handout** to help the patient: 1) become familiar with positive coping statements, and 2) choose statements that may be effective for them

4. Plan Home Practice (1-2 min)

- Stress the importance of completing as many examples as possible on the ***Catching ANTs*** **handout**, including circling whether the thought had a helpful/positive or unhelpful/negative influence and creation of a more balanced and accurate cognition. Jointly develop SMART goal for home practice of this skill (when, where, how often, etc.)
- Ask the patient to identify several statements that they find calming and reassuring which can be used before the next module

MODULE G: THE PAIN ACTION PLAN

This is the final module with patients focused on pain management. While functioning, mood, and pain intensity have likely improved, chronic pain remains a part of daily life, and pain flare-ups are expected in the future. This module focuses on developing a relapse prevention plan, which includes making appropriate referrals and solidifying a clear path for pain self-management. Finally, all clinical measures must be completed again.

MODULE AGENDA

- Check on mood and risk; review patient measures
- Review previous module and home practice; review progress overall
- Introduce new material (develop a plan to address future obstacles)
- Plan home practice

BACKGROUND CONTENT FOR THE BHC

Review of Progress

Begin the module by reminding patients of where they were when they entered treatment and how much progress they have made. Be specific in the feedback provided as patients may have lost sight of their gains. Obtain feedback from patients about areas where they feel they have made the most progress and what has worked best for them.

Asking questions such as the following may facilitate discussion and help patients identify their own progress:

- Have you become more active?
- Has your mood improved?
- Do you feel like your life is more fulfilling, even though you still have pain?
- Have you noticed a difference in your pain intensity?
- What about how you react to your pain?
- Have others commented on positive changes they have seen in you?

Before examining the things that may get in the way of pain management in the future, it is important to reflect on what the patient has already accomplished as a means of motivation.

Anticipating Obstacles

The best way to prevent a relapse to previous poor functioning is to be prepared for pain exacerbations and difficult days. Planning ahead will make it easier to cope during challenging times. Discuss anticipated obstacles that are likely to arise in the future as well as how those issues will be addressed.

Use the ***Anticipating Obstacles* handout** to identify patients' triggers for pain increases.

Common triggers are:

- Emotional stress
- Weather changes
- Lack of sleep
- Sitting or standing "too long"

When completing the handout, encourage patients to be as specific as possible. For example, instead of listing "stress," define it further by listing the source of stress such as, "kids fighting with each other." Similarly, if there is a particular kind of weather that increases pain, identify "weather under 50 degrees." Find out how many minutes of sitting or standing is "too long." If the patient is unable to think of potential barriers, suggest barriers identified in prior appointments related to coping with pain or even completing the outside practice assignments. While identifying triggers may be challenging, increasing attention to any emotional and physical signs that may indicate an imminent flare-up can be beneficial.

Once personal triggers are identified, determine the best approaches for coping. This is an opportunity to review all the ways to manage pain that have been explored in the prior modules. Engage in a discussion about all of the CBT-CP techniques, from the role of pacing in approaching activities to how relaxation can be used to address increased irritability. Reviewing options for how managing each specific stressor can help make the exercise more realistic and implementation easier.

Action Planning

Now patients are ready to develop a specific daily plan. Having a clear schedule helps patients feel more prepared for several reasons. First, it can assist in mitigating difficult situations and minimizing the triggers previously discussed. Second, it shows patients how to incorporate various positive coping techniques into their everyday lives. Third, creating a plan helps imbue a sense of structure and purpose into daily life, something that is valuable for everyone. Working through a plan together will help reveal how all of the pieces fit together and increase confidence moving forward.

Use the ***Weekly Activities Schedule* handout** to formulate an example of a typical week for patients. If they prefer to use their electronic device for the schedule then defer to their preference. Collaborate with patients to develop a plan and activities in their words. Ask about specific behaviors that they want to avoid doing or saying, and use these to develop items for the schedule that will combat maladaptive habits. For example, if someone wants to avoid isolating from others, perhaps "Meeting my friend John for coffee" can be scheduled for every Tuesday morning, and also encourage the patient to include where they will meet. Noting specific distractions to help keep the patients' minds occupied such as "garden (if nice weather)/puzzles (if bad weather)" or "play catch with my dog" will help create a concrete plan for the future. It is important that the schedule is realistic, since setting unreasonable plans will only make self-disappointment more likely if goals are not achieved.

Rewarding oneself for engaging in all scheduled activities for one week may be another incentive to stay the course.

In all settings, but especially in primary care, it is critical to identify future needs and place referrals as indicated. For example, if the work thus far with brief CBT-CP has been helpful but there is still significant progress to be made, perhaps a consult to pain psychology at the tertiary level for continued services such as group or individual modules may be in order. If the patient has increased activities and would be aided by participation in a rehabilitation modality such as physical or aquatic therapy, these options should be discussed with the patient and the PCM.

If in the course of treatment other behavioral health needs such as sleep problems, depression, or anxiety have been identified, patients may benefit from engaging in a new episode of care with the BHC to address these concerns. If problems are beyond the scope of what can be addressed in primary care by the PCM or the BHC, patients can be referred to a psychiatrist or a therapist for specialty behavioral health services.

Goals

The final task in this module is to explore goals for the future. There may be accomplishments made in recent weeks that can be expanded or new ideas that the patient now feels comfortable considering. For example, if the patient has largely overcome a fear of movement, they may want to incorporate bicycling or another adapted sport into their routine. If negative cognitions have kept patients from considering dating, they may now feel confident enough to begin exploring ways to meet others. Discuss what the individual patient is motivated to accomplish in the future and tailor goals to meet specific interests and needs.

Practice

Provide positive feedback about all that has been accomplished so that patients leave feeling supported and confident. Assure them that even if obstacles or setbacks are encountered, they now have foundational tools necessary to manage their chronic pain.

STEP-BY-STEP GUIDE: MODULE G
THE PAIN ACTION PLAN

Step 1: Check on Mood and Risk; Complete Patient Measures

The patient should have completed the BHM-20 in the waiting room prior to the appointment. The BHC verbally administers the DVPRS near the start of the appointment. The BHC scores the measures and briefly reviews the scores of the BHM-20 and DVPRS with the patient in comparison to baseline to identify any areas of significant concern/distress. Assess mood and risk as well as any other changes in symptoms or functioning.

Conduct assessment of suicide risk IAW Service-specific policies.

Step 2: Review Previous Module and Home Practice

Briefly check in with patients about their home practice since the last appointment.

Scripting includes:

1. *"Before we get started on new material, do you have any questions about what we covered last time?"*

2. *"Last time we discussed <previous topic> which included some outside practice for you to complete. Do you have your practice work from last time?"*

Note to provider: It is common for patients to have not completed their home practice work. Therefore, it is important to briefly explore barriers to completion and re-state the importance of outside practice for developing and strengthening CBT skill development.

Step 3: Introduce New Material

Scripting includes*:*

1. *"Today is our final appointment for addressing chronic pain as part of Brief CBT for chronic pain. Today, we will review the progress we've made over the last several modules and think about next steps as well. It's important that we take some time to look back on what we've learned to both consider the progress we've made as well as plan for how to continue to use the skills learned in the future."*

Review of Progress. It is important to first emphasize substantive gains in functioning or mood that have occurred during the course of treatment. Identifying improvement or stabilization is

accomplished in part by reviewing the change in patient measures, particularly from baseline to current status. If the patient is unable to spontaneously identify areas of improvement, asking open-ended questions may help guide them through likely areas that have improved.

Scripting includes:

1. *"I'd like to start by identifying either symptoms or larger areas of life that might have improved during the course of this treatment. Thinking back to when we first started CBT for chronic pain, what changes have you seen in your life related to chronic pain?"*

2. *"One way to help identify areas of change is to take another look at the information you reported in the measures we completed at the beginning of each module. When we compare your score on the <most relevant measure>, it looks like there's a trend for improved mood over the course of this treatment. Have you noticed that you've been less <depressed/irritable/etc.>? How has that impacted other areas of your life?"*

   - "Tell me about ways that you have become more active."
   - "Have you noticed any difference in your pain intensity or frequency? How has it changed? Do you respond to pain differently now?
   - "Have others commented on positive changes they've seen in you?"

Key point: Identify progress first to bolster motivation and acknowledge the results of the patient's efforts to use CBT skills, then address barriers to progress.

Anticipating Obstacles. Having identified areas of growth or improvement, there are likely still areas that may need attention in the future should they arise again. Use the ***Anticipating Obstacles*** **handout** to identify triggers for pain and appropriate responses. Explain that now is good time to plan for how skills learned in this treatment can be applied in the future when triggers for pain are present.

Scripting includes:

1. *"One of the best ways to help maintain our progress (or continue to move toward achieving our goals), is to take a moment to think about likely situations or other triggers that might bring on a difficult pain episode. By thinking of these triggers now, we might be able to avoid some difficult situations or match the coping skills that we've learned to the area of concern. Planning ahead may help us feel more confident in our ability to manage pain the future."*

2. *"Sometimes it's difficult to identify very specific triggers for pain. As a rule of thumb, consider times when your emotions, thoughts, or physical sensations may be hinting that a pain flare-up is close. Do you recall our last conversation when you found that _____ was a trigger for your pain? Of the skills that we've talk about in our modules, which was the most effective?"*

Key point: As a chronic condition, pain will need to be managed well into the future. Planning ahead provides the opportunity for the patient to identify the most likely predictors of future pain episodes and matching the CBT skill to that situation that they have found to be most effective.

Action Planning. Use the ***Weekly Activities Schedule*** **handout** to schedule important activities over a typical week. This process helps minimize the impact of triggers, ensures meaningful goals/activities are attended to, and adds structure and beneficial routines to otherwise unstructured time.

Scripting includes:

1. *"There are several benefits to developing this typical weekly schedule. For one, adding structure to our weeks can help with pacing, making sure we avoid inactivity or overactivity. By planning ahead, we are most likely to make sure that the activities or routines that are most important to us are really part of our day. This is also a great way to find time in the week to practice some prevention, such as using relaxation skills, to keep our stress and muscle tension levels down."*

2. *"Let's be sure to be as realistic as possible as we develop this plan. We can include obligations as well as pleasurable events. For example, we can include both your hours required at your part-time job, as well as the time you want to spend with your social club."*

In addition to completing the ***Weekly Activities Schedule*** **handout**, the final module is a time to make a determination whether additional services are warranted. If the patient is requesting additional services, consider whether these are best addressed by you or another provider. Consult with the patient's PCM as needed. There are potentially many options depending on the needs of the patient and resources available in your health care setting. Some patients may require additional psychosocial interventions for pain management in settings that allow for longer treatment protocols. Other patients may benefit from additional services such as physical therapy, nutrition counseling, or specialty behavioral health.

Key point: Weekly activity planning is an important final step of this treatment. Scheduling ensures that patient-identified goals and preferences are clearly included in future activities and routines.

Key point: Concluding brief CBT-CP is a highly personalized process in which additional referrals (e.g., more intensive pain management services, behavioral health, or other rehabilitation-focused services) should be considered based on patient need and local resources.

Goals. Following weekly activity scheduling, it is valuable to briefly consider future long-term goals that are potentially feasible now that CBT skills have been introduced. Although the weekly scheduling will address a number of routine activities, discussing long-term goals once again can offer an opportunity to further enhance motivation for the patient to engage in additional realistic goals to achieve. Use the ***SMART Goal Setting*** **handout** to write down the short and long-term goals identified. The patient's short-term goals might have changed from the beginning of treatment, which could indicate progress that can be emphasized. Provide encouragement for continuing long term goals after treatment ends.

Scripting includes*:*

1. ***"Now that we've taken a look at what your typical weekly schedule will look like, it's also a good time to consider future goals. You've made progress in your pain management, so what other goals for the future should we discuss briefly? Let's write them down using the SMART Goal Setting handout."***

2. *"For example, early on in our modules we discussed that you had to quit the softball league because of your chronic pain. Now that you've made progress in addressing activity pacing and identifying triggers for flare ups, maybe there's a way to return to playing ball or helping out with coaching."*

Practice. Although it is very helpful to acknowledge the patient's progress throughout the course of treatment, it is especially important to provide positive feedback about small and large gains. This time is also good for reminding patients that they can continue to master their skills with additional practice, even when faced with setbacks.

Step 4: Plan Home Practice

Handouts. The patient should complete (and continue to modify as needed) the ***Anticipating Obstacles*** **handout** and the ***Weekly Activities Schedule*** **handout** for application into the future.

Scripting includes:

1. *"Today we've discussed the importance of continued practice of the skills discussed over the course of our time together. We've identified the skills that have worked best for you (or identified those in need of additional practice) as well as a plan for how to use those skills into the future."*

2. *"Be sure to keep the materials provided in these modules readily available as they can be an ongoing resource well into the future. Often patients will return to the worksheets from time-to-time as tune-up or reminder of how to practice these skills."*

Mobile Apps. For patients who would benefit from use of a mobile app to address general health and wellness in addition to this module, see Appendix 3 for a patient handout that lists a wide variety of free mobile apps that can address sleep, mood management, and other concerns that commonly accompany chronic pain.

Continued Application. This module emphasized progress made and the need for continued application of these skills into the future. It allowed time to arrange for any additional pain (or related) services that could not be addressed by Brief CBT-CP. This is also the perfect time to add any

additional personal message to the patient that acknowledges the value of their efforts, the end of the focused BHC interaction, and options for re-engaging with you in the future, as needed.

Scripting includes:

1. *"As the final module of Brief CBT-CP, we review the progress you've made over the course of treatment. We started two new worksheets that will be important for you to complete outside of this module because they will act as a guide for putting the skills to practice on daily basis."*

2. *"We also identified that it would be helpful to try a course of [… add relevant details…] to promote […add relevant details…]. We've arranged for that service through your primary care provider.*

3. *"Finally, this is an opportunity for me to express my appreciation for the opportunity to work with you over this course of treatment as well as the service you have provided to our country."*

ONE-PAGE GUIDE: MODULE G
THE PAIN ACTION PLAN

MODULE MATERIALS

- Brief self-report measures (BHM-20 and DVPRS)
- *Anticipating Obstacles* handout
- *Weekly Activities Schedule* handout
- *SMART Goal Setting* handout

1. Check on Mood and Risk; Review Patient Measures (5 min)

- Assess mood and risk; ask about any other changes in symptoms or functioning
- Administer, score, and provide feedback to patient on BHM-20 and DVPRS

2. Review Previous Module and Home Practice (5 min)

- Review home practice since last appointment
- Identify strengths; address barriers

3. Introduce New Material (10 min)

- Review of progress. First emphasize substantive gains in functioning or mood that have occurred during the course of treatment. Identifying improvement (or stabilization) is accomplished in part by reviewing the change in patient measures, particularly from baseline to current status
- Anticipating obstacles. Use the ***Anticipating Obstacles*** **handout** to identify triggers for pain and appropriate responses. Explain that now is a good time to plan for how skills learned in this treatment can be applied in the future when triggers for pain are present
- Action planning. Use the ***Weekly Activities Schedule*** **handout** to schedule important activities over a typical week
- Goals. Briefly consider future long-term goals that are potentially feasible now that CBT skills have been introduced. Use the ***SMART Goal Setting*** **handout** to write down the short and long-term goals identified
- Determine whether additional services (from you or another provider) are needed. This could include additional treatment for chronic pain or for other concerns (e.g., sleep, comorbid depression or anxiety)

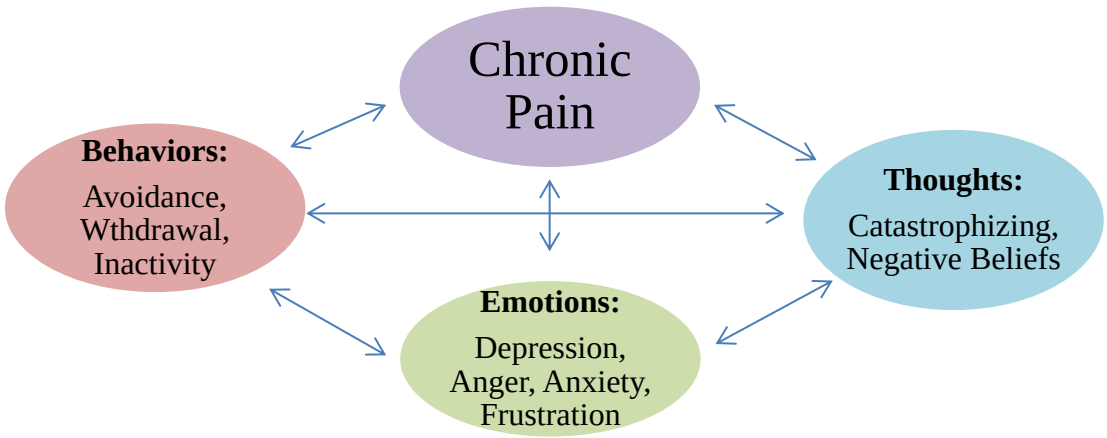
4. Plan Home Practice (2-3 min)

- The patient should complete (and continue to modify as needed) the ***Anticipating Obstacles*** **handout** and the ***Weekly Activities Schedule*** **handout**
- If additional services from you are another provider are needed, develop plan for further care
- Wrap up. In addition to providing a general summary of the treatment, feel free to add an additional personal message to the patient that acknowledges the value of their efforts, the end of this episode of care, as well as option for re-engaging with you as needed in the future

PART III
BRIEF CBT-CP PROTOCOL:
PATIENT HANDOUTS

Cognitive Behavioral Approach to Chronic Pain

One's experience of chronic pain involves more than the pain itself. Chronic pain is best understood as an interaction between the physical components of pain, behaviors, thoughts, and emotions. Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) focuses on these biopsychosocial interactions between thoughts, behaviors, and feelings that impact your chronic pain experience. As shown below, all of these pieces affect each other. The aim of this treatment is to help you develop adaptive coping skills so that you feel a greater sense of control over your life and your pain, and to improve your quality of life despite pain.



Goals of Cognitive Behavioral Therapy for Chronic Pain (CBT-CP)

- Increase your ability to perform activities and live a full life despite pain
- Improve physical and emotional functioning
- Decrease the frequency and impact of flare-ups
- Increase effective coping skills for managing pain
- Reduce pain intensity
- Improve quality of life despite the presence of pain

Brief Cognitive Behavioral Therapy for Chronic Pain

Brief Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) is a biopsychosocial approach to help manage chronic pain. Brief CBT-CP aims to decrease distress and disability from pain and improve quality of life. It is safe for almost anyone and can be used in addition to other pain management strategies. It is a core part of a team-based approach to chronic pain in primary care.

Brief CBT-CP includes up to seven, one-to-one meetings of about 30 minutes each with a Behavioral Health Consultant (BHC). We ask that patients complete a minimum of three appointments. Treatment is spread out over several weeks, with appointments often scheduled every other week.

A new pain management skill is covered at each appointment based on the order you prefer. Key topics and skills include:

- Activity planning and pacing, which helps with avoiding a common pitfall of overexertion that causes a pain flare-up.
- Relaxation training, which will help to reduce tension in your body and manage distress.
- Cognitive coping, which will help with managing unhelpful thought patterns.
- Developing an action plan, which will help you move forward with meeting important personal goals based on new pain management skills.

Brief CBT-CP is flexibly structured around seven modules. **All patients complete the first two modules**:

Module A: Assessment and Goal Setting
Module B: Education and Relaxation Training 1

All patients also complete a **minimum of one additional module**, based on their goals:

Module C: Activities and Pacing
Module D: Relaxation Training 2
Module E: Cognitive Coping 1
Module F: Cognitive Coping 2
Module G: The Pain Action Plan

Before You Go: Additional Information About Chronic Pain Treatment Options

Today we discussed some of the challenges of living with chronic pain. We also discussed some options available to help manage chronic pain. One option that may be a good fit for you is brief cognitive behavioral therapy for chronic pain, or Brief CBT-CP. Some key information about Brief CBT-CP is summarized here, in case you would like to begin this treatment at a future time:

1. Brief CBT-CP aims to decrease distress and disability from pain and is safe for almost anyone.
2. Brief CBT-CP includes up to seven, one-to-one meetings of about 30 minutes each. We ask that patients complete a minimum of three appointments. Treatment is spread out over several weeks, with appointments often scheduled every other week.
3. A new pain management skill is covered at each appointment based on the order you prefer. Key topics and skills include:

    - Activity planning and pacing, which helps with avoiding a common pitfall of overexertion that causes a pain flare-up.
    - Relaxation training, which will help to reduce tension in your body and manage distress.
    - Cognitive coping, which will help with managing unhelpful thought patterns.
    - Developing an action plan, which will help you move forward with meeting important personal goals based on new pain management skills.

Here's a quick deep breathing exercise to consider that can help manage the stress that comes with living with chronic pain:

1. Find a safe, quiet place to sit or lie in a comfortable position for at least five minutes. Use soothing music to block out distracting noises, if necessary.
2. Breathe in deeply, but comfortably, taking a moment to focus your thoughts on your breathing.
3. Count to yourself "one" at your next inhale, and exhale at your own pace. Continue to count (e.g., "two"…, "three"…, "four"…) each time you inhale until you get to ten.
4. Take a moment to notice your breathing as it slows and develops a new rhythm. If disruptive thoughts enter your mind, re-focus on counting each inhalation.
5. Count in sets of ten breaths for as long as you feel comfortable. Practicing two to three times a day for short periods can be helpful when first learning this skill.

Visit the VA mobile app store (**https://mobile.va.gov/appstore**) to download free apps to help with stress management and healthy lifestyles. These are a few examples of the health topics these apps address:

- Sleep
- Weight loss
- Smoking cessation
- Stress management
- Coping with depression, anxiety, PTSD, and other behavioral health concerns

We discussed several options that can help you with better pain management and overall wellness. Here is a summary of next steps to follow:

Provider: Include helpful information below on referrals to other services initiated today.

1._____
2._____
3._____

Living with chronic pain can be very challenging. It can negatively impact how we live our lives, including our ability to participate in activities and important relationships with others. Treatment options are available that can lead to new ways of coping with pain to maintain connections to the people and daily routines that we value. My goal is to work with you in a way that you find supportive and empowering.

If you would like more information about your treatment options for chronic pain or related concerns, please contact me at the number below:

Provider/Clinic name: _____
Phone number:_____
Additional information: _____

SMART Goal Setting

A SMART goal is set using the following guidelines:

Specific	**Identifies a specific action or event that will take place.**
Measurable	**Should be quantifiable so progress can be tracked.**
Achievable	**Should be attainable and realistic given resources.**
Relevant	**Should be personally meaningful and really matter.**
Time-Bound	**States the time period for accomplishing the goal.**

Adapted from Doran, 1981

Short-Term Goals

Short-term goals can be accomplished over the course of the next several weeks to months. Once goals are identified, track them on a weekly basis to ensure that progress is occurring. If it is not, make adjustments as needed. For each goal, consider if it fits the SMART criteria listed above. These should be personally meaningful goals that motivate you to apply the skills of the Brief CBT-CP program.

_____

_____

_____

Long-Term Goals

Long-term goals are those for the next 6-12 months or perhaps even longer. These are often our most important goals for the future, so they can be an important motivator.

_____

_____

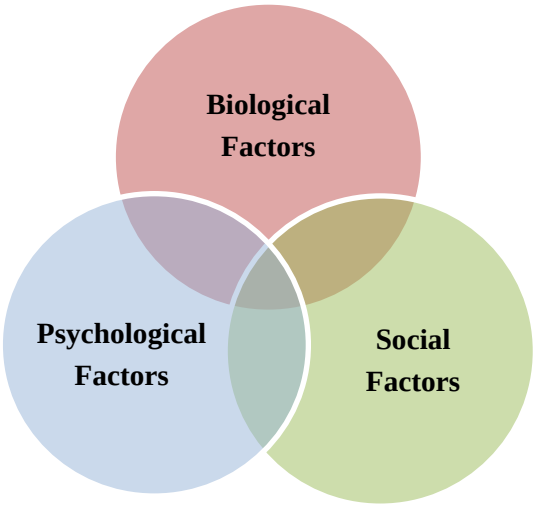
_____

Factors That Impact Pain

Chronic pain touches many parts of your life, and each piece affects others. The interaction between each circle shown here impacts how you feel overall:

1. Biological
   - Pain, medical issues
2. Psychological
   - Emotions, attention, thoughts
3. Social
   - Relationships, job, hobbies

The good news is, while some factors may increase or turn the volume up on pain, other factors may decrease it. And you can decide how to manage many of these factors.



Below are just a few examples of factors that may impact your pain:

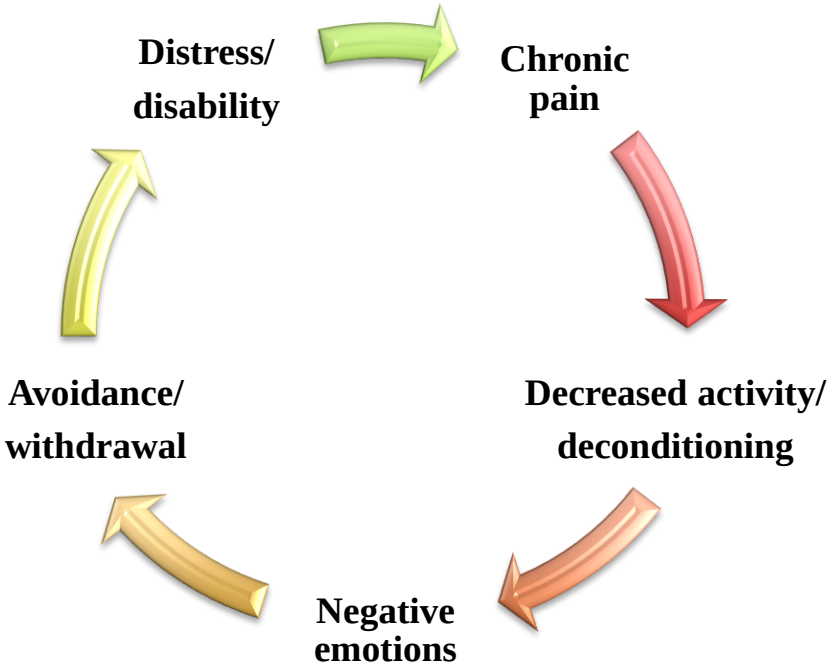
Factors That May Increase Pain ⇧	Factors That May Decrease Pain ⇩
Physical Factors	
Degenerative Changes	Medical interventions
Muscle tension	Relaxation techniques
Thoughts	
Catastrophizing	Having balanced thoughts
Focusing on pain	Using distraction to focus on other things
Emotions	
Depression or anger	Challenging negative thoughts
Stress/worry/anxiety	Exercise and relaxation techniques
Behaviors	
Under-or over-activity	Using pacing regularly
Lack of involvement in hobbies	Increasing pleasant activities
Social Interactions	
Social isolation	Positive time with family and/or friends
Lack of or too much support from others	Volunteering/community involvement

The Chronic Pain Cycle

Many people with chronic pain fear that movement will increase pain or cause physical damage/injury. This often leads to a decrease in activities, which leads to physical deconditioning (e.g., less strength and stamina, weight gain). Dealing with constant pain may also lead to negative thoughts and emotions such as frustration and depression. All of these factors contribute to increased avoidance of people and activities. While this cycle is understandable for those with chronic pain, it is *not helpful*! In fact, it actually makes your pain and its effects worse over time. Now that we are aware of the cycle, we must learn how to break it.

The Costs of Inactivity

- More pain
- Poorer physical fitness
- Less time with family/friends
- Depressed mood
- Increased irritability
- Lower self-esteem
- Strain on relationships
- Decreased quality of life



REMEMBER: THERE'S HOPE!

Understanding the cycle gives us the power to break it!

Relaxation: Benefits & Tips

The goal of relaxation is to reduce the effects of stress on your health. Since chronic pain produces chronic stress on the body, it is important to regularly practice relaxation techniques that can help your mind and body recover. Relaxation is more than resting or enjoying a hobby; it involves using specific strategies to reduce tension.

Benefits of Relaxation

Relaxation is important for good health. When you are relaxed, your muscles are loose, your heart rate is lower, and your breathing is slow and deep. Learning how to relax can help especially when you feel pain.

Relaxation won't cure pain or other chronic symptoms, but skills that relax the body and the mind may help decrease muscle tension, prevent muscle spasms, and relieve the stress that can aggravate pain and other symptoms.

Taking time to relax and refuel your energy provides benefits such as:

- Improved mood
- Increased energy and productivity
- Improved concentration and focus
- Improved sense of control over stress and daily demands
- Improved nighttime sleep
- Increased self-confidence
- Greater ability to handle problems
- Decreased anxiety and other negative emotions such as anger and frustration
- Increased blood flow to muscles and reduced muscle tension
- Lower blood pressure, breathing rate, and heart rate
- Decreased pain, such as headaches and back pain

Relaxation Practice Tips

Relaxation is a skill that requires practice. You may not feel the benefits immediately, so don't give up! Remain patient and motivated and you'll reduce the negative impacts of stress. And remember: If relaxation feels foreign or unnatural, that likely means you are a person who needs it most!

Establish a routine

1. Set aside time to practice relaxation at least once or twice a day. Pairing relaxation with a regular activity may help you remember to practice (for example, take ten relaxed breaths before bed or whenever you sit down to eat).

2. Practice at various times throughout the day until relaxation becomes natural and you can use it readily when you feel stressed. You may want to leave "reminders" for yourself to relax (for example, sticky notes on the bathroom mirror, kitchen cabinets, or car dashboard with the words "relax" or "breathe").

Be comfortable

1. Practice on a comfortable chair, sofa, mat, or bed. Dim the lights.
2. Loosen tight clothing and remove shoes, belt, glasses or contact lenses, if you like.

Concentrate

1. Eliminate disruptions. Turn off the TV, radio, or telephone.
2. Practice in a quiet, calm, environment.
3. Close your eyes to reduce distractions and improve concentration. If you prefer, keep your eyes open and focus on one spot.
4. Move your body as little as possible, changing positions only for comfort. Don't worry if you have some distracting thoughts—it happens to everyone. Just notice that your thoughts have wandered and then gently, without judgment, return your attention to your breath.

Relax

1. Begin and end relaxation practices with relaxed breathing techniques.
2. Use a relaxation recording if it helps. Gradually, learn to relax without a recording so that you can use relaxation techniques anywhere.
3. Let relaxation proceed naturally and spread throughout your body. Do not try to resist.

Be patient

1. Give yourself time to learn relaxation skills. Practice is required for these techniques to become automatic.
2. Try not to become upset if you have trouble concentrating. A wandering mind is normal and expected. Keep bringing your attention back to your breath.
3. Don't worry about how well you are practicing.
4. After a few weeks, select a word, such as "calm," "relax," “peace," or “patience” that you can say during relaxation practices. Eventually, simply saying that word may help you relax.

Incorporate relaxation into daily life

1. Over time, move relaxation practices from planned, quiet settings to "real life." The goal is to be able to calm yourself when necessary, no matter where you are.
2. Use relaxation whenever you notice yourself feeling stressed or anxious, such as waiting in line, at a doctor’s appointment, or during a difficult meeting.

Deep Breathing Relaxation

1. Start by becoming aware of your breathing. Place one hand on your stomach and the other hand on the center of your chest. Without trying to change anything, simply notice how you are breathing. Notice *where* you are breathing from, whether your shoulders are rising and falling, whether your chest is rising and falling, or perhaps your belly is rising and falling. Notice how your hands move as you breathe. (PAUSE)

2. Now notice the rate of your breathing. Are you breathing rapidly or slowly? Are you breathing deeply or more shallow? (PAUSE)

3. Now as you slowly inhale, imagine the air flowing deeper into your belly. Feel your belly fill with air as your lower hand rises. Pause at the top of your breath, and then follow your breath out as you completely exhale. Slowly take a breath in, two, three, four, and slowly exhale, two, three, four. Let any tension melt away as you relax more deeply with each breath. (PAUSE)

4. Notice how the air feels, as cool fresh air enters your nose, passes through the little hairs in your nasal passage, reaches the back of your throat, and descends deep into your lungs. Notice what happens as that breath of fresh air enters your lungs. Notice what happens when you exhale. Feel the temperature of each breath, cool as you inhale, and warm as you exhale. Count your breaths as you breathe in and out. (PAUSE)

5. Notice your breath becoming smooth and slow. Feel your belly and ribcage expand outward with each breath, and feel yourself become more relaxed with each exhale. Allow your shoulders to become heavier with each exhale. (PAUSE 15 sec)

6. Continue breathing slowly and gently. (PAUSE 15 sec)

7. As you breathe, notice the cool temperature of the air, as it enters your nose or mouth. Notice how the air becomes warmer as you follow it deep into your belly and out through your mouth.

8. Continue breathing slowly and gently. (PAUSE 15 sec)

9. Again, slowly take a breath in, two, three, four, and slowly exhale, two, three, four. Feel yourself become more and more relaxed with each exhale. (PAUSE 15 sec)

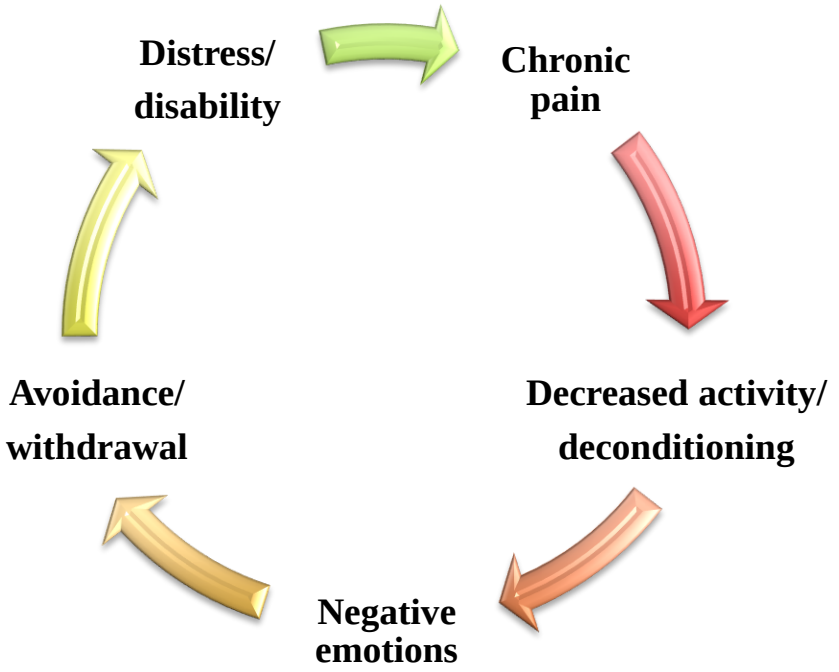
10. Now, as I count from five to one, feel yourself become more alert. Five, bringing your attention to this room. Four, feeling calm and relaxed. Three, start to wiggle your fingers and toes. Two, slowly start to move and stretch your muscles. One, open your eyes, feeling refreshed and rejuvenated.

The Chronic Pain Cycle

Many people with chronic pain fear that movement will increase pain or cause physical damage/injury. This often leads to a decrease in activities, which leads to physical deconditioning (e.g., less strength and stamina, weight gain). Dealing with constant pain may also lead to negative thoughts and emotions such as frustration and depression. All of these factors contribute to increased avoidance of people and activities. While this cycle is understandable for those with chronic pain, it is *not helpful*! In fact, it actually makes your pain and its effects worse over time. Now that we are aware of the cycle, we must learn how to break it.

The Costs of Inactivity

- More pain
- Poorer physical fitness
- Less time with family/friends
- Depressed mood
- Increased irritability
- Lower self-esteem
- Strain on relationships
- Decreased quality of life



REMEMBER: THERE'S HOPE!

Understanding the cycle gives us the power to break it!

Pleasant Activities List

Try different activities to distract yourself from pain and improve your mood.

- ☐ Go fishing
- ☐ Text, email, or call friends/family
- ☐ Get your hair cut or nails done
- ☐ Take a walk, exercise, or stretch
- ☐ Do yard work or gardening
- ☐ Read a book or magazine
- ☐ Watch or participate in sports
- ☐ Go to the park
- ☐ Organize
- ☐ Woodwork
- ☐ Surf the internet
- ☐ Look into classes you'd like to take
- ☐ Plan a trip
- ☐ Draw or paint
- ☐ Walk your dog/play with your pet
- ☐ Listen to music
- ☐ Watch a movie or your favorite show
- ☐ Take or edit pictures
- ☐ Repair or fix something
- ☐ Start or finish a project
- ☐ Go to the pool or beach
- ☐ Plan something nice for others
- ☐ Go for a drive
- ☐ Decorate or re-arrange your home
- ☐ Knit or sew
- ☐ Sing or play an instrument
- ☐ Do hobbies (e.g., building models)
- ☐ Visit with family or friends
- ☐ Enjoy a hot bath or shower
- ☐ Chat with your neighbor
- ☐ Write or journal
- ☐ Play games or do puzzles
- ☐ Go shopping
- ☐ Meditate or pray
- ☐ Other activities/ideas?

_____

_____

Adapted with permission from K.M. Phillips, Ph.D.

Pleasant Activities Schedule

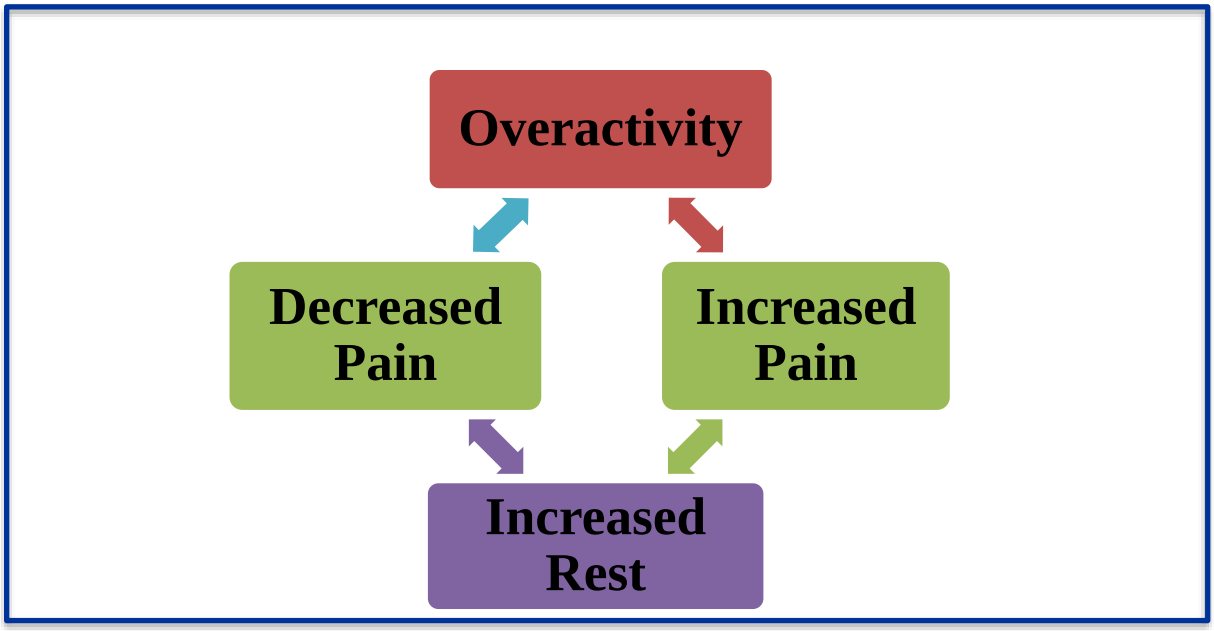
Choose at least two pleasant activities that can be scheduled over the course of the week. Place an 'X' to schedule and circle the X when completed.

Activity	Sun	Mon	Tues	Wed	Thu	Fri	Sat
Gardening		**X**		**X**		**X**	

Remember to use proper pacing when engaging in activities.

Pacing Activities

Some people are prone to “pushing through” pain in the name of accomplishing a task and will not stop until it is complete, while others may be preoccupied with fears about harming themselves and avoid activity altogether. Sometimes those with chronic pain use a “good pain day” when they are feeling better to try to complete one or more rigorous activities that have fallen by the wayside. The next day, they wake up with increased pain levels and rest for a day or more to recover. This **Overactivity Cycle** may happen on a recurring basis and can lead to negative consequences such as increased stress and anxiety, decreased efficiency, lowered self-esteem, and avoidance of any activity.



Engaging in a moderate, safe level of activity on a regular basis is how to avoid this cycle. Using the skill of pacing, where time is the guide for activity engagement, can be a helpful strategy. Pacing is about balancing activities, planning ahead, and working “smarter not harder.”

How To Pace

Estimate how long you can safely do one of your regular activities (e.g., yardwork, dishes) without causing a severe pain flare and set that minus one minute as your "active" goal time for the activity. Approximate the amount of "resting" time you will need in order to safely resume activity or continue your day.

Remember

Approximated times may need to be adjusted after pacing begins. Stick to time-based pacing goals whether you are having a 'good' or a 'bad' pain day to avoid the crash-burn/over-activity cycle or the avoidance/inactivity cycle. Moderation is the key!

Spread out activities during the week and be reasonable with the schedule so you can succeed.

Use the table below to record how you pace activities this week. Use the sample as your guide, where each period of activity and rest equals one cycle. In the examples provided, 10 / 15 (1) indicates *working for 10* minutes, *resting for 15* minutes for *one cycle* of pacing.

	Sample	**Activity 1**	**Activity 2**	**Activity 3**
Activity	Yard Work			
Active Goal	10 minutes			
Rest Goal	15 minutes			
Day 1	10 / 15 (1)			
Day 2	10 / 15 (2)			
Day 3	10 / 15 (3)			
Day 4	15 / 15 (1)			
Day 5	15 / 15 (2)			
Day 6	15 / 15 (3)			
Day 7	20 / 15 (2)			

Progressive Muscle Relaxation

The technique I am going to help you learn is called progressive muscle relaxation. It involves tensing and relaxing muscle groups throughout your body to bring about a state of relaxation. As I ask you to tense your muscles, only tighten them enough to feel some tension—maybe a third to a half of their fully tense state. Make sure you don't strain yourself or hold your breath when you tense your muscles. The goal is to notice what the muscles feel like when they are tense so you can more fully relax them. I'll have you hold the tension for about five seconds and then ask you to relax. Focus on the sensations of letting go of the tension and study the feelings of the muscle being completely relaxed. We'll have you do that for about a minute before moving on to the next muscle group.

Before we begin, get into a comfortable relaxation posture: feet on the floor, legs apart, neck straight, back against your chair, teeth slightly apart, eyes gently closed, and head upright. Take a few slow, deep, comfortable breaths. Breathe in deeply, hold for a moment, and exhale. As you breathe in, concentrate on the sound and feel of the air. As you exhale completely, notice the warmth of the air and silently say the word "calm" to yourself with each breath you let out. Take a few more slow deep breaths. Be sure to exhale slowly and completely each time. Imagine your body becoming more relaxed and feeling heavier in your chair each time you exhale. [Pause]

Now we'll begin the progressive muscle relaxation. First, we'll start with your **legs**. Lift your legs slightly off the ground, tense your thighs, and point your toes toward your head. Hold that position and feel the tension. Now let your legs drop to the ground and release all the tension at once. Notice the difference between the way your legs feel now when relaxed and how they felt when they were tense.

Now we will move to your **arms**. With your palms facing the ceiling, make a fist and raise your forearm bringing your fist as close to your shoulder as you can while at the same time pressing your arms to your sides. Feel the tension in your fingers, hands, and arms. And now relax. As you relax you may notice your arms feel warm and heavy. Notice the difference between the relaxation and tension in your arms. Continue to breathe slowly and deeply.

While your legs and arms remain relaxed, we will now move to your **shoulders and stomach**. Lift both shoulders as if you were trying to touch your ears with them and at the same time suck your stomach in as if someone were pushing on it. Feel the tightness and tension across both shoulders and in your stomach muscles and hold it. And now relax. Let your shoulders fall back down and enjoy the heaviness, warmth, and relaxation in your shoulders.

Continue to breathe slowly and deeply, and scan your legs, arms, and shoulders, releasing any excess tension you notice. Focus on the sensation of relaxation in these areas. We'll now move to your **face and neck**. To tense your neck, press your chin to your chest or the back of your head to the back of your chair. While doing this, squint your eyes and slightly bring your back teeth together, tensing just enough to feel the muscles in your jaw. Notice the tension in your face and neck: hold it. And now relax. Let all the tension go from your face and neck.

Continue to breathe slowly and enjoy the relaxed feelings throughout your entire body. Scan your body from your head to your toes and notice what your muscles feel like. As you are doing this, take five more slow deep breaths at your own pace. After you exhale on the last breath, open your eyes.

Guided Imagery Relaxation

Close your eyes and begin to relax. Breathe deeply and slowly and let your entire body feel relaxed and at ease. Now, imagine yourself at the back of a movie theatre. Picture a scene or a place that you associate with feeling relaxed and calm and imagine it on the screen at the front of the theatre. It can be a real place that you have been to or an imaginary place. Hold that scene in your mind. [Pause]

Now imagine yourself moving closer and closer to the screen and as you get closer, the picture becomes clearer and more vivid, almost as if you're in the image. Imagine that there are three steps right in front of the screen. Walk up the first, then the second, and now the third step. You are right in front of the screen and can see the image with perfect clarity. Now walk through the screen and put yourself in that image, not as if you were outside looking in, but actually in that place. [Pause]

Now look around you. Be aware of all the details of what you see. Notice the colors of everything around you, notice how vivid those colors are and areas of light and darkness. You might notice the various shades or textures and the intensity, softness, or brightness of the light. [Pause]

Be aware of the sounds you hear or don't hear in this place. Are the sounds close or far, loud or soft? [Pause]
Become aware of the smells. [Pause]

Notice the things that you can feel and the temperature of the air. [Pause]

Enjoy the sensation of being in this place where you can feel very, very relaxed. You can use any distracting, stressful, or anxious thoughts as reminders to easily travel back to this image and relax yourself. This can be your relaxation place and you can come here whenever you wish.

Relaxation Practice Record

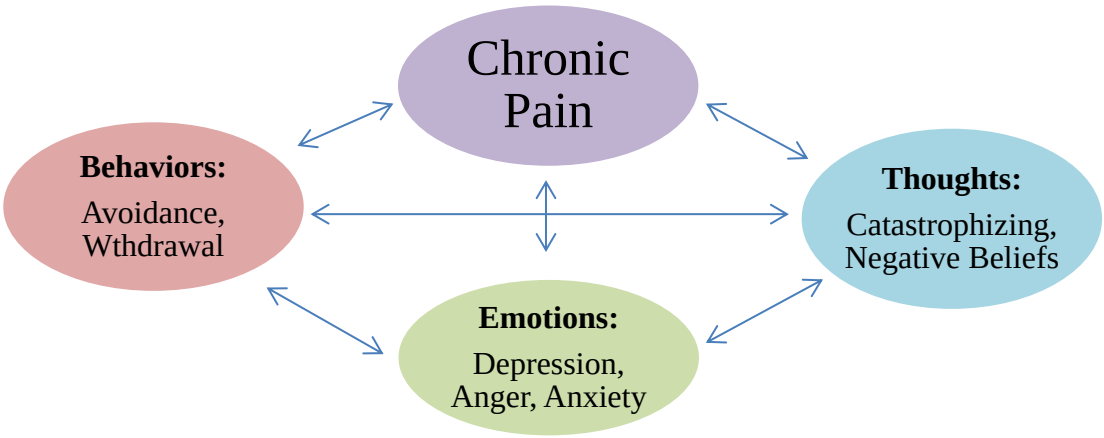
Use this record to chart your relaxation practice over time. Before you begin your practice, use the scale below to rate your level of tension. After you complete the practice, use the same scale again to rate your level of tension. Note any differences. Remember, it may take a number of practice periods before you notice improvement.

0	1	2	3	4	5	6	7	8	9	10
Totally Relaxed		Very Relaxed		Slightly Relaxed		Slightly Tense		Moderately Tense		Extremely Tense

Date	How long did you practice? (minutes)	Level of tension before practice (0-10)	Level of tension after practice (0-10)

Cognitive Behavioral Approach to Chronic Pain

One's experience of chronic pain involves more than the pain itself. Chronic pain is best understood as an interaction between the physical components of pain, behaviors, thoughts, and emotions. Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) focuses on these biopsychosocial interactions between thoughts, behaviors, and feelings that impact your chronic pain experience. As shown below, all of these pieces affect each other. The aim of this treatment is to help you develop adaptive coping skills so that you feel a greater sense of control over your life and your pain, and to improve your quality of life despite pain.



Goals of Cognitive Behavioral Therapy for Chronic Pain (CBT-CP)

- Increase confidence in your ability to perform activities and live a full life despite the pain
- Improve physical and emotional functioning
- Decrease the frequency and impact of flare-ups
- Increase effective coping skills for managing pain
- Reduce pain intensity
- Improve quality of life despite the presence of pain

Pain Thoughts: Identifying and Replacing Thoughts That Are Not Helpful

Thinking about how much pain you are in does not help you cope with the pain. As pain increases, thoughts may become more negative; as thoughts become more negative, pain often increases further. Negative thoughts can lead to:

- Worsening mood
- Avoiding activities
- Isolating/avoiding others

Although pain thoughts can be automatic, with practice you can become more aware of them. Then you can replace unhelpful thoughts with ones that are helpful. Here are some examples of unhelpful pain thoughts and some coping statements that you can use to replace them:

Types of Unhelpful Thoughts	Examples of Unhelpful Thoughts	Examples of Helpful Thoughts
Catastrophizing: Believing something is the worst it could possibly be.	When my pain is bad, I can't do anything.	Even when my pain is bad, there are still some things I can do.
Should Statements: Thinking in terms of how things should, must, or ought to be.	My doctor should be able to cure my pain.	There is no cure for chronic pain, but I can use skills to cope with my pain.
All or None Thinking: Seeing things as "either or" or "right or wrong" instead of in terms of degrees.	I can only be happy if I am pain free.	Even if I am in pain I can still be happy. There is always something that I can do to have a better quality of life.
Overgeneralization: Viewing one or two bad events as an endless pattern of defeat.	I tried doing exercises for my back pain before and it didn't help. So, it isn't going to help now.	Although physical therapy didn't help much before, maybe this time it will help. I might as well try.
Jumping to Conclusions: Making negative conclusions of events that are not based on fact.	When I move my back hurts, so it must be bad for me to move.	Hurt does not equal harm.
Emotional Reasoning: Believing how you feel reflects how things really are.	I feel useless, so I am useless.	Even though I can't do all the things I used to do, it doesn't mean I can't do anything.
Disqualifying the Positive: Focusing on only the bad and discounting the good.	So what if I am doing more, I am still in pain.	Doing more is important for me to live the life I want to live.

Used with permission from KM. Phillips, Ph. D

Catching ANTs: How to Catch, Check, & Challenge Automatic Negative Thoughts

When you get upset, you often have negative thoughts. These thoughts may happen automatically and increase your pain and negative mood. You can feel better physically and emotionally by catching ANTs when they occur, noticing how they make you feel, and challenging them with a more balanced thought.

Identify *at least one* ANT each day. Evaluate the thought and generate a new helpful one.

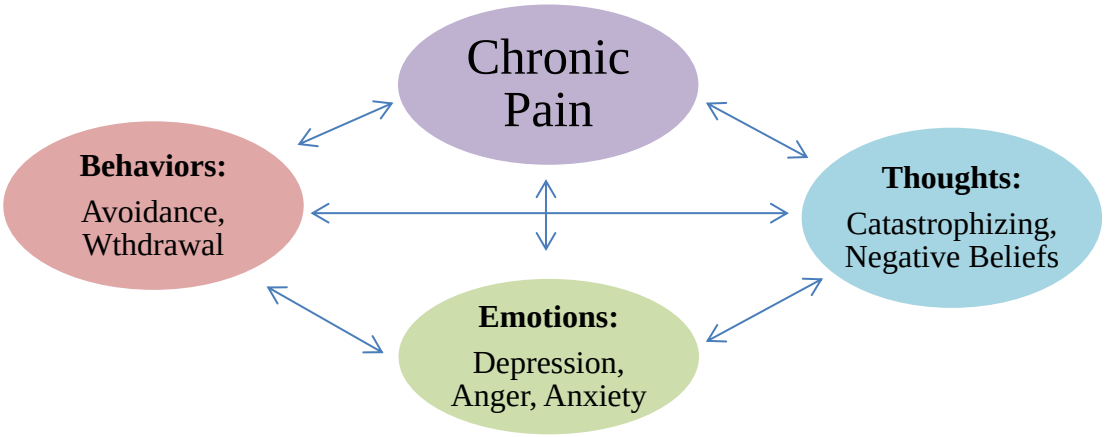
Day/Situation	***Catch It! Identify ANT***	***Check It! Effect on your pain/mood***	***Challenge It! Positive/balanced coping statement***
Tuesday/Cleaning garage and pain flares	*This pain is killing me. I can't do anything anymore.*	Helpful or Unhelpful	*I am hurting right now because I overdid it but I know that I will feel better soon. Then I will pace myself to get the job done.*
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	

Day/Situation	***Catch It! Identify ANT***	***Check It! Effect on your pain/mood***	***Challenge It! Positive/balanced coping statement***
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	

Adapted with permission from S. Palyo, Ph.D. & J. McQuaid, Ph.D.

Cognitive Behavioral Approach to Chronic Pain

One's experience of chronic pain involves more than the pain itself. Chronic pain is best understood as an interaction between the physical components of pain, behaviors, thoughts, and emotions. Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) focuses on these biopsychosocial interactions between thoughts, behaviors, and feelings that impact your chronic pain experience. As shown below, all of these pieces affect each other. The aim of this treatment is to help you develop adaptive coping skills so that you feel a greater sense of control over your life and your pain, and to improve your quality of life despite pain.



Goals of Cognitive Behavioral Therapy for Chronic Pain (CBT-CP)

- Increase your ability to perform activities and live a full life despite the pain!
- Improve physical and emotional functioning
- Decrease the frequency and impact of flare-ups
- Increase effective coping skills for managing pain
- Reduce pain intensity
- Improve quality of life despite the presence of pain

Pain Thoughts: Identifying and Replacing Thoughts That Are Not Helpful

Thinking about how much pain you are in does not help you cope with the pain. As pain increases, thoughts may become more negative; as thoughts become more negative, pain often increases further. Negative thoughts can lead to:

- Worsening mood
- Avoiding activities
- Isolating/avoiding others

Although pain thoughts can be automatic, with practice you can become more aware of them. Then you can replace unhelpful thoughts with ones that are helpful. Here are some examples of unhelpful pain thoughts and some coping statements that you can use to replace them:

Types of Unhelpful Thoughts	Examples of Unhelpful Thoughts	Examples of Helpful Thoughts
Catastrophizing: Believing something is the worst it could possibly be.	When my pain is bad, I can't do anything.	Even when my pain is bad, there are still some things I can do.
Should Statements: Thinking in terms of how things should, must, or ought to be.	My doctor should be able to cure my pain.	There is no cure for chronic pain, but I can use skills to cope with my pain.
All or None Thinking: Seeing things as "either or" or "right or wrong" instead of in terms of degrees.	I can only be happy if I am pain free.	Even if I am in pain I can still be happy. There is always something that I can do to have a better quality of life.
Overgeneralization: Viewing one or two bad events as an endless pattern of defeat.	I tried doing exercises for my back pain before and it didn't help. So, it isn't going to help now.	Although physical therapy didn't help much before, maybe this time it will help. I might as well try.
Jumping to Conclusions: Making negative conclusions of events that are not based on fact.	When I move my back hurts, so it must be bad for me to move.	Hurt does not equal harm.
Emotional Reasoning: Believing how you feel reflects how things really are.	I feel useless, so I am useless.	Even though I can't do all the things I used to do, it doesn't mean I can't do anything.
Disqualifying the Positive: Focusing on only the bad and discounting the good.	So what if I am doing more, I am still in pain.	Doing more is important for me to live the life I want to live.

Used with permission from KM. Phillips, Ph.D.

Catching ANTs: How to Catch, Check, & Challenge Automatic Negative Thoughts

When you get upset, you often have negative thoughts. These thoughts may happen automatically and increase your pain and negative mood. You can feel better physically and emotionally by catching ANTs when they occur, noticing how they make you feel, and challenging them with a more balanced thought.

Identify *at least one* ANT each day. Evaluate the thought and generate a new helpful one.

Day/Situation	***Catch It!*** ***Identify ANT***	***Check It!*** ***Effect on your pain/mood***	***Challenge It!*** ***Positive/balanced coping statement***
Tuesday/Cleaning garage and pain flares	*This pain is killing me. I can't do anything anymore.*	Helpful or Unhelpful	*I am hurting right now because I overdid it but I know that I will feel better soon. Then I will pace myself to get the job done.*
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	
		Helpful or Unhelpful	

Adapted with permission from S. Palyo, Ph.D. & J. McQuaid, Ph.D.

Coping Statements Checklist

Here are some statements that can be used to replace unhelpful thoughts. Put an "**X**" next to the ones that you think may be helpful for you. What things have you told yourself in the past to get through a pain flare or difficult situation? Add your helpful statements to the list.

X	Coping Statement Checklist
	The pain flare passes in a while.
	I can handle this. I just have to make it through this moment.
	I've gotten through it before and I can get through it again.
	I don't have to suffer. I have skills I can use to cope.
	What would I tell a friend who was in pain?
	How can I set a good example for my kids about coping with life's challenges?
	How would someone I admire cope with this?
	I just have to focus on something else.
	There may be no cure, but I can still live my life.
	I'm going to focus on what I *can* do, not what I can't do.

Adapted with permission from K.M. Phillips, Ph.D.

Remember: It's easy to think of helpful statements when you're feeling okay. But, if you are in a bad mood or having a pain flare, it's more difficult. Keep a list of these or other helpful statements in a place where you can easily find them when you need them most (e.g., in your wallet, on your refrigerator, in your phone).

Anticipating Obstacles: Plan for Coping

People have many challenging situations in their lives and it is expected that certain obstacles will arise. A difficult day may involve life stressors and increased pain symptoms. The best time to plan for how you will best cope with and manage your pain during one of these days is *now*.

Below, identify the *specific* things in your life that may be triggers for pain flare-ups, as well as how you may cope with challenges using the skills that you have learned.

Potential Obstacles/Triggers/Stressors: *(Example: Kids fighting, Cold weather)*

1. _____ 2. _____

3. _____ 4. _____

5. _____ 6. _____

Ways to Cope: *(Example: Walking, Deep breathing, Pleasant activity)*

1. _____ 2. _____

3. _____ 4. _____

5. _____ 6. _____

Remember:

BE PREPARED! The best defense is a good offense.

Consider all the tools you have learned and do not undersell yourself or let automatic negative thoughts (ANTs) sabotage you.

Contact friends, family, and health care providers who are there to provide support as needed. Use humor and remember: Tomorrow is a new day!

Weekly Activities Schedule

Use the schedule provided to plan your activities for the upcoming week. Be as specific as possible and include items such as doing the dishes as well as the pain management strategies you will employ regularly such as using relaxation techniques.

Be realistic in your planning so that you are able to follow the schedule. **Remember:** Failing to plan is planning to fail!

Time	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
7:00 am							
8:00							
9:00							
10:00							
11:00							
12:00 pm							
1:00							
2:00							
3:00							
4:00							
5:00							
Evening							

SMART Goal Setting

A SMART goal is set using the following guidelines:

Specific	**Identifies a specific action or event that will take place.**
Measurable	**Should be quantifiable so progress can be tracked.**
Achievable	**Should be attainable and realistic given resources.**
Relevant	**Should be personally meaningful and really matter.**
Time-Bound	**States the time period for accomplishing the goal.**

Adapted from Doran, 1981

Short-Term Goals

Short-term goals can be accomplished over the course of the next several weeks to months. Once goals are identified, track them on a weekly basis to ensure that progress is occurring. If it is not, make adjustments as needed. For each goal, consider if it fits the SMART criteria listed above. These should be personally meaningful goals that motivate you to apply the skills of the Brief CBT-CP program.

_____

_____

_____

Long-Term Goals

Long-term goals are those for the next 6-12 months or perhaps even longer. These are often our most important goals for the future, so they can be an important motivator.

_____

_____

_____

REFERENCES

Ahles, T. A., Wasson, J. H., Seville, J. L., Johnson, D. J., Cole, B. F., Hanscom, B., . . . McKinstry, E. (2006). A controlled trial of methods for managing pain in primary care patients with or without co-occurring psychosocial problems. *Ann Fam Med, 4*(4), 341-350. **https://doi.org/10.1370/afm.527**

Beck, J. S. (1995). *Cognitive Therapy: Basics and beyond*. Guilford Press.

Beehler, G.P., Loughran, T.A., King, P.R., Dollar, K.M., Murphy, J.L…Goldstein, W.R. (2021). Patients' perspectives of brief cognitive behavioral therapy for chronic pain: Treatment satisfaction, perceived utility, and global assessment of change. *Families, Systems, & Heath, 39*(2), 351-357.

Beehler, G. P., Murphy, J. L., King, P. R., & Dollar, K. M. (2017). *Brief Cognitive Behavioral Therapy for Chronic Pain: Therapist Manual*. U.S. Department of Veterans Affairs.

Beehler, G. P., Murphy, J. L., King, P. R., Dollar, K. M., Kearney, L, K., Halsam, A…. Goldstein, W. R. (2019). Brief Cognitive Behavioral Therapy for Chronic Pain: Results from a clinical demonstration project in primary care behavioral health. *Clinical Journal of Pain, 35*(10), 809-817.

Benson, H., & Klipper, M. Z. (1975). *The relaxation response*. Harper Collins.

Buckenmaier, C. C. et al., (2013). Preliminary validation of the Defense and Veterans Pain Rating Scale (DVPRS) in a military population. *Pain Medicine, 14,* 110-123.

Burns, J. W., Nielson, W. R., Jensen, M. P., Heapy, A., Czlapinski, R., & Kerns, R. D. (2015). Specific and general therapeutic mechanisms in cognitive behavioral treatment of chronic pain. *J Consult Clin Psychol, 83*(1). **https://doi.org/10.1037/a0037208**

Buszewicz, M., Rait, G., Griffin, M., Nazareth, I., Patel, A., Atkinson, A., . . . Haines, A. (2006). Self-management of arthritis in primary care: Randomised controlled trial. *British Medical Journal, 333*, 879-882.

Carlier, I. V. E., Meuldijk, D., Van Vliet, I. M., Van Fenema, E., Van der Wee, N. J. A., & Zitman, F. G. (2012). Routine outcome monitoring and feedback on physical or mental health status: evidence and theory. *Journal of Evaluation and Clinical Practice, 18*, 104-110.

Defense Health Agency. (2018, June 08). Pain management and opioid safety in the Military Health System (MHS) (DHA Healthcare Operations Procedural Instruction No. 6025.14). Defense Health Agency.

Dobscha, S. K., Corson, K., Flores, J. A., Tansill, E. C., & Gerrity, M. S. (2008). Veterans Affairs Primary Care Clinicians' Attitudes toward chronic pain and correlates of ppioid prescribing rates. *Pain Medicine, 9*(5), 564-571. **https://doi.org/10.1111/j.1526-4637.2007.00330.x**

Duncan, B. L., Reese, R. J., Lengerich, A. J., DeSantis, B., Comeau, C. V., & Johnson-Esparza, Y. (2021). Measurement-based care in integrated health care: A randomized clinical trial. *Families, Systems, & Health, 39*(2), 259–268. **https://doi.org/10.1037/fsh0000608**

Elwyn, G., Durand, M. A., Song, J., Aarts, J., Barr, P. J., Berger, Z…. Van der Weijden, T. (2017). A three-talk model for shared decision making: Multistage consultation process. *British Medical Journal, 359*, j4891.

Elwyn, G., Frosch, D., Thomson, R., Joseph-Williams, N., Lloyd, A., Kinnersley, P…. Barry, M. (2012). Shared decision making: A model for clinical practice. *Journal of General Internal Medicine, 27*(10), 1361-1367.

Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science, 196*(4286), 129-136. **https://doi.org/10.1126/science.847460**

Finan, P. H., Goodin, B. R., & Smith, M. T. (2013). The association of sleep and pain: An update and a path forward. *Journal of Pain, 14*, 1539-1552.

Harding, J.K.J., Rush, A.J., Arbuckle, M., Trivedi, M.H., & Pincus, H.A. (2011). Measurement-based care in psychiatric practice: A policy framework for implementation. *Journal of Clinical Psychiatry, 72*, 1136-1143.

Hoffman, B. M., Papas, R. K., Chatkoff, D. K., & Kerns, R. D. (2007). Meta-analysis of psychological interventions for chronic low back pain. *Health Psychology, 26*(1), 1-9. **https://doi.org/10.1037/0278-6133.26.1.1**

Hunter, C. L., Goodie, J. L., Oordt, M. S., & Dobmeyer, A. C. (2024) Integrated behavioral health in primary care: Step-by-step guidance for assessment and intervention (3rd ed). American Psychological Association.

IASP. (1994). Part III: Pain terms: A current list with definitions and notes on usage. In H. Merskey & N. Bogduk (Eds.), *Classification of Chronic Pain, Second Edition* (pp. 209-214). IASP Press.

Institute of Medicine. (2011). *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. The National Academies Press.

Kearney, L. K., Wray, L. O., Dollar, K. M., & King, P. R. (2015). Establishing measurement-based care in integrated primary care: Monitoring clinical outcomes over time. *Journal of Clinical Psychology in Medical Settings*, *22*(4), 213-227.

Kerns, R. D., Otis, J., Rosenberg, R., & Reid, M. C. (2003). Veterans' reports of pain and association with ratings of health, health-risk behaviors, affective distress, and use of the healthcare system. *Journal of Rehabilitation Research and Development, 40*(5), 371-380.

Kim, S., & Kratz, A. L. (2021). A review of the use and psychometric properties of the chronic pain acceptance questionnaires. *Rehabilitation Psychology*, *66*(1), 102–105. **https://doi.org/10.1037/rep0000342**

Kim, S., Lee, J., & Boone, D. (2021). Protective and risk factors at the intersection of chronic pain, depression, anxiety, and somatic amplification: A latent profile approach. *Journal of Pain Research, 2022*(15), 1107-1121.

Klonoff, D. C., Buckingham, B., Christiansen, J. S., Montori, V. M., Tamborlane, W. V., Vigersky, R. A., & Wolpert, H. (2011). Continuous glucose monitoring: an endocrine society clinical practice guideline. *The Journal of Clinical Endocrinology & Metabolism, 96*(10), 2968-2979.

Kopka, S. M., & Lowry, J. L. (2002). Psychometric evaluation of the Behavioral Health Questionnaire-20: A brief instrument for assessing global mental health and the three phases of psychotherapy outcome. *Psychotherapy Research, 12,* 413-426.

Kubler-Ross, E. (1972). On death and dying. *Journal of the American Medical Association, 211.2*, 174-179.

Lamb, S. E., Hansen, Z., Lall, R., Castelnuovo, E., Withers, E. J., Nichols, V., . . . Underwood, M. R. (2010). Group cognitive behavioural treatment for low-back pain in primary care: a randomised controlled trial and cost-eff ectiveness analysis. *Lancet, 375*, 916-923. **https://doi.org/10.1016/s01406736(09)62164-4**

Lawrence, J., Hoeft, F., Sheau, K., & Mackey, S. (2011). Strategy-dependent dissociation of the neural correlates involved in pain modulation. *Anesthesiology, 115*(4), 844-851. **https://doi.org/10.1097/ALN.0b013e31822b79ea**

Li J. X. (2015). Pain and depression comorbidity: A preclinical perspective. *Behavioural Brain Research*, *276*, 92–98. **https://doi.org/10.1016/j.bbr.2014.04.042**

Martinson, A., Craner, J., & Clinton-Lont, J. (2020). Outcomes of a 6-week Cognitive-Behavioral Therapy for Chronic Pain Group for veterans seen in primary care. *Translational Behavioral Medicine, 10*, 254-266. **https://doi.org/10.1093/tbm/iby127**

Matthias, M. S., Parpart, A. L., Nyland, K. A., Huffman, M. A., Stubbs, D. L., Sargent, C., & Bair, M. J. (2010). The patient-provider relationship in chronic pain care: Providers' perspectives. *Pain Medicine, 11*, 1688-1697.

McCraken, L. M., Vowles, K. E., & Eccleston, C. (2004). Acceptance of chronic pain: Component analysis and a revised assessment method. *Pain, 107*, 159-166.

Moore, J. E., Von Korff, M., Cherkin, D., Saunders, K., & Lorig, K. (2000). A randomized trial of a cognitive-behavioral program for enhancing back pain self care in a primary care setting. *Pain, 88*, 145-153.

Morris, D.W., Toups, M., & Trivedi, M.H. (2012). Measurement-based care in the treatment of clinical depression. *Focus, 10*, 428-433.

Otis, J. D., Gregor, K., Hardway, C., Morrison, J., Scioli, E., & Sanderson, K. (2010). An examination of the co-morbidity between chronic pain and posttraumatic stress disorder on US Veterans. *Psychological Services*, *7*(3), 126–135. **https://doi.org/10.1037/a0020512**

Pickering, T., Hall, J., Appel, L., Falkner, B., Graves, J., Hill, M., . . . Roccella, E. (2005). Recommendations for blood pressure measurement in humans and experimental animals Part 1: Blood pressure measurement in humans: A statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. *Circulation, 11*, 697-716.

Schtuze, R., Rees, C., Smith, A., Slater, H., Campbell, J.M., & O'Sullivan, P.O. (2018). How can we best reduce pain catastrophizing in adults with chronic noncancer pain? A systematic review and meta-analysis. *The Journal of Pain, 19*(3), 233-256.

Scott, K., & Lewis, C. C. (2015). Using measurement-based care to enhance any treatment. *Cognitive and Behavioral Practice, 22*, 49–59. **https://doi.org/10.1016/j.cbpra.2014.01.010**

Smith, B. H., & Torrance, N. (2011). Management of chronic pain in primary care. *Current Opinions on Supportive Palliative Care, 5*(2), 137-142. **https://doi.org/10.1097/SPC.0b013e328345a3ec**

Von Korff, M., Moore, J. E., Lorig, K., Cherkin, D. C., Saunders, K., Gonzales, V. M., . . . Comite, F. (1998). A randomized trial of a lay person-led self-management group intervention for back pain patients in primary care. *Spine, 23*(23), 2608-2615.

Wertli, M. M., Eugster, R., Held, U., Steurer, J., Kofmehl, R., & Weiser, S. (2014). Catastrophizing—a prognostic factor for outcome in patients with low back pain: A systematic review. *The Spine Journal, 14*(11), 2639-2657.

Wetherell, J. L., Afari, N., Rutledge, T., Sorrell, J. T., Stoddard, J. A., Petkus, A. J., . . . Atkinson, J. H. (2011). A randomized, controlled trial of Acceptance and Commitment Therapy and Cognitive-Behavioral Therapy for chronic pain. *Pain, 152*(9), 2098-2107. doi: 10.1016/j.pain.2011.05.016

Williams, A. d. C., Fisher, E., Hearn, L., & Eccleston, C. (2020). Psychological therapies for the management of chronic pain (excluding headache) in adults. *Cochrane Database of Systematic Reviews,* (8).

APPENDIX 1: PAIN CONDITIONS

Updated From Murphy, J.L., McKellar, J.D., Raffa, S.D., Clark, M.E., Kerns, R.D., & Karlin, B.E. Cognitive behavioral therapy for chronic pain among veterans: Therapist manual. Washington, DC: U.S. Department of Veterans Affairs.

Arthritis

Osteoarthritis. Osteoarthritis (OA) is the most common form of arthritis (Centers for Disease Control and Prevention, 2020) and occurs when cartilage that cushions the ends of bones and joints deteriorates. Military service members are at increased risk of developing OA given the demands of their work (Rodriguez et al., 2019). The most common areas of the body affected include hands, feet, neck, low back, knees, and hips.

Rheumatoid Arthritis. Rheumatoid arthritis (RA) is a chronic, systemic inflammatory disorder that primarily affects the joints. White blood cells accumulate in the joints causing swelling and pain. Progression of the disease can lead to destruction of cartilage, ligaments, and tendons. RA typically impacts functional status to a greater degree than OA and is twice as prevalent in women than men (Centers for Disease Control and Prevention, 2020).

Back Pain

Low Back Pain. Referred to as the leading cause of disability worldwide (Harvigsen et al., 2018), the annual prevalence of low back pain (LBP) in the US is 10-30%, with a lifetime prevalence in US adults of 65-80% (Urits et al., 2019). While many people with new onset of LBP experience quick recovery, pain commonly recurs. There are several risk factors for progression to a chronic and disabling condition, including high pain intensity ratings at onset, pain in multiple places, and psychological distress, including depression, anxiety, and pain cognitions such as catastrophizing (Harvigsen et al., 2018). It can be difficult to identify a specific cause of LBP, and 85-95% of patients presenting to PCMs do not have an identified anatomical cause of their pain. In the remaining cases, some causes include fractures in the vertebrae, inflammatory disorders, malignancy, and infections (Finucane et al., 2020).

Middle and Upper Back Pain. Middle and upper back pain are less common than LBP because the bones in these areas do not move as often. As in the lower area of the back, pain is most often related to muscle sprain or overuse, herniated discs, or arthritic processes.

Complex Regional Pain Syndrome. Complex regional pain syndrome (CRPS) is not well understood. It involves ongoing pain (often described as burning, tingling, stabbing) that is disproportionate to a precipitating event (e.g., injury, surgery) and accompanied by other categories of symptoms (e.g., hyperalgesia, temperature changes, swelling, decreased range of motion, and/or weakness). The clinical criteria in Type 1 are met with no associated nerve injury, and the clinical criteria in Type 2 are met following nerve damage. The condition is often associated with significant impact on functioning (Kessler et al., 2020; Lloyd et al., 2021).

Fibromyalgia. Fibromyalgia (FM) is a disorder of unknown etiology associated with widespread chronic pain, sleep disturbance, fatigue, and cognitive concerns (e.g., forgetfulness). It is associated with central sensitization, wherein the central nervous system (CNS) has become more reactive to painful stimuli. The development of FM is also linked to other factors, such as inflammatory, immune, endocrine, genetic, and psychosocial factors (Siracusa et al., 2021; Sarzi-Puttini et al., 2021). FM is more common in women than men, and individuals with FM are more likely to have comorbid affective symptoms (e.g., depression, anxiety) and other pain conditions (e.g., headaches, irritable bowel syndrome) than individuals without FM (Arnold et al., 2016).

Gout. Gout is a very painful form of inflammatory arthritis. It usually affects one joint at a time (often the big toe). Additional symptoms include redness and heat at the affected joint. It is caused by hyperuricemia (too much uric acid in body); uric acid is created to break down purines which are found in our bodies and in some foods. The course of gout fluctuates between periods of worse symptoms (flares) and periods of no symptoms or remission (Centers for Disease Control and Prevention, 2020).

Headaches

The most common types of headaches are listed below. It is important to remember, however, that patients may have more than one kind of headache (e.g., tension-type headaches a few times per week and migraines a few times per month). In addition, in the same way that other pain locations may be difficult to classify, patients may present with mixed symptoms that do not fall neatly into one category.

Cluster. Cluster headaches involve severe unilateral pain that is orbital, supraorbital, or temporal, lasting 15 to 180 minutes, and ranging in frequency from daily to eight times per day (ICHD-3, 2018). Painful episodes may be accompanied by tearing, nasal congestion, sweating, a drooping eyelid, or a contracted pupil. These all occur on the affected side of the face. While the underlying cause is not well understood, several structures are implicated in the intense pain of cluster headaches: dilation of blood vessels creating pressure on the trigeminal nerve, the hypothalamus (given circadian patterns often observed), and the parasympathetic nervous system (Kandel & Mandiga, 2023). Triggers for cluster headaches include alcohol, histamine, or nitroglycerin. Cluster headaches are rare (prevalence of .1%) and 3 times more common in men than women (ICHD-3, 2018; Kandel & Mandiga, 2023).

Medication Overuse. Medications are often an important part of the treatment plan for headaches but can be overused. This leads to more headache pain; these types of headaches are medication overuse headaches (MOH). They are common in people who have 15 or more days per month with headaches. They occur in the context of an underlying headache disorder and are defined as regular overuse of at least one drug that can be taken for acute/symptomatic treatment of headache for more than three months. Even low/prescribed doses can cause MOH at a certain frequency (Ashina et al., 2023; Fisher & Jan, 2023).

Migraine. Characteristics of migraine headaches include unilateral position, moderate to severe intensity, pulsating quality, and a duration of four to 72 hours (including prodromal and postdromal stages). Prodrome refers to affective and vegetative symptoms that occur 24 to 48 hours prior to

headache onset. Postdrome refers to the state where pain has resolved, but it could recur with sudden head movement; the patient may feel drained or exhausted. There are two major types of migraine headache, with and without aura. Aura refers to neurologic symptoms, including visual, motor, and sensory disturbance; they can precede or co-occur with a headache. Other symptoms include nausea, vomiting, photophobia, or phonophobia (at least one must be present). Migraines are considered chronic when they occur 15 days per month or more for three months or longer, with eight or more of those headaches being migraines. Migraines can be triggered by certain foods, caffeine, smells, and physical activity (ICHD-3, 2018).

Post-traumatic. Headaches associated with head trauma (e.g., mild to severe traumatic brain injury) are common immediately following an injury, with prevalence rates ranging from 30% to 90% (Mavroudis et al., 2023). They are considered acute during the first three months from onset and persistent beyond that (ICHD-3, 2018). The most common presentation patterns are tension-type headache or migraine. Exposure to blasts and concussions while deployed make this type of headache more common among Veterans and military service members.

Tension-type. Tension-type headaches (TTH) are very common, with lifetime prevalence rates ranging between 30% and 78% (ICHD-3, 2018). The primary sensation associated with TTH is the feeling of a tight band wrapped around one's head. These range in intensity from mild to moderate, in duration from minutes to days, and in frequency from infrequent (less than once a month), frequent episodic (at least 10 headache episodes on one to 14 days/month on average, for more than three months) to chronic. Criterion for chronic TTH is met when an individual experiences headaches for 15 or more days a month, on average, for at least three months (ICHD-3, 2018).

Neck Pain. Neck pain (i.e., cervicalgia) is common, with about 65% of the population experiencing it at some point in their lives. In primary care, neck pain is a common presenting problem (10.4% to 21.3% incidence per year; Childress & Stuek, 2020). It is generally caused by activities that strain the neck such as poor posture or sleeping, muscle tightness, or whiplash from a motor vehicle accident. Neck pain may also be associated with headache pain.

Pelvic Floor Disorders. Pelvic floor disorders occur when the area that supports the pelvic organs becomes weak or damaged. These may result in urinary or fecal incontinence, as well as persistent pain in the pelvic walls. Some of the common causes are endometriosis, pelvic floor tension myalgia, pelvic inflammatory disease, fibroids, surgeries, and irritable bowel syndrome. Pelvic pain is much more common among women, with one in seven experiencing some form of this chronic condition.

Peripheral Neuropathic Pain. Peripheral neuropathy typically affects the hands and feet. It involves microvascular lesions in small blood vessels and its development is often associated with high blood sugar secondary to diabetes. Pain is commonly, but not universally, associated with peripheral neuropathy. Pain quality is often described as numb and tingling, pins and needles, electric, or burning, as opposed to being characterized as "pain."

Phantom Limb Pain. A phantom limb is the sensation that an amputated or missing limb is still attached to the body. Among the 95% of patients who report amputation-related pain, 60-80% report phantom limb pain (PLP) and 67.7% report residual limb pain (RLP, formerly called "stump pain" and often related to some source, such as nerve damage, formation of neuroma, infection). Pain is variable from a dull ache to shooting and severe. More than half of people with PLP also have RLP (Hanyu-Deutmeyer et al., 2023).

Radicular Pain. Radicular pain is most commonly associated with LBP or neck pain and referred to as lumbar radiculopathy and cervical radiculopathy, respectively. It radiates along a nerve due to inflammation or irritation of the nerve root and extends from the spinal cord to areas such as the buttocks and down the legs in the case of back pain, or down the arms in the case of neck pain. The most common associated symptoms are "pins and needles" sensations (63-72%), muscle weakness (37%), radiation of pain in the lower limb (35%), and numbness (27%). Depending on the severity of nerve compression, the condition can also cause loss of sensation and motor function (Dydyk et al., 2023).

Tendonitis/Bursitis. Tendonitis and bursitis involve inflammation of one of the tendons and bursae, respectively. Tendons are thick cords that join muscles to bones, and inflammation causes pain and tenderness in the joints. Tendonitis is commonly associated with sports involving repetitive motion such as swimming or throwing a ball but can result from any repetitive movement involving the joints. Bursae are fluid-filled sacs found in joints that surround areas where tendons, skin, and muscle tissues meet. Bursae provide essential lubrication to the hips, knees, elbows, and heels. Bursitis can be caused by infection or trauma (as is often the case in acute bursitis) or by overuse injury and inflammatory disorders (as is often the case in chronic bursitis). The prognosis and outcomes for most patients with bursitis are good (Williams et al., 2023).

APPENDIX 1 REFERENCES

Arnold, L.M., Gebke, K.B., & Choy, E.H.S. (2016). Fibromyalgia: Management strategies for primary care. *International Journal of Clinical Practice, 70*(2), 99-112.

Ashina, S., Terwindt, G. M., Steiner, T. J., Lee, M. J., Porreca, F., Tassorelli, C., Schwedt, T. J., Jensen, R. H., Diener, H. C., & Lipton, R. B. (2023). Medication overuse headache. *Nature Reviews. Disease primers*, *9*(1), 5. **https://doi.org/10.1038/s41572-022-00415-0**

Centers for Disease Control and Prevention. (2020, July 27). *Gout*. **https://www.cdc.gov/arthritis/basics/gout.html**

Centers for Disease Control and Prevention. (2020, July 27). *Osteoarthritis*. **https://www.cdc.gov/arthritis/basics/osteoarthritis.html**

Centers for Disease Control and Prevention. (2020, July 27). *Rheumatoid arthritis (RA)*. **https://www.cdc.gov/arthritis/basics/rheumatoid-arthritis.html**

Childress, M.A., & Stuek, S.J. (2020) Neck pain: Initial evaluation and management. *American Family Physician, 102*(3), 150-156.

Dydyk, A.M., Khan, M.Z., & Singh P. (2022, Oct 24). Radicular Back Pain. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK546593/**

Fischer, M.A., & Jan, A. (2023, Aug 22). Medication-Overuse Headache. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK538150/**

Finucane, L.M., Downie, A., Mercer, C., Greenhalgh, S.M., Boissonnault, W.G., Pool-Goudzwaard, A.L., Beneciuk, J.M., Leech, R.L., & Selfe, J. (2020). International framework for red flags for potential serious spinal pathologies. *Journal of Orthopaedic and Sports Physical Therapy, 50*(7): 350-372.

Hanyu-Deutmeyer, A.A., Cascella, M., & Varacallo, M. (2023, Aug 4). Phantom Limb Pain. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK448188/**

Hartvigsen, J., Hancock, M. J., Kongsted, A., Louw, Q., Ferreira, M. L., Genevay, S., Hoy, D., Karppinen, J., Pransky, G., Sieper, J., Smeets, R. J., Underwood, M., & Lancet Low Back Pain Series Working Group (2018). What low back pain is and why we need to pay attention. *Lancet (London, England)*, *391*(10137), 2356–2367. **https://doi.org/10.1016/S0140-6736(18)30480-X**

International Headache Society. (2018). International Classification of Headache Disorders *(ICHD-3)*, 3rd ed. **https://ichd-3.org/**

Kandel, S.A., & Mandiga, P. (2023, Jul 4). Cluster Headache. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK544241/**

Kessler, A., Yoo, M., & Calisoff, R. (2020). Complex regional pain syndrome: An updated comprehensive review. *NeuroRehabilitation*, *47*(3), 253–264. **https://doi.org/10.3233/NRE-208001**

Lloyd, E. C. O., Dempsey, B., & Romero, L. (2021). Complex Regional Pain Syndrome. *American Family Physician*, *104*(1), 49–55.

Mavroudis, I., Ciobica, A., Luca, A. C., & Balmus, I. M. (2023). Post-traumatic headache: A review of prevalence, clinical features, risk factors, and treatment strategies. *Journal of Clinical Medicine*, *12*(13), 4233. **https://doi.org/10.3390/jcm12134233**

Rodriguez, M. J., Garcia, E. J., & Dickens, J. F. (2019). Primary and Posttraumatic Knee Osteoarthritis in the Military. *The Journal of Knee Surgery*, *32*(2), 134–137. https://doi.org/10.1055/s-0038-1676956

Sarzi-Puttini, P., Giorgi, V., Atzeni, F., Gorla, R., Kosek, E., Choy, E. H., Bazzichi, L., Häuser, W., Ablin, J. N., Aloush, V., Buskila, D., Amital, H., Da Silva, J. A. P., Perrot, S., Morlion, B., Polati, E., Schweiger,

V., Coaccioli, S., Varrassi, G., Di Franco, M., … Batticciotto, A. (2021). Fibromyalgia position paper. *Clinical and Experimental Rheumatology*, *39 Suppl 130*(3), 186–193. **https://doi.org/10.55563/clinexprheumatol/i19pig**

Siracusa, R., Paola, R.D., Cuzzocrea, S., & Impellizzeri, D. (2021). Fibromyalgia: Pathogenesis, Mechanisms, Diagnosis and Treatment Options Update. *International Journal of Molecular Science, 22*(8), 3891. **https://doi.org/10.3390/ijms22083891**

Urits, I., Burshtein, A., Sharma, M., Testa, L., Gold, P. A., Orhurhu, V., Viswanath, O., Jones, M. R., Sidransky, M. A., Spektor, B., & Kaye, A. D. (2019). Low back pain, a comprehensive review: Pathophysiology, diagnosis, and treatment. *Current Pain and Headache Reports*, *23*(3), 23. **https://doi.org/10.1007/s11916-019-0757-1**

Williams, C.H., Jamal, Z., & Sternard, B.T. (2023, Jul 24). Bursitis. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK513340/**

APPENDIX 2: TREATMENT OPTIONS FOR CHRONIC PAIN

From Murphy, J.L., McKellar, J.D., Raffa, S.D., Clark, M.E., Kerns, R.D., & Karlin, B.E. Cognitive behavioral therapy for chronic pain among veterans: Therapist manual. Washington, DC: U.S. Department of Veterans Affairs.

The intent of this appendix is to familiarize non-medical providers with common treatment modalities by providing basic information that does not include data on efficacy.

Additional resource: Health and Human Services guide on Pain Management Best Practices. It has sections on medications, restorative therapies (e.g., massage, ice/heat), interventional procedures, behavioral health approaches, and complementary and integrative health approaches. It also has a section on special populations, to include military active duty, reserve service members, and veterans. https://www.hhs.gov/sites/default/files/pmtf-final-report-2019-05-23.pdf

Analgesic Medications

The following section is an introduction to analgesic, or pain relieving, medications. It is not meant to guide prescription of medications but instead to help providers understand the likely uses of medications taken by patients with chronic pain. A table of medications including both generic and brand names is also included (Figure 15). In addition, an overview of several classes of pain management medications can be found at the following link: https://www.ncbi.nlm.nih.gov/books/NBK560692/?report=reader

Non-Opioid Analgesics. Aspirin and other related compounds constitute a class of drugs known as nonsteroidal anti- inflammatory drugs (NSAIDS). This class of medication produces three desirable effects including anti-inflammatory, analgesic, and antipyretic (fever reducing). Commonly used medications in this category include aspirin, ibuprofren, naproxen, etolodac, meloxicam, and piroxicam. The most common adverse effects of NSAIDs are gastrointestinal and renal (kidney). Acetaminophen is also a non-opioid analgesic but is not an NSAID because, though possessing pain relieving and antipyretic properties, it lacks an anti-inflammatory effect.

Opioid Analgesics. Opioid analgesics (or narcotics) refer to compounds that act by binding to opioid receptors in the brain. Though often used interchangeably, the term opiate refers only to the naturally occurring resin found in opium poppy while opioids also include synthetically produced substances and thus is the preferred general term.

This class of medications can either be short- or long-acting. Commonly used opioids include morphine, hydrocodone, oxycodone, codeine, methadone, and hydromorphone. The analgesic effects of opioids are due to decreased perception of pain, decreased reaction to pain, and increased pain tolerance. The most commonly cited side effects of opioids include dysphoria/euphoria, sedation, nausea and vomiting, constipation, irritability, dizziness, and respiratory depression. Opioids may be associated with risk of misuse, abuse, and physiological dependence (Queremel & Davis, 2023, USDHHS, 2019).

Measuring the risk to benefit ratio of opioid therapy for patients with chronic pain is complicated and prescribing providers are encouraged to follow the 2022 *VA/DoD Clinical Practice Guideline for The Use of Opioids in the Management of Chronic Pain* (available at https://www.healthquality.va.gov/). Of note, concurrently prescribing opioids and sedatives/hypnotics (e.g., benzodiazepines) should be done with extreme caution based on evidence of risk of accidental overdose-related deaths (Jones et al., 2013).

Tramadol. Tramadol does not fit neatly into a single category because it is dual acting. It interferes with the transmission of pain signals like an opioid, but it also releases norepinephrine and serotonin like an antidepressant. It is used for moderate to severe chronic pain and the most common side effects are dizziness, sedation, constipation, nausea, and headaches. Because it is not a pure opioid, risk of physiological dependence is lower but is still present.

Topical Analgesics. Topical analgesics are applied to the skin for delivery of medication to targeted pain areas. They block the generation and transmission of nerve signals to the brain through a local numbing effect. Topical products are available in various creams, gels, lotions, patches, and plasters. Since they are applied to a localized area externally, topical agents afford a lower risk for systemic adverse events and side effects. They are frequently used in the VA and the most commonly prescribed topicals are capsaicin, lidocaine, diclofenac, and menthol-methylsalcilate.

Muscle Relaxants. Muscle relaxants (or spasmolytics, antispasmodics) are most commonly prescribed for LBP, neck pain, fibromyalgia, and tension headaches in situations where muscular contractions appear to be a prominent component of pain.

Muscle relaxants used most commonly include cyclobenzaprine, tizanidine, baclofen, and methocarbamol. Muscle relaxants work by inhibiting the central nervous system, which contributes to the commonly reported side effect of sedation and the recommendation against driving or operating heavy machinery. Other common side effects include dizziness, headache, nausea, irritability, and nervousness. Muscle relaxants also pose a risk of physiological dependence.

Adjuvant Analgesics. Adjuvant analgesics, or co-analgesics, are medications that were originally developed and marketed for uses other than analgesia and are also used in pain management. The two most common classes of medications that fall into this category are certain types of antidepressants and anticonvulsants. Antidepressants commonly used for analgesic purposes include duloxetine, venlafaxine, and nortriptyline.

Anticonvulsants, primarily used to relieve neuropathic pain, include gabapentin, pregablin, topiramate, and lamotrigine. Common side effects of antidepressants include nausea, vomiting, insomnia, decreased sex drive, and constipation. Common side effects of anticonvulsant medications include dizziness, fatigue, weight gain, and drowsiness.

Headache Analgesics. Analgesics used to treat headaches vary widely and do not fall into a neat class. Migraine medications are generally categorized by nature of their action into those that are preventative (e.g., propranolol, topiramate or Topamax), abortive (e.g., sumatriptan or

Maxalt), and rescue (butalbital/acetaminophen/caffeine or Fioricet). Of note, medication overuse headaches, or rebound headaches, may occur when excessive analgesics are taken for headache relief, leading to chronic daily headaches of a different type.

Category	Generic Name(s)	Brand Name(s)
Opioid Analgesics	oxycodone	**Oxycontin**
	oxycodone + acetaminophen	**Percocet**
	oxymorphone	**Opana**
Opioid and Antidepressant	tramadol	**Ultram**
Muscle Relaxants	baclofen	
	cyclobenzaprine	**Flexeril**
	methocarbamol	**Robaxin**
	tizanidine	**Zanaflex**
Topical Analgesics	capsaicin cream/patch	
	diclofenac gel	**Voltaren**
	lidocaine gel/cream/ointment/patch	**Lidoderm**
	menthol-methylsalicylate	
Adjuvant Analgesics: Anticonvulsants	carbamazepine	**Tegretol**
	gabapentin	**Neurontin**
	pregablin	**Lyrica**
	topiramate	**Topamax**
	lamotrigine	**Lamictal**
Adjuvant Analgesics: Antidepressants	amitriptyline	**Elavil**
	duloxetine	**Cymbalta**
	nortriptyline	**Pamelor**
	venlafaxine	**Effexor**
Headache Analgesics	butalbital + acetaminophen + caffeine	**Fioricet**
	rizatritpan	**Maxalt**
	sumatriptan	**Imitrex**
	zolmitriptan	**Zomig**

Figure 15: Medications for Pain

Invasive Medical Treatment Options for Chronic Pain

Epidural Steroid Injections. Epidural Steroid Injections (ESIs) are used for back pain complaints associated with conditions such as spinal stenosis or spinal disc herniation. ESIs include a combination of corticosteroids and local anesthesia that is injected into the epidural space around the spinal cord and nerves. The injection may be guided by fluoroscopy or x-ray. The effects of the injection last from one week to six months.

Facet Injections. Facet injections are used for those with chronic neck or back pain caused by inflamed facet joints, which are located between each set of vertebrae in the spine from the neck to the tailbone. A mixture of local anesthetic and corticosteroid medication is injected into the facet joint to reduce swelling and inflammation around the facet joint space.

Intrathecal Pump. An intrathecal pump is an implantable device that delivers pain medication directly to the spinal fluid. Common medications used in pumps include baclofen or morphine. The pumps deliver medications at higher dosages than possible with oral medications.

Nerve Blocks. Nerve blocks (aka, regional nerve blockade) are used for pain in the neck, back, feet or even the head. Nerve blocks may include local anesthetic and epinephrine, with corticosteroids, and/or opioids that are injected directly into the nerve group associated with reported pain. Nerve blocks can be used to treat painful conditions, to determine sources of pain, or to judge the benefits of more permanent treatments such as surgery.

Onabotulinnumtoxin A (Brand name: Botox). Botox injections are typically used for relief of frequent migraine headaches. Botox received approval from the U.S. Food and Drug Administration (FDA) as a treatment for chronic migraines in 2010.

Radiofrequency Ablation. Radiofrequency ablation (RFA) is used to treat severe chronic low back pain. Radiofrequency waves produce high heat on specifically identified nerves surrounding the facet joints in the lumbar spine, ablating the nerves, and destroying their ability to transmit pain signals. RFA is an outpatient procedure using local anesthesia. While the procedure may provide pain relief, in most patients the nerves regenerate.

Spinal Cord Stimulator. The most common use of spinal cord stimulators (SCS) is with patients diagnosed with failed back syndrome (see definition under Surgery below). A SCS includes electrodes implanted in the epidural space, an electrical pulse generator implanted in the lower abdominal area of gluteal region, connecting wires to the generator, and a generator remote control.

Surgery. Surgery may be offered for various pain locations such as back, neck, knee, shoulder, or ankle. Surgery for chronic pain is usually considered only after conservative treatments have failed or if seen as medically necessary. Individuals who have undergone one or more unsuccessful back surgeries may receive the diagnosis or label of “failed back syndrome” or “failed back surgery syndrome” (FBSS). While the causes for failure of surgery vary, preoperative risk factors for FBSS include psychiatric comorbidities such as anxiety and depression; obesity; smoking; presence of litigation or worker’s compensation claim; and certain physical and/or

radiologic findings such as stenosis, fibrosis, and disc herniation. Psychosocial risk factors are most strongly associated with the development of FBSS. In terms of prognosis, patients with FBSS have been shown to experience lower quality of life, increased pain, increased depression, unemployment, opioid use, and disability (Orhurhu et al., 2023).

Trigger Point Injections. Trigger point injections (TPI) are used to relieve muscles where knots form when muscles do not relax. TPI is used in many muscle groups ranging from arms, legs, low back, and neck and is most associated with treatment of fibromyalgia and tension headache. The injection contains a local anesthetic that may include a corticosteroid.

Non-Invasive Treatment Options for Chronic Pain

Biofeedback. Biofeedback involves gaining greater awareness of physiological functions or processes such as muscle tone, skin conduction, heart rate, or brainwaves. Awareness of different physiological processes is gained through use of a variety of types of monitoring devices specific to the process being monitored, such as an electromyography (EMG) to measure muscle activity or electrodermograph to register skin conductance or resistance. Information on a specific process is gathered, amplified, and displayed (fed back) to the patient who then uses the visual or auditory feedback to gain control over the targeted behavior. Biofeedback has been used to treat a variety of chronic pain disorders but is most often used in the management of headaches.

Complementary and Alternative Therapies (CAM)

Acupuncture. Acupuncture involves the insertion of needles into acupuncture points in the skin in an effort to relieve pain. Acupuncture produces physiologic effects that are relevant to analgesia. Even so, clinical practice guidelines differ in terms of the accepted mechanisms for how acupuncture affects chronic pain (USDHHS, 2019).

Chiropractics. These interventions primarily focus on spinal adjustment or adjustment to other joint areas. Spinal or other joint manipulations involve a dynamic thrust that causes an audible release and attempts to increase range of motion. Chiropractic care may also involve soft tissue therapy, strength training, dry needling, functional electrical stimulation, traction, or nutritional recommendations.

Yoga/Tai Chi. Yoga and Tai Chi may provide a source of graded physical exercise combined with relaxation to improve chronic pain.

Heat/Cold. Application of cold and heat are often used for the management of chronic pain. Cold and heat may decrease sensitivity to pain and provide competing sensory central nervous system input that can reduce pain sensations.

Physical Therapy. Reduction in bodily movement that can be related to fear of pain or re-injury is common in chronic pain and often leads to physical deconditioning and, subsequently, increased pain. Physical therapy is an integral part of chronic pain interventions as it helps restore physical functioning and reengagement in rewarding life activities. Physical therapy

involves a range of activities including stretching exercises, strengthening exercises, and use of graded exercise techniques such as therapeutic pools or stationary bikes, in addition to a range of palliative therapies such as spinal manipulation and ultrasound, among others.

Relaxation Training. Relaxation training, which may be done in the context of biofeedback, focuses on identifying tension within the body and applying systematic techniques for decreasing that tension. The most common techniques, which are described in detail in this manual, include diaphragmatic (or deep) breathing, progressive muscle relaxation, and visualization.

Transcutaneous Electrical Nerve Stimulation (TENS). TENS units stimulate nerves by introducing a mild electrical current. The electric current is not strong enough to cause muscle contraction but, instead, is thought to interfere with the transmission of pain signals to the brain. Electrodes are placed on the skin and a battery-powered unit is carried or worn on the person. No surgical procedures are involved in the use of a TENS unit.

Selected Psychological Approaches for Chronic Pain

Acceptance and Commitment Therapy (ACT). Acceptance and Commitment Therapy, (ACT: Hayes et al., 1999) is an acceptance- and mindfulness-based intervention that teaches patients to observe and accept thoughts and feelings without judgment and without trying to change them. It focuses on identifying core values and behaving in accordance with those values. As applied to chronic pain, ACT emphasizes that while the physical sensation may be painful, the patient's struggle with pain is what causes suffering and emotional distress (Dahl & Lundgren, 2006). The aim of therapy, therefore, is to develop greater psychological flexibility in the presence of thoughts, feelings, and behaviors associated with pain.

Cognitive Behavioral Therapy (CBT). CBT helps individuals resolve their problems with maladaptive emotions, behaviors, and cognitions through a goal-oriented, systematic process. While it was originally used for treatment of depression and anxiety disorders, it has been used with a variety of other conditions from insomnia to substance abuse. Since this manual is focused on CBT-CP, a more in-depth review of its application to chronic pain is included.

Hypnotherapy. Hypnotherapy utilizes suggestive statements made by a therapist to alter the patient's attention and focus away from pain. Deep breathing is often used as a behavioral cue to alter the subjective experience of pain, but there is significant variation in specific techniques.

Mindfulness. Mindfulness meditation is another approach combining elements of relaxation and hypnotherapy, which seeks to increase focused attention and facilitate relaxation. Based in Theravada Buddhism, it seeks to increase intentional self- regulation to what is occurring in the present without attaching negative associations. As applied to pain management, a primary goal is to separate the pain sensation from unhelpful thoughts.

Operant Behavioral Therapy. The operant-behavioral formulation of chronic pain by Fordyce (1976) marked a significant development in the understanding and treatment of chronic pain by introducing the concept of pain behaviors. These refer to forms of communication that are

observable expressions of pain and suffering such as moaning, clenching, grimacing, sighing, or limping. The model suggests that reinforcement of such behaviors, often by those in one's social environment, could lead to maintenance of subjective reports of pain and increased self-perceptions of disability.

APPENDIX 2 REFERENCES

Dahl, J. C., & Lundgren, T. L. (2006). *Living beyond your pain: Using Acceptance and Commitment Therapy to ease chronic pain*. New Harbinger.

Fordyce, W. E. (1976). *Behavioral methods for chronic pain and illness*. St. Louis, MO: Mosby.

Hayes, S.C., Strosahl, K.D, & Wilson, K.G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. Guilford Press.

Jones, C.M., Mack, K.A., & Paulozzi, L.J. (2013). Pharmaceutical overdose deaths, United States, 2010. *Journal of the American Medical Association, 309*(7), 657-659. **https://doi.org/10.1001/jama.2013.272**

Orhurhu, V.J., Chu, R., & Gill, J. (2023, May). Failed Back Surgery Syndrome. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK539777/**

Queremel Milani D.A., & Davis, D.D. (2023, Jan). Pain Management Medications. StatPearls Publishing. **https://www.ncbi.nlm.nih.gov/books/NBK560692/#article-105841.s7**

U.S. Department of Health and Human Services (2019, May). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from U. S. Department of Health and Human Services website: **https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html**

APPENDIX 3: MOBILE APPS AND WEBSITES FOR HEALTH AND WELLNESS

Below you will find a list of mobile apps and websites that can assist you with management of important health topics, from improving sleep quality to quitting smoking. Although these apps do not all specifically address chronic pain management, they can be used with (or without) Brief CBT-CP to help address your wellness goals. Consider visiting the following website for a full listing of additional free mobile apps:

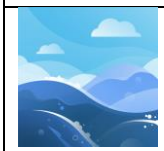
VA App Store: **https://mobile.va.gov/appstore**

Insomnia		**CBT-i Coach** is for people who are engaged in Cognitive Behavioral Therapy for Insomnia with a health provider, or who have experienced symptoms of insomnia and would like to improve their sleep habits. Available for iOS and Android. https://mobile.va.gov/app/cbt-i-coach
Tobacco		**Stay Quit Coach** is intended to serve as a source of readily available support and information for adults who are already in treatment to quit smoking and to help them stay quit after treatment ends. Available for iOS and Android. https://mobile.va.gov/app/stay-quit-coach
Weight		**MOVE! Coach** provides self-managed, weight management allowing individuals to monitor, track, and receive tailored feedback regarding their progress with weight and exercise goals while controlling relapse triggers and forming coping plans. Available for iOS and Android. https://mobile.va.gov/app/move-coach
Behavioral Health		**Life Armor** allows users to browse information on 17 topics, including sleep, depression, relationship issues, and post-traumatic stress. Brief self- assessments help the user measure and track their symptoms, and tools are available to assist with managing specific problems. Available for iOS and Android. https://play.google.com/store/apps/details?id=mil.dha.lifearmor&hl=en_US&gl=US
PTSD		**PTSD Coach** is designed for Veterans and military Service Members who have, or may have, Posttraumatic Stress Disorder (PTSD). This app provides users with education about PTSD, information about professional care, a self-assessment for PTSD, opportunities to find support, and tools that can help users manage the stresses of daily life. Available for iOS and Android. https://mobile.va.gov/app/ptsd-coach

		**CPT Coach** is for Veterans, Service members, and others with PTSD who are participating in Cognitive Processing Therapy (CPT) with a professional behavioral healthcare provider. This app contains support materials for a complete course. Available for iOS and Android. https://mobile.va.gov/app/cpt-coach
		**ACT Coach** is designed for Veterans and military Service Members in Acceptance and Commitment Therapy (ACT) with a professional behavioral healthcare provider and provides additional assistance with unpleasant thoughts, feelings, and impulses without avoiding them or being controlled by them. Available for iOS and Android. https://mobilehealth.va.gov/app/act- coach
		**Virtual Hope Box** is an accessory to treatment that contains simple tools to help with emotional regulation, coping, relaxation, distraction, and positive thinking through personalized supportive audio, video, pictures, games, mindfulness exercises, positive messages and activity planning, inspirational quotes, coping statements, and other tools. Available for iOS and Android. https://apps.apple.com/us/app/virtual-hope-box/id825099621 https://play.google.com/store/apps/details?id=mil.dha.vhb
		**Breathe2Relax** is a hands-on diaphragmatic breathing exercise. Breathing exercises have been documented to decrease the body's 'fight-or-flight' (stress) response, and help with mood stabilization, anger control, and anxiety management. The app can be used as a stand-alone stress reduction tool or can be used in addition to face-to-face care. Available for iOS and Android. https://play.google.com/store/apps/details?id=org.t2health.breathe2relax&hl=en_US&gl=US https://apps.apple.com/us/app/breathe2relax/id425720246
		**Mindfulness Coach** is for people who may be experiencing emotional distress, and for those wanting to maintain healthy coping practices. The app can be used on its own by those who would like mindfulness tools, or to enhance face-to-face care with a health care professional. It is not recommended for PTSD. Available for iOS and Android. https://mobile.va.gov/app/mindfulness-coach
Problem Solving		**Moving Forward** provides on-the-go tools and teaches problem solving skills to overcome obstacles and deal with stress. http://www.veterantraining.va.gov/movingforward/

Parenting		**Parenting2Go** helps Veterans and Service Members reconnect with their children and provides tools to strengthen parenting skills. https://www.veterantraining.va.gov/Parenting/

Other apps/websites recommended by various providers and lists:

	**mTBI Pocket Guide** https://www.cdc.gov/traumaticbraininjury/pdf/tbi_pocket_card-a.pdf
	**Tactical Breather** https://mobile.health.mil/tactical-breather/intro
	**BioZen** (Android only) https://play.google.com/store/apps/details?id=com.t2
	**PE Coach** (iOS, & Android) https://mobile.va.gov/app/pe-coach
	**Pill Reminder all in one** (iOS) apps.apple.com/us/app/pill-reminder-all-in-one/id816347839
	**Real Warriors** https://www.health.mil/Military-Health-Topics/Centers-of-Excellence/Psychological-Health-Center-of-Excellence/Real-Warriors-Campaign
	**AIMS for Anger Management** (iOS, & Android) https://mobile.va.gov/app/aims-anger-management
	**Vet Change** (iOS, & Android) Develop healthier drinking habits. https://mobile.va.gov/app/vetchange
	**DHA Medication Adherence** (iOS, & Android) Help ensure vital medication is taken as prescribed. https://play.google.com/store/apps/details?id=mil.dha.antidepressant https://apps.apple.com/ph/app/antidepressant-adherence/id1517095621