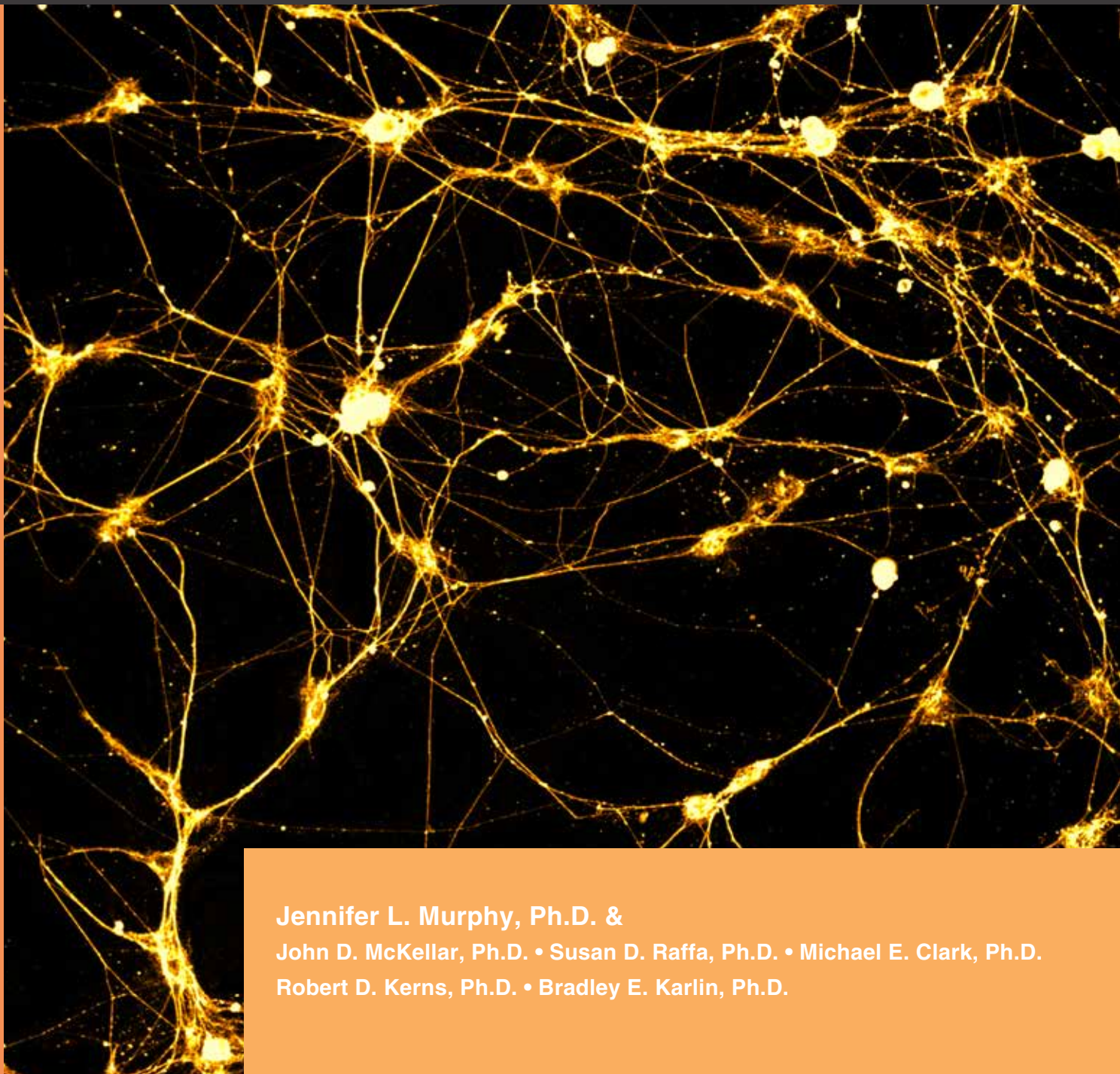


# Cognitive Behavioral Therapy for Chronic Pain

## Therapist Manual



Jennifer L. Murphy, Ph.D. &  
John D. McKellar, Ph.D. • Susan D. Raffa, Ph.D. • Michael E. Clark, Ph.D.  
Robert D. Kerns, Ph.D. • Bradley E. Karlin, Ph.D.

The image on the cover shows a network of the nerve cells which carry sensory information from the external world to the spinal cord and brain. The image was captured at the Bosch Institute Advanced Microscopy Facility, University of Sydney and is used with permission from: Dr. Michael Lovelace and Professor Tailoi Chan-Ling, Retinal and Developmental Neurobiology Laboratory, Discipline of Anatomy and Histology, University of Sydney; Professor Patricia Armati and Dr. Roberta Chow, Brain and Mind Science Research Institute and Nerve Research Foundation, University of Sydney.

# Cognitive Behavioral Therapy for Chronic Pain Among Veterans

## Therapist Manual



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In addition, the resources below were used while researching material for this manual:

Caudill, M.A. (2002). *Managing pain before it manages you: Revised edition*. New York: Guilford Press.

Eimer, B.N. & Freeman, A. (1998). *Pain management psychotherapy: A practical guide*. New York: Wiley & Sons.

Gatchel, R.J. (2005). *Clinical essentials of pain management*. Washington, DC: American Psychological Association.

Otis, J. (2007). *Managing chronic pain: A cognitive-behavioral therapy approach: Therapist guide*. Oxford: Oxford University Press.

Rome, J. (2002). *Mayo Clinic on chronic pain: Practical advice for leading a more active life*. New York: Mayo Clinic Health Information.

# Preface

In an effort to promote the availability of effective psychological treatments, the U.S. Department of Veterans Affairs (VA) has implemented national initiatives to disseminate evidence-based psychotherapies for various mental and behavioral health conditions, such as depression, posttraumatic stress disorder, insomnia, chronic pain, substance use disorders, and serious mental illness (Karlin & Cross, 2014). As part of this effort, VA has implemented national, competency-based training programs in each of these therapies. Program evaluation results indicate that the training in and implementation of these therapies have significantly enhanced therapist skills and Veteran outcomes (e.g., Eftekhari et al., 2013; Karlin et al., 2012; Karlin, Trockel, Taylor, Gimeno, & Manber, 2013; Trockel, Karlin, Taylor, & Manber, 2014; Walser, Karlin, Trockel, Mazina, & Taylor, 2013).

This therapist manual was developed to support the VA Cognitive Behavioral Therapy for Chronic Pain (CBT-CP) Training Program that is currently being disseminated throughout the Veterans Health Administration (VHA). The VA CBT-CP Training Program incorporates a competency-based training model and focuses on both the theory and application of CBT-CP. Initial program evaluation results suggest that, consistent with other VA therapies in this model, both therapist skills and Veteran outcomes are enhanced through participation in CBT-CP (Stewart et al., in press).

This manual is designed to serve as a training resource for therapists engaged in the training program, as well as for others inside and outside of the VHA who are interested in further developing their CBT skills for the treatment of Veterans with chronic pain.

Three composite case examples have been created based on the experience of the authors to represent Veterans who present for CBT-CP. These examples are used throughout the manual to illustrate the process of case conceptualization and the implementation of CBT-CP strategies. Therapist and Veteran forms and worksheets are described in the text and provided in the Appendices.



# Part 1: Background, Theory, and Case Conceptualization

# Introduction

## What is Cognitive Behavioral Therapy for Chronic Pain?

Cognitive Behavioral Therapy (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 (e.g., Hoffman, Papas, Chatkoff, & Kerns, 2007; Morley, Williams, & Eccleston, 1999; Turner, Mancl, & Aaron, 2006).

CBT-CP is an approach rooted in the development of a strong therapeutic relationship that encourages clients to adopt an active, problem-solving approach to cope with the many challenges associated with chronic pain (Burns et al., in press). Key components of CBT-CP include:

**Exercise** – walking program to increase engagement with valued activities

**Pacing** – how to accomplish tasks in a thoughtful and sensible way

**Relaxation Training** – techniques to decrease stress and muscle tension

**Cognitive Restructuring** – identify unhelpful thoughts and increase balanced thinking

**Behavioral Activation** – increase engagement in rewarding and meaningful activities

## Organization of Manual

This manual is divided into two parts. The first part focuses on foundational information regarding pain, especially chronic pain, including common conditions and treatments. It provides education on CBT and its application in the management of chronic pain, as well as an introduction to case conceptualization and the therapeutic alliance. The second part of the manual focuses on the understanding and implementation of the specific sessions for CBT-CP.

This manual was written specifically for implementing CBT-CP with Veterans. The content and specific issues are presented with this particular population in mind. Although, it should be noted that this CBT-CP protocol can be used with active duty military servicemembers and would likely be useful in helping any individuals manage chronic pain more effectively.

# Chronic Pain: Foundational Information









Pain is one of the most frequently reported symptoms by individuals receiving care in VHA facilities, with Veterans experiencing pain at rates exceeding those observed in the general population (Kazis et al., 1999). As many as 50% of male and 75% of female Veterans report pain in a primary care setting (Haskell Heapy, Reid, Papas, & Kerns, 2006; Kerns, Otis, Rosember, & Reid, 2003). Among those returning from Iraq and Afghanistan, as many as 45% endorse clinically significant pain levels (Girona, Clark, Massengale, & Walker, 2006). In addition, chronic pain and mental health disorders often co-occur (Gatchel, 2004). This is reflected in a growing body of literature that documents the frequent comorbidity of chronic pain and posttraumatic stress disorder (PTSD) (Asmundson & Katz, 2009; Villano et al., 2007).

Veterans with chronic pain seen in mental health settings report a variety of pain complaints and, in many cases, a history of numerous pain management interventions. Although some VHA mental health providers have expertise in working with Veterans who have pain, most do not. Accordingly, the following section provides an introduction to common pain conditions and treatments. The goal of this section is to familiarize mental health providers with basic information regarding pain in order to enhance understanding of their patients' experiences. In addition, possessing pain-related knowledge can help in understanding the patient's condition and history, conceptualizing the best approach to treatment, and establishing credibility with the Veteran to assist in the formation of a therapeutic alliance.

## Definitions

The International Association for the Study of Pain (IASP) defines pain as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage” (IASP, 1994). Pain is a subjective experience dependent on the self-report of the individual. For this reason, another popular definition of pain is that it is “whatever the experiencing person says it is, existing whenever he (or she) says it does” (McCaffrey & Pasero, 1999).

One of the most important distinctions in understanding and treating pain is between acute and chronic pain. Some of the most important differences are highlighted below:

Acute Pain	Chronic Pain
 Less than 3 months	 More than 3 months
 Is a symptom	 Is a condition
 Identified cause; body's response to injury	 May develop after incident; may have known or unknown cause
 Diminishes with healing and responds to treatment	 Persists beyond expected healing time and/or despite treatment

*Acute* pain typically occurs following an identifiable incident where an injury is sustained, such as a broken arm or sprained ankle. It is adaptive because it results in focused attention on a situation that is threatening. Acute pain is time-limited, diminishes with healing, and the cause usually is known. *Chronic* pain, on the other hand, persists beyond the expected time and indicated point of healing, and is typically defined as longer than 3 months duration. It may be present in multiple contexts and have an unknown or known cause (e.g., identified injury, osteoarthritis). While pain is present and may feel identical to acute pain, the experience does not have the same meaning. More recent understandings of chronic pain suggest that when pain continues in the absence of ongoing tissue damage, the nervous system itself is misfiring pain signals. Chronic pain, therefore, is best understood as a chronic disease to be managed versus an acute symptom to be cured.

## Types and Locations of Pain

Chronic pain can affect any part of the body. Because of the complexity of chronic pain, it is often difficult to categorize conditions into clear and simplistic categories. It is useful, however, to be familiar with the most commonly used classifications, *nociceptive* and *neuropathic* pain:

### Nociceptive Pain

- Pain that is caused by damage to body tissue and is based on input by specialized nerves called nociceptors
- Nociceptors sense danger to soft tissues such as muscles, bones, ligaments, and tendons
- Most nociceptive pain is musculoskeletal, and is often described as aching or deep

### Neuropathic Pain

- Pain that occurs when there is nerve damage that typically involves either the peripheral or central nerves
- It is often described as burning, shooting, tingling, or electric

Headache pain does not fall into either of the above classes but is another large category of painful conditions:

### Headache Pain

- Pain that involves disturbance of sensitive structures around the brain
- Sensation is usually in the forehead, eyes, or upper back/neck areas
- Pain is often described as a tight band, pounding, throbbing, or dull

The evaluation of a patient who has chronic pain can be a complex process and various factors must be considered. First, many Veterans have more than one type and location of pain. It is not uncommon for someone to have low back pain related to degenerative disc disease (nociceptive) as well as diabetic neuropathy creating foot pain and numbness (neuropathic). This same person may also have tension-type headaches several times per week. In addition, many individuals treated in the VA system have numerous medical and psychiatric comorbidities that can create a multifaceted pain presentation. Furthermore, the etiology of a specific pain complaint may be unknown; while some Veterans have an identified precipitating event or trauma demarcating the onset of their pain issues, others do not. There may also be a lack of clarity regarding a specific diagnosis, something that can be frustrating for the Veteran. While cases may be challenging for these reasons, many chronic pain patients are appropriate for CBT-CP and can benefit from the intervention.

## Pain Conditions

A comprehensive review of all pain locations and diagnoses is beyond the scope of this manual. Because of the previously mentioned difficulties encountered in straightforward classification, the list below provides basic information on many conditions encountered in VHA.

### Back Pain

**Low Back Pain.** Low back pain (LBP or lumbago) is the most common form of pain and the most fiscally costly worldwide in terms of medical visits and loss of work productivity (Deyo & Weinstein, 2001). Most people with acute LBP recover in a matter of weeks but for about 10% the pain will become chronic (Costa et al., 2012). Many individuals who experience chronic LBP report high levels of fear of movement and consequently are prone to deconditioning of the muscles leading to greater disability. LBP may be due to factors such as herniated discs, degenerative disc disease, spinal stenosis, or arthritis, but the vast majority of back pain is due to muscle strain (Deyo & Weinstein, 2001).

**Middle and Upper Back Pain.** Middle and upper back pain is 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.

**Neck Pain.** Neck pain (i.e., cervicalgia) is a common issue with about 65% of the population experiencing it at some point in their lives. 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.

### Arthritis

**Osteoarthritis.** Osteoarthritis (OA) is the most common form of arthritis (Prieto-Alhambra & Judge, 2013) and occurs when cartilage that cushions the ends of bones and joints deteriorates. Because of this, OA is often referred to as the “wear and tear” disease and is common among Veterans given engagement in military and non-military occupations that often involve physical labor (Morgenroth, Gellhorn, & Suri, 2012). 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.

**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. Damage can cause pain, swelling, and redness.

**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.

**Gout.** Gout is a type of arthritis that is characterized by inflammation, tenderness, and stiffness in joints. The disorder is more common in men than women and often affects the big toe. Symptoms are episodic and flare-ups are typically associated with increased levels of uric acid. Uric acid levels are influenced by genetic factors but also by diet and lifestyle (Gheita, El-Fishwawy, Nasrallah, & Hussein 2012).

**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.”

**Radicular Pain.** Radicular pain is most commonly associated with LBP or neck pain, 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 sudden appearance of radicular pain, new muscular weakness, or the identification of radicular pain that is not noted by medical providers is cause for immediate medical evaluation (Gilon, Watson, Cahill, & Moulin, 2006). Radicular pain is typically described as burning, shooting, or shock-like (Atlas et al., 1996).

**Phantom Limb Pain.** A phantom limb is the sensation that an amputated or missing limb is still attached to the body. Between 60 and 80% of individuals with an amputation experience phantom limb sensations and the majority of these sensations are painful (Sherman, Sherman, & Parker, 1984). In addition, pain at the site of the amputation, or stump, caused by nerve damage in the stump region is also common. Pain is variable from a dull ache to shooting and severe.

**Fibromyalgia.** Fibromyalgia (FM) is a disorder of unknown etiology associated with widespread pain, sleep disturbance, fatigue, and psychological distress among other symptoms. FM pain typically includes tender “trigger” points found in soft tissue of the back of the neck, shoulders, low back, hips, shins, and knees, and the pain is often described as a deep aching or burning. FM is about 7 times more common in women than men (Haviland, Banta, & Prezekop, 2011) and individuals with FM are 3 times more likely to have a comorbid diagnosis of major depression than individuals without FM.

**Complex Regional Pain Syndrome.** Complex regional pain syndrome (CRPS), previously known as reflex sympathetic dystrophy syndrome or RSD, is a poorly understood pain condition that often starts after a minor injury or complication, usually to a hand, arm, foot, or leg, and often spreads. Type 1, the form most commonly seen, has no demonstrable nerve lesions while there is nerve damage in Type 2. Pain is described as severe and changes in the appearance and texture of the skin are often noticeable.

## Types of 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, Veterans may present with mixed symptoms that do not fall neatly into one category.

**Tension-type.** Tension-type headaches (TTH) are by far the most common type, accounting for over half of all headaches (ICHD, 2nd edition, 2004). 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 and also range in frequency from episodic to chronic. Criterion for chronic TTH is met when an individual experiences headaches for 15 days a month for at least 6 months (ICHD, 2nd edition, 2004).

**Migraine.** Migraine headaches occur in about 10% of the population at some point in their lifetime (Rasmussen, Jensen, Schroll, & Olesen, 1991). They are classified as either with or without aura, defined by symptoms such as sensory or motor disturbance that precede or accompany the headache. Migraine headaches tend to be recurrent and are associated with a number of autonomic nervous system symptoms. The typical migraine headache is unilateral and pulsing in nature, lasts from 2 to 72 hours and may be associated with nausea, vomiting, sensitivity to light and sound, and aggravated by physical activity. Migraines are 2 to 3 times more common in women than men (ICHD, 2nd edition, 2004).

**Cluster.** Cluster headaches involve severe unilateral pain that is orbital, supraorbital, or temporal, lasting 15 to 180 minutes, and occurring in frequency from every other day to up to 8 times per day (ICHD, 2nd edition, 2004). 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. The intense pain of cluster headaches is due to dilation of blood vessels creating pressure on the trigeminal nerve. However, the underlying cause of the dilation is not understood. This type of headache is much less common, affecting .1% of the population, and is 3 to 4 times more common in men than women (ICHD, 2nd edition, 2004).

**Post-traumatic.** Headaches associated with head trauma (e.g. mild to severe traumatic brain injury) is common immediately following an injury, with a prevalence up to 90%. Up to 44% of patients report continued headaches 6 months following an injury (Nicholson & Martelli, 2004). The three most common presentation patterns are tension-type, migraine type, or cervicogenic (Girona et al., 2009). Exposure to blasts and concussions while deployed make this type of headache more common among Veterans and military Servicemembers.

**Medication Overuse.** Medication overuse headaches, previously known as rebound headaches, are a secondary cause of chronic daily headaches due to the overuse of acute headache analgesics. Overuse is defined by treatment days per month and depends on the drug. Overuse is often motivated by the desire to treat headaches or a fear of future headaches, but regardless can make headaches refractory to preventative medications (Silberstein, Lipton, & Saper, 2007).

## Treatment Options for Chronic Pain

The following section provides an introduction to interventions for pain management that Veterans may receive. The intent of this section is to familiarize non-medical providers with common treatment modalities by providing basic information that does not include data on efficacy.

### 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 Veterans with chronic pain. A table of medications including both generic and brand names is also included (Figure 1).

**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, ibuprofen, naproxen, etodolac, 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 (in order of frequency reported) include nausea, constipation, drowsiness, dizziness, and vomiting (Eisenberg, McNicol, & Carr 2006). Opioids may be associated with risk of misuse (Compton & Volkow, 2006) and physiological dependence. Measuring the risk to benefit ratio of opioid therapy for patients with chronic pain is complicated and prescribing providers are encouraged to follow the 2010 VA/Department of Defense (DoD) Clinical Practice Guideline for the Management of Opioid Therapy for Chronic Pain. (see [http://www.healthquality.va.gov/Chronic\\_Opioid\\_Therapy\\_COT.asp](http://www.healthquality.va.gov/Chronic_Opioid_Therapy_COT.asp)). Of note, concurrently prescribing opioids and sedatives/hypnotics (e.g., benzodiazepines) should be done with extreme caution based on increasing evidence of risk of accidental overdose-related deaths (Jones, Mack, & Paulozzi, 2010).

**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-methylsalicylate.

**Muscle Relaxants.** Muscle relaxants (or spasmolytics, antispasmodic) 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 in VA 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, pregabalin, 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.

**Figure 1. Medications for Pain**

Category	Generic Name(s) <i>Not capitalized</i>	Brand Name(s) <i>Capitalized</i>
Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)	aspirin, acetylsalicylic acid (i.e., ASA)	Bayer Aspirin
	celecoxib	Celebrex
	etodolac	Lodine
	ibuprofen	Advil Motrin
	meloxicam	Mobic
	naproxen	Aleve Naprosyn
	piroxicam	Feldene
	salsalate	
Analgesic and Antipyretic	acetaminophen (i.e., APAP)	Tylenol
Opioid Analgesics	codeine	
	codeine + acetaminophen	Tylenol #3
	duragesic	Fentanyl patch
	hydrocodone + acetaminophen	Vicodin Norco Lortab Lorcet
	hydromorphone	Dilaudid
	methadone	
	morphine	MS Contin



**Figure 1. Medications for Pain (continued)**

Opioid Analgesics (continued)	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 cream	
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
	rizatriptan	Maxalt
	sumatriptan	Imitrex
	zolmitriptan	Zomig

### 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.

**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.

**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.

**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.

**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.

**OnabotulinumtoxinA (Brand name: Botox).** Botox injections are typically used for relief of frequent migraine headaches. Botox received approval from the FDA as a treatment for chronic migraines in 2010.

**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.

**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.

**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.” Causes for failure of surgery vary but the results can lead to frustration and distrust of medical providers, increased depression, and increased perceptions of disability (Onesti, 2004).

## Non-Invasive Treatment Options for Chronic Pain

**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.

**Cold/Heat.** 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.

**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.

## Complementary and Alternative Therapies (CAM)

**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.

**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; however, the mechanism for how acupuncture affects chronic pain remains unclear (Vickers, Cronin, et al., 2012).

**Yoga/Tai Chi.** Yoga and Tai Chi may provide a source of graded physical exercise combined with relaxation to improve 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.

**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 will be described in detail later in this manual, include diaphragmatic (or deep) breathing, progressive muscle relaxation, and visualization.

## Selected Psychological Approaches

**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.

**Cognitive Behavioral Therapy (CBT).** CBT helps individuals resolve their problems concerning maladaptive emotions, behaviors, and cognitions through a goal-oriented, systematic process. While it was originally used for treatment of those with 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 follows in the next section (History, Components, and Support).

**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.

**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 in the effort to alter the subjective experience of pain, however 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.

# History, Components, and Support

## Chronic Pain: A Historical Overview

Efforts to understand and treat pain have persisted over time. In the 17th century, René Descartes suggested that the mind was incapable of influencing the body directly. His ideas solidified a general adoption of unidimensional, reductionist views of medicine that persisted through the 19th century. While this biomedical approach significantly aided the advancement of science, it conceptualized pain in an overly simplistic manner. In 1894, von Frey proposed the *Specificity Theory of Pain*, which suggested that sensory receptors were directly responsible for specific types of pain, formalizing the ideas of Descartes. The appeal of the Specificity Theory was the straightforwardness in asserting that physical pathology and pain experience have a one-to-one relationship, and this conceptualization captures how many people believe that pain operates even today. However, subsequent advances in recognizing the interaction between physiological and psychological processes in pain perception led to the development of more complex theories.

Perhaps most groundbreaking was Melzack and Wall's *Gate Control Theory* in 1965. This model posited that pain signals ascend from the pain location and can be modulated. A "gate" in the brain can be opened or closed, and therefore the pain experience can be minimized or exacerbated by attending to particular stimuli. This highlighted the role of psychosocial variables in pain perception. This model suggests that pain is a subjective experience influenced by many factors, including thoughts, feelings, and behaviors. In 1999, Melzack incorporated the Gate Control Theory with models of stress (Selye, 1950; Selye, 1976) to form the *Neuromatrix Model of Pain*. This theory asserts that pain is a multidimensional experience related to an initial pattern of nerve impulses, or *neuromatrix*, that is then impacted by factors such as sensory experiences and learning. Chronic pain disrupts the system and may become a chronic stressor, potentially entering into an unproductive cycle. The important relationship between pain and stress, and the need to decrease tension with tools such as relaxation to combat pain intensity and disrupt the pain-stress cycle, are emphasized. According to this theory, an individual's neuromatrix determines their experience of pain. The concept of *neuroplasticity*, the ability of the nervous system to change its structure and function, may similarly apply to pain. Changes that occur in the brain may alter an individual's sensitization and modulation of pain, perhaps partially explaining an ongoing experience of pain after the stimuli has objectively resolved.

While other theories and models evolved to incorporate both the physical and psychological aspects of chronic pain, the *Biopsychosocial Model* is currently accepted as the most useful way to conceptualize, understand, and treat pain (Gatchel, Peng, Peters, Fuchs, & Turk, 2007). It views pain and other chronic conditions through a multidimensional framework that integrates the relationship among physical, psychological, and social factors that may impact the development and maintenance of one's clinical presentation. The interplay between history, emotional factors, family status, and numerous other variables must be considered when assessing and treating pain most appropriately.

## CBT-CP: Theoretical Components

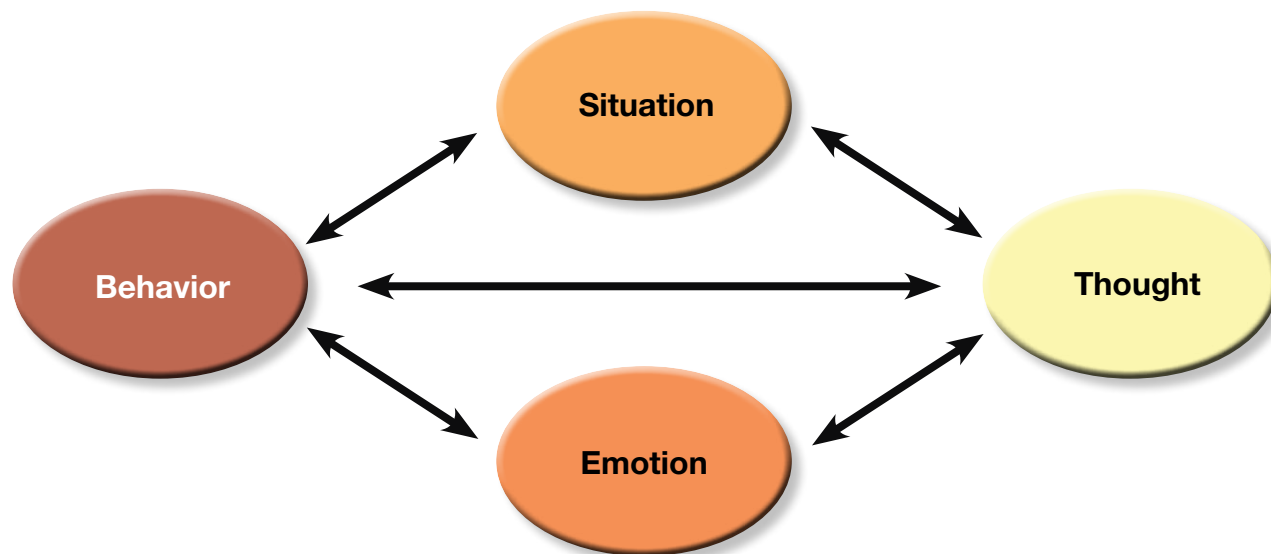
Understanding the theory underlying or closely related to CBT-CP is essential for successful delivery of the intervention. Specifically, appreciating this framework will guide therapists in providing a strong rationale behind each session, address the Veteran's questions or concerns, and help establish the therapeutic alliance. A brief description of CBT is presented, as well as additional information on the biopsychosocial model as the most useful heuristic for conceptualizing chronic pain.

## Cognitive Behavioral Therapy

CBT is an empirically supported, time-limited treatment where a goal-oriented, systematic approach is used. CBT, originally developed to treat depression (Beck, 1967), has been successfully applied to the management of a variety of conditions including anxiety disorders (Beck, Emery, & Greenberg, 1985), substance use disorders (Beck, Wright, Newman, & Liese, 1993), and bipolar disorder (Basco & Rush, 1996). The cognitive behavioral model emphasizes the inextricable link between cognitions, emotions, and behaviors. All of these variables interact and maladaptive responses may create undesirable experiences for the Veteran.

The following is a visual depiction of cognitive behavioral conceptualization, adapted from Wenzel, Brown, and Karlin (2011):

**Figure 2. Cognitive Behavioral Conceptualization**



As the diagram illustrates, all of these factors interact in a bidirectional manner. Specifically, behavior can impact how a person thinks and feels, or thoughts can impact how a person responds to and behaves in certain situations. For example, when leg pain is experienced upon standing up from the table (a situation), a person may feel discouraged and frustrated (emotion) and think, “if I try to do anything today I’m just going to hurt more” (thought), which may lead to staying in their recliner and avoiding moving for the rest of the day (behavior).

### CBT and Chronic Pain

The model of CBT-CP developed out of a confluence of advances within the pain community and the mental health field. Within the mental health field, cognitive behavioral interventions for depression and anxiety received attention in the 1970’s due to the early and strong empirical results of such interventions. The basic tenet was that people are upset not as much by the things that happen to them as by their interpretations of events (Beck, 1976). At the same time, utility of multidimensional models of pain were exerting an influence not only on pain research but also on thinking about pain treatments. Multidimensional models of pain emphasized the prominent role of behaviors, cognitions, and emotions as important clinical factors influencing individuals with chronic pain. It was also during the 1970s that Fordyce’s operant-behavioral model of chronic pain treatment emerged and forged a role for psychotherapeutic interventions in the field of chronic pain management. Turk et al.’s book (1983) *Pain and Behavioral Medicine: A Cognitive-Behavioral Perspective*, provided a comprehensive review of the CBT and pain literature, and included a CBT-CP therapeutic model. This model provided an empirically supported curriculum aimed at teaching those with pain useful coping skills in a structured, goal-oriented, time-limited manner, which was also of significant practical assistance in the field. Thus, the cognitive behavioral model for chronic pain incorporated techniques both from cognitive behavioral approaches to depression and anxiety and from the operant-behavioral model of chronic pain to address many of the clinical factors identified in multidimensional models of chronic pain by the biopsychosocial model.

### The Biopsychosocial Model

The biopsychosocial model is generally accepted as the most useful approach for understanding the relevant clinical factors associated with the chronic pain experience (Gatchel, Peng, Peters, Fuchs, & Turk, 2007). The interchange between physical (pain), psychological (cognition and affect), behavioral, and social influences helps to explain the variability between individuals and their reports of pain.

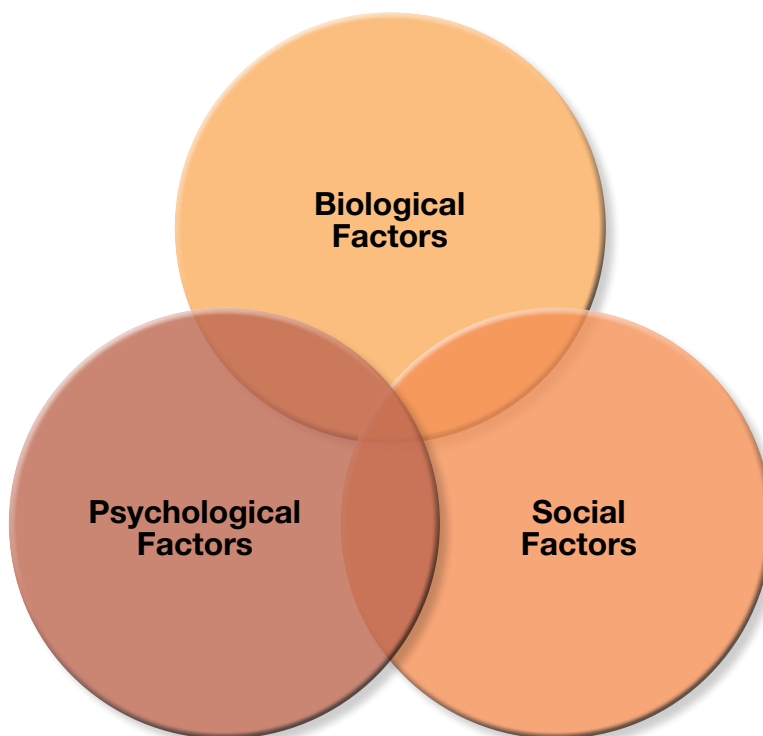
The biopsychosocial model was proposed by George Engel (1977) who voiced concern over the narrowness of the biomedical model based on his experiences with patients, and he posited the need to broaden the context in which medical issues were understood. Inspired by models such as the gate control theory, a growing realization emerged regarding the impact of psychosocial factors such as emotional distress, that influence report of medical symptoms and response to treatments. The model, which is largely accepted today as the best way to conceptualize and understand chronic pain, acknowledges that each individual experiences pain in a unique way that is affected by physiological, psychological, and social factors. These factors may play a critical role in the development and maintenance of a chronic condition. Adding to this idea, Loesser (1982) suggested that while *nociception* and *pain* act as signals to the central nervous system, *suffering* and *pain behavior* are reactions affected by individual differences.

In 2002, Turk and Monarch made an important distinction in chronic pain between *disease* and *illness*. Disease is a distinct biological event while illness is influenced by subjective experience and is in essence the response to a disease. Since chronic pain can typically not be cured but only managed, it must be viewed as an illness. The biopsychosocial approach interacts well with this conceptualization, as even with identical biological factors, the psychosocial pieces may affect the experience and recommended treatment for pain management.

The biopsychosocial model suggests the need for a wider focus of intervention that extends beyond treating disease to treating factors that contribute to illness (Gatchel, Peng, Peters, Fuchs, & Turk, 2007). This leads to a different way of thinking about conditions such as chronic pain as the individual and the disease state can change over time. Biological factors may initiate, maintain, and modulate physical perturbations but the individuals' perceptions about their illness determine how they cope with and experience the disease.

The figure below displays the three distinct but overlapping factors within the biopsychosocial model.

**Figure 3. Biopsychosocial Model**



## Influential Factors in Pain Experience

The next section summarizes some of the most important psychological, behavioral, and social factors that influence chronic pain. While biological factors are also important in understanding the physical underpinnings of a pain condition, for the purposes of CBT-CP the focus will be on the patient's thoughts, beliefs, behaviors, and social environment. Emphasizing these areas lends itself to a focus on function and adapting behaviors that may be unhealthy.

### Psychological Factors

**Pain Cognitions.** Negative cognitions and beliefs about pain can lead to maladaptive coping, exacerbation of pain, increased suffering, and greater disability. Pain cognitions provide one of the most direct indicators of a patient's *illness* perceptions and, as such, it is not surprising that a substantial number of chronic pain studies focus on the role of cognitions on chronic pain and treatment outcomes.

**Catastrophizing.** Catastrophic thoughts or assuming the worst are among the most problematic of thought patterns associated with pain, contributing to increased pain intensity, distress, and failure to utilize adaptive coping techniques. Examples such as “my pain will never stop” or “nothing can be done to improve my pain,” may interfere with treatment. Positively, however, catastrophizing appears to respond to behavioral and cognitive behavioral interventions (Hansen, Daykin, & Lamb, 2010; Turner, Mancl, & Aaron, 2006) and may be among the most sensitive indicators of treatment outcomes.

**Hurt versus Harm.** When pain is interpreted as evidence of further damage to tissue rather than an ongoing stable problem that may improve, individuals with chronic pain will report higher pain intensity regardless of whether damage is occurring (Smith, Gracely, & Safer, 1998). This belief, one of the most important among those with chronic pain, can also lead to decreased activity or inactivity.

**Negative Affect.** The relationship between pain and negative affect is complex and bidirectional as individuals with chronic pain are more likely to experience depressive and anxiety disorders (Bair et al., 2013; Kroenke et al., 2011). States of negative emotion can increase the reported intensity of pain. Thus combining negative affect with pain (or vice versa) operates much like turning up a volume knob or adding additional traffic on a street.

**Answer-Seeking.** Failing to accept the offered cause of pain or being unwilling to accept that a source of pain cannot be determined can interfere with effective management. Believing that one's pain is a “mystery” can lead to increased distress and pain intensity and can also be associated with repeated seeking of further medical tests or pursuing invasive interventions (Williams & Thorn, 1989).

**Pain Self-efficacy.** Pain self-efficacy is another important, more adaptive, belief about pain. It involves a person achieving a level of confidence that some degree of control can be exerted over their pain. Improvements in pain self-efficacy tend to track with improvements in a variety of important pain outcomes (Turner, Mancl, & Aaron, 2006; Weitlauf, Cervone, Smith, & Wright, 2001).

### Behavioral Factors

A high degree of variability exists in the manner in which patients behaviorally cope with chronic pain. A person can consider coping on a continuum from active to passive forms of coping.

#### Passive Coping

**Guarding.** Guarding is defined as any of a set of protective behaviors such as limping, bracing, or otherwise protecting a part of the body. Guarding, similar to other pain behaviors, continues after healing has occurred and reinforces self-perceptions of disability (Prkachin, 2007). Guarding may lead to secondary problems with other parts of the body where compensation has affected alignment.

**Resting/Under-activity.** Over-reliance on resting as a coping strategy can lead to deconditioning of muscles and general atrophy. Alternating rest periods with activity, also known as *pacing*, is a healthy way to incorporate rest. A brief explanation is included in the section below, and pacing will be discussed further in session four.

## Active Coping

**Exercise.** Appropriate exercise and stretching can have numerous benefits for individuals with chronic pain. It can reverse the effects of deconditioning, improve strength, reduce risks associated with obesity, and decrease self-perceptions of disability. Exercise can also lead to increased stamina and increased engagement with rewarding or pleasurable activities.

**Over-activity.** For some individuals, over-activity can be as problematic as avoidance of activity (Andrews, Strong, & Meredith, 2012). Individuals who routinely completely ignore pain to conduct physically stressful activities such as mowing the lawn or painting a house all at one time can pay a steep price. The overactivity may lead to inflammation of pain and result in being unable to function for the remainder of a day or longer; therefore, pacing activities is recommended.

## Other Coping

**Pacing.** As previously mentioned, pacing is the practice of engaging in an appropriate level of physical activity without significantly exacerbating pain (Gill & Brown, 2009). By using calculated increases in activity, pacing can lead to greater endurance and a reduced frequency of intensely painful episodes. Pacing will be discussed in more detail during session 4 of the CBT-CP protocol.

**Relaxation Training.** Relaxation techniques lead to decreased perceptions of pain (Henschke et al., 2010) and can contribute to feelings of self-efficacy to manage pain (Laevsky, Pabst, Barrett, & Stanos, 2011; Persson, Veenhuizen, Zachrison, & Gard, 2008). Relaxation techniques will be covered in detail during sessions 5 and 6 of the CBT-CP protocol.

## Social Factors

**Solicitous Significant Other.** A solicitous significant other is highly responsive to an individual's pain or to expressions of behavior indicative of pain (McCracken, 2005). The solicitous social interaction results in increased reports of pain as contrasted with social interactions that focus the individual's attention away from pain and onto different topics or activities. This may lead to increased pain or increased reports of disability for the person with pain (Fillingim, Doleys, Edwards & Lowery, 2003).

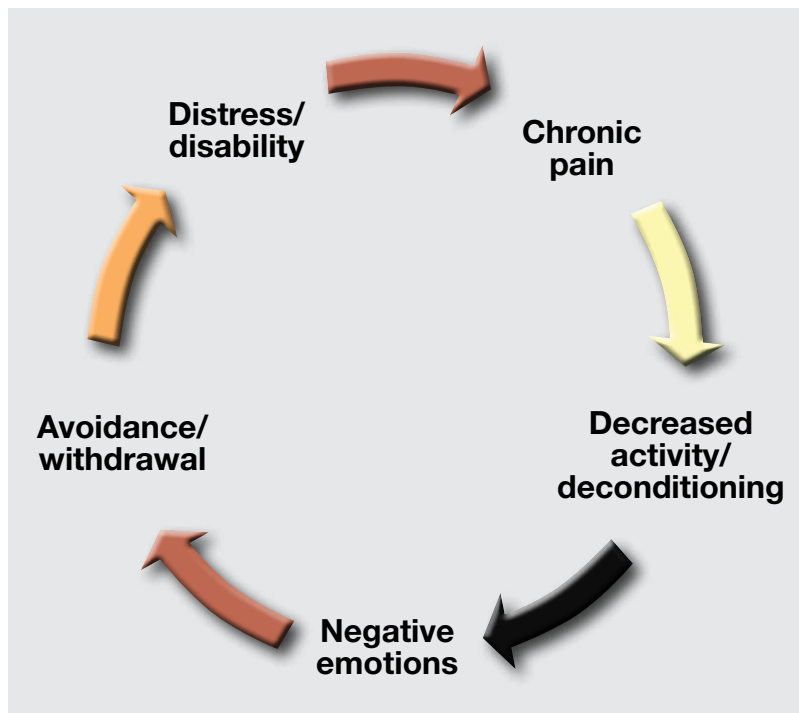
**Punishing Responses.** If "solicitous" is at one end of the social continuum then "punishing" is at the other. Punishing responses involve either angry or ignoring responses, each aimed at limiting expression of pain (McCracken, 2005). Some potential consequences of punishing responses include dramatic (loud) expressions of one's pain experience in an effort to be "heard" or, alternately, inability to express emotions about pain can lead to stoicism and resignation.

## Chronic Pain Cycle

Since chronic pain impacts various aspects of daily functioning and areas of life, the chronic pain cycle is helpful to understanding the process and stages that occur over time. As the figure below illustrates, the onset of chronic pain often leads to a decrease in activities, which leads to physical deconditioning such as muscle atrophy. 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. This figure is used with Veterans in session 2 to discuss the impact of chronic pain. Most patients are easily able to recognize this cycle in their own lives. CBT-CP is a means to help Veterans break this difficult cycle.



Figure 4. Chronic Pain Cycle

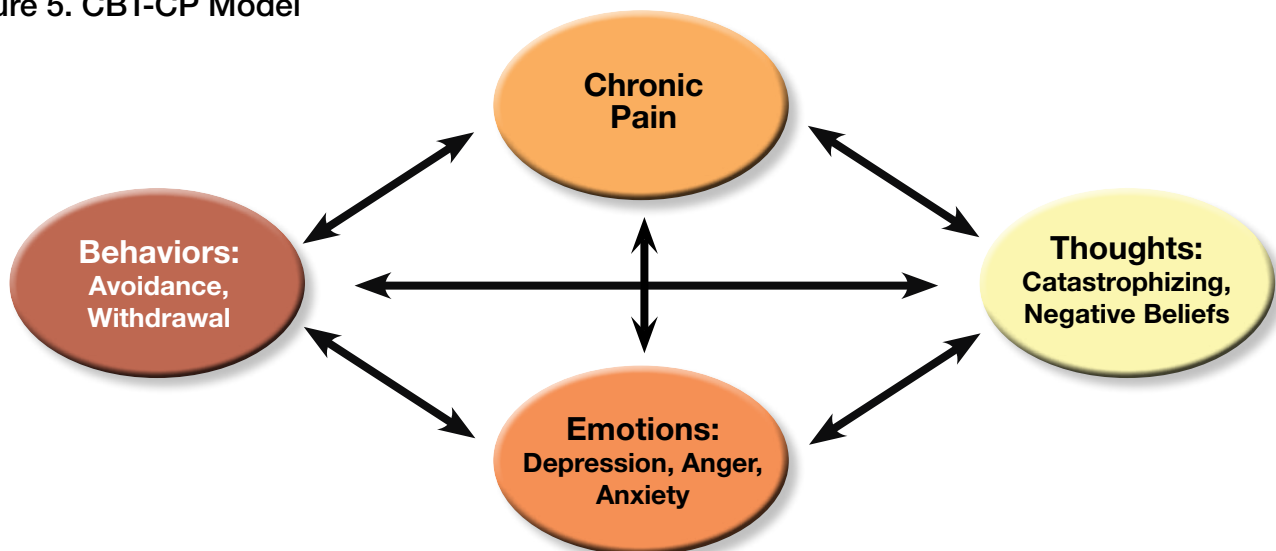


### CBT-CP Intervention

The focus of CBT-CP is to improve the individual's quality of life and functioning across several domains. This separates CBT-CP from traditional psychotherapies aimed at reducing symptoms of specific emotional disorders in that those who participate may have varying psychological symptoms. The commonality across Veterans who engage in the protocol will be the presence of chronic pain and its negative effects on their lives. Attending to the psychological and psychosocial factors that interact with a person's pain is of central importance as it can help modulate the experience and severity of pain itself, and maximize the benefit of all treatments including CBT-CP.

The following figure represents the cognitive behavioral model and the interaction between the clinical factors in the biopsychosocial understanding of pain. The depicted interrelationships between thoughts, emotions, and behaviors are present within most cognitive behavioral models, whereas the model below adds chronic pain. The placement of pain at the top is meant to reflect its primary but also bidirectional role with all the other life factors.

Figure 5. CBT-CP Model



The CBT-CP intervention focuses on helping Veterans to change their thoughts and behaviors associated with chronic pain by learning a variety of adaptive pain coping skills in support of developing a strong sense of self-efficacy. One of the primary goals of CBT-CP is helping Veterans to gain a sense of control over their chronic pain condition and the effects that pain has exerted on their lives. Behavioral experiences help show patients that they may be capable of more, physically, than they previously believed and that such gains can lead to re-engagement with rewarding experiences. Addressing negative thought patterns such as catastrophizing can help patients to view their experiences in a more balanced manner contributing to improved mood. The intervention seeks to improve Veterans' reactions to the experience of chronic pain thus minimizing the negative impacts on their lives. While decreasing pain intensity is ideal, the focus is on how to reduce pain-related suffering.

## CBT-CP: Empirical Support

This section elaborates upon empirical support for a CBT approach to chronic pain. Specifically, focus will be on recent and more distant meta-analytic findings that further support the strong track record for this intervention over the last 30 years, recent support for CBT to address chronic pain in large randomized trials, and mediational findings that highlight important clinical targets for CBT interventions.

## Meta-Analytic Studies

Morley, Williams, and Eccleston (1999) completed a systematic review and meta-analysis of randomized controlled trials of CBT for chronic pain in adults (excluding headache). The review identified 25 trials with the goal of answering two questions: (a) Is CBT (including behavior therapy and biofeedback) an effective treatment for chronic pain (better than no treatment)? (b) Is CBT better than alternative active treatments? The authors evaluated the above questions by comparing the average effects of treatment (effect sizes) of different studies and different treatment conditions within studies. The authors concluded that active psychological interventions that are based upon principles of CBT are effective relative to waitlist control conditions producing significant and beneficial changes in pain experience, mood/affect, cognitive coping, pain behavior, activity levels, and role functioning. When CBT interventions were compared to active control conditions, size of the effects were smaller and limited to outcomes related to the pain experience, coping and social role functioning. Overall, the authors concluded that the reviewed studies provided good evidence of the effectiveness of CBT interventions for the management of chronic pain.

A more recent meta-analytic study of CBT for individuals with chronic low back pain (CLBP) was conducted by Hoffman, Papas, Chatkoff, and Kerns (2007). The purpose of this review was to evaluate the relative efficacy of outpatient, psychological interventions for adults with noncancerous CLBP. Psychological interventions reviewed included CBT, self-regulatory approaches (biofeedback, relaxation, or hypnosis), behavioral therapy, and supportive counseling. A total of 22 studies were identified for comparison and included studies of psychological interventions for chronic pain occurring with multidisciplinary treatment or as a stand-alone intervention. The review found support for psychological interventions, including CBT, when used in conjunction with multidisciplinary treatment or when used as a stand-alone intervention. Positive effects for psychological interventions, when contrasted to control groups, were identified for pain intensity, pain-related interference, health-related quality of life, and depression. CBT and self-regulatory approaches were specifically found to be efficacious.

## Recent Large Randomized Controlled Trials

Turner, Mancl, and Aaron (2006) evaluated the short and long-term effects of CBT for chronic temporomandibular disorder (TMD). The trial randomly assigned patients to either a 4 session CBT condition ( $n = 78$ ) or to an education/control condition that was also 4 sessions in length. TMDs are a group of conditions that involve the temporomandibular joints (TMJ), masticatory muscles, and associated structures, and share the common symptoms of pain, restricted jaw function, and TMJ noises such as "popping" (Mimitroulis, 1998). Patients with TMD are similar to most patients with chronic pain in terms of chronicity of problem, presence of psychosocial dysfunction, and refractoriness to treatment (Dworkin, 1995). Individuals randomized to the CBT condition received 4 biweekly individual treatment sessions over the course of 8 weeks focusing on psychological aspects of pain, challenging negative thoughts about pain, relaxation, and other behavioral techniques for managing pain flare-ups. Individuals randomized to the education/control condition received 4 biweekly individual sessions that followed a structured education protocol including information about TMD, pain medications, communicating with health care providers, and making treatment decisions. At 12-month follow-up, patients randomized to the CBT condition as compared to those in the control condition were 3 times as likely to report no pain interference (35% vs. 13%), almost twice as likely to report clinically meaningful improvement (50% vs. 29%), as well as improvements in jaw function and depression.

Lamb and colleagues (2010) evaluated the effectiveness of a group cognitive behavioral intervention in people with low-back pain (LBP) in primary care. The study involved 701 adults from 56 separate primary care practices in England. All participants received an active advisory consultation with a physical therapist with exercise recommendations. Participants were then randomized to either receive up to 6 sessions of group CBT or no further intervention. The CBT intervention involved identifying and countering negative automatic thoughts, pacing, graded activity, relaxation, and other CBT skills. At 12-month follow-up those randomized to CBT reported significantly lower levels of disability and pain, and greater satisfaction with treatment. In addition to supporting the clinical effectiveness of CBT, this trial found that the intervention was cost-effective.

## Mediational Findings

The above studies suggest that CBT for chronic pain is generally effective. Mediational studies allow for the testing of theoretical assumptions of CBT for chronic pain and for the identification of clinically important variables that lead to a better outcome for patients. The three process studies in this section each explored potential mediational effects that operate in cognitive behavioral interventions.

Smeets, Vlaeyen, Kester, and Knotterus (2006) examined whether treatments based on different theories change catastrophizing and internal control of pain, and whether such changes mediate treatment outcome. Participants in this study included 211 patients with chronic low back pain (CLBP) that were randomized to receive active physical treatment (APT), cognitive-behavioral treatment (CBT), a combination of APT and CBT, or to a waiting list. In addition to assessing the potential mediating effect of catastrophizing the study also assessed “internal pain control” which bears similarity to the construct of pain self-efficacy. The APT intervention involved aerobic training on a bicycle and fairly intricate strength and endurance training that was supervised by a physical therapist. The CBT intervention involved problem-solving training focused on pain management and a form of pacing known as graded activity. The study found that pain catastrophizing improved across all three active treatment groups (APT, CBT, combined) and no differences in internal pain control. The three active treatment groups also reported improvements in perceived disability and pain intensity. Changes in pain catastrophizing mediated the reductions in disability and pain intensity. Thus, not only cognitive behavioral treatments but also physical treatment produced changes in pain catastrophizing that also mediated general improvements among patients.

Turner, Holtzmann, and Mancl (2007) investigated the therapeutic mechanisms underlying the improvement in patients with TMD treated with CBT by conducting a secondary data analysis of the Turner study (2006) described above. To explore this question the study identified process variables that improved within the CBT arm of the trial but not the attention control condition. Variables whose response was most specific to the CBT intervention were then tested to determine which variables were most predictive of improved function over the one-year follow-up period. A number of variables were found to be responsive to CBT and predictive of longer-term outcomes but the strongest effects were found for self-efficacy to control pain and for catastrophizing. Improvements in pain self-efficacy predicted the greatest level of improvement across all study outcomes. Improvements in catastrophizing also predicted a range of outcomes, although the overall impact of this variable was more modest in impact than that of the self-efficacy variable. Finally, the authors did not find that the mediational findings were dependent on specific types of patients but, instead, appear to be consistent across a range of patients.

The study by Hansen and colleagues (2010), described above, also conducted mediational analyses to help explain the beneficial effects of the CBT intervention on patients with LBP. Mediational analyses within this study focused primarily on the constructs of pain self-efficacy and fear of pain. The mediational analyses within this study were not as elaborate as the other two studies in that the criteria for mediation was only that the variables were improved within the CBT arm and not the control arm of the study. Improvements in fear of pain and pain self-efficacy were notable in comparing the CBT to control group at 3-month outcome and the differences persisted through the 12-month follow-up.

Recent studies by Burns and colleagues and Kerns and colleagues (Burns et al., in press; Kerns et al., in press) reported on results of a randomized controlled trial of CBT for LBP for Veterans that was tailored to patient preferences for learning specific pain coping skills. It employed Motivational Interviewing (MI) strategies to promote engagement and participation in treatment and to enhance adherence to therapist recommendations for pain coping skill practice. Although the tailored intervention was not more effective in promoting these outcomes relative to a “standard CBT” condition, greater pain coping skill practice was associated with improved outcomes regardless of treatment (Kerns et al., in press). Patient reports of increased commitment to learning and adopting a pain self-management approach early in treatment mediated adherence and improved outcomes (Burns

et al., in press). Interestingly, patients' reports of the strength of the therapeutic relationship and expectancies about treatment benefits, conceptualized as general or non-specific mechanisms of change, were also significantly associated with adherence and outcomes. Together, these findings encourage therapist efforts to build a strong therapeutic alliance and to promote optimism about the benefits of treatment, and to foster a commitment to adopting a pain self-management approach early in treatment.

## Summary of Findings

The meta-analytic studies suggest that CBT for chronic pain has a consistent track record of improving a variety of patient outcomes. The recent large randomized control trials add to this track record and now are beginning to explore which mechanisms of change best account for the benefits of CBT. Recent process studies suggest that CBT appears to work much as expected in decreasing negative cognitions and increasing the belief that one can better manage and control pain. What remains less clear, however, is the degree to which specific coping strategies, such as pacing, challenging negative thoughts, or relaxation, impact the identified processes of change. Recent research also reinforces the value of emphasizing the establishment of a strong therapeutic alliance and expectations of benefit early in treatment. From a clinical perspective, the process studies suggest the need to listen for the presence or absence of important indicators of change in the same way that practitioners of Motivational Interviewing listen for "change talk." For example, improvements in pain self-efficacy might be evident in statements such as "I just feel more in control" or "my pain seems more manageable." Improvements in catastrophizing may be more evident by the absence or the reduced occurrence of statements such as "my pain will never stop" or "I just can't take it anymore." Demonstration of respect for patients' reports of pain and its impact and the challenges of making cognitive and behavioral changes is almost certainly central to establishing a sound therapeutic relationship that is foundational for effective therapy.

# Case Conceptualization

Case conceptualization is an ongoing process that involves the integration of information that the therapist obtains through clinical interview, chart review, assessment measures, behavioral observations, and information obtained from the Veteran's family members and/or other providers. The therapist uses this information to formulate hypotheses about the Veteran's presenting problems and what is maintaining them. The conceptualization will evolve over time as new information is gathered.

## Case Examples

### REGGIE

Reggie is a 64-year-old, African-American male Vietnam Army Veteran with bilateral foot pain due to diabetic neuropathy. He also has joint pain in his knees and ankles. His primary care physician referred him for assistance with how he can better manage his pain. Reggie was diagnosed with diabetes 9 years ago but the painful tingling and numbness in his feet has worsened over the last 2 years. He is now mostly sedentary and spends most of his day watching television in his recliner. While he was overweight when diagnosed, he is now morbidly obese and has gained 30 pounds this year. His provider shared that Reggie has not taken his pain medications consistently, and has discontinued physical therapy after one session since it created increased pain. Reggie is frustrated and angry about his lack of mobility and need to use a rolling walker when walking long distances. He has been married for 35 years and describes his wife as an "angel;" however, he feels guilty that he is unable to help more around the house and with yard work, and reports that he "snaps" at her because of his pain. He wants to be able to play with his grandchildren and be more active with his church, but lately he has not even been attending services since it is too difficult to get going.

### SHEILA

Sheila is a 47-year-old, white female National Guard Veteran. A women's center psychologist who works with her for PTSD treatment feels Sheila's focus on fibromyalgia symptoms is impacting her ability to progress in therapy. The Veteran has been coping with pain for much of the last 10 years but, after years of frustration and work-ups, was only diagnosed with fibromyalgia in the last year. Sheila works as a competitive dog trainer and has been cutting back on her number of clients due to difficulty maintaining appointments before noon and the physical nature of the job. She has a partner who is supportive of her PTSD treatment but has difficulty understanding the symptoms of fibromyalgia and often views Sheila's chronic pain as a convenient "excuse" to not work or attend social functions. The Veteran realizes that if she can't get her pain and the accompanying symptoms under better control she may lose her job and her relationship. She experiences an increase in her pain symptoms when her PTSD symptoms are exacerbated, but she is struggling to manage either effectively and feels down and helpless.

### JUAN

Juan is a 29-year-old, white Latino male, and an Operation Enduring Freedom, Marine Corps Veteran with low back pain. He was referred by his licensed clinical social worker who believes that poorly managed pain is complicating his treatment with her for his depressive symptoms. Juan's pain complaints began 4 years ago when he fell off of a truck in Afghanistan and ruptured a disc in his lumbar region. The injury necessitated immediate surgery to alleviate pressure on his spinal cord. One year after the initial surgery, he elected to have a second surgery to alleviate ongoing pain but it was not successful. Since then Juan has become increasingly depressed and irritable. He is trained to work as a computer network manager but for the last 2 years he has been unable to maintain a job for longer than 6 months due to problems with fatigue and pain. Juan lives with his parents who are concerned about his mood and functioning. Juan spends time with some "buddies" from high school but never mentions his back pain or depression, and frequently fails to show at gatherings or answer text messages from friends. Finally, Juan's physician has expressed concern about his increasing weight, which is now in the range of mild obesity.

## Case Considerations

When conceptualizing a CBT-CP case, using the biopsychosocial framework allows the therapist to focus on the most salient aspects of Veterans' presentations. As an exercise, the case of Reggie will be examined using this model below. It is always important to consider the need for additional follow-up questions as well as treatment implications.

### Biological

- Bilateral neuropathic foot pain secondary to diabetes; joint pain in knees and ankles
  - Consider impact on mobility
- Obesity and recent weight gain
  - Diet considerations in addition to exercise
- Inconsistent use of medications
  - Education re: need for proper trial

### Psychological

- Frustrated and angry with limitations
- Assess for other emotional symptoms and previous use of mental health services

### Social

- Supportive wife
  - Evaluate possible solicitous behaviors
- Social isolation and inactivity
- Spiritual considerations

# Therapist Considerations

Chronic pain can be an incredibly stressful condition eliciting vulnerabilities in patients that may not otherwise be expressed. For this reason, Veterans may present with a complex array of issues and comorbidities that can complicate assessment and treatment. This section is designed to help the therapist gain a better understanding for the Veterans' experiences as well as feel more confident in addressing challenging situations. Several key topics that may be particularly difficult for providers to address will be reviewed. Anticipating these issues and being prepared will help foster a collaborative relationship with the Veteran. In this CBT-CP protocol, the Working Alliance Inventory will also help the therapist evaluate the status of the working relationship.

## Chronic Pain Experience

Veterans who struggle with chronic pain and its concomitant functional impairments often have seen numerous health care providers regarding their condition. They may feel frustrated that they have not received the answers they are seeking regarding the etiology of their pain, or that they have not received a desired level of pain relief from treatments. In addition, some Veterans feel as if they have not been "heard" adequately by providers. They may complain that doctors have just "pushed pills" at them and have not taken the time to listen and understand their feelings. Veterans may also feel that they have been treated as if they are "crazy," and that the pain is all in their head. Others may feel that they have been unjustly labeled as "drug seeking" when they are only looking for a way to feel better.

Factors such as these may leave those with chronic pain feeling wary about meeting another provider. They may present at the initial session with doubts that anything will help them since they have been disappointed before. It is important to remember that the Veteran is hurting, likely emotionally as well as physically. In CBT-CP, building a strong rapport is typically best accomplished by striking a balance between being both compassionate and directive; offering the Veteran an understanding and safe environment, but also providing clear education and guidance regarding what will be most helpful for long-term pain management.

## Special Topics

While there are many challenges that may arise when treating Veterans with chronic pain, four common topics that may impede therapeutic progress are reviewed. The ways these may arise in sessions and ideas for how to address them are discussed. The general subject heading, description of the primary issue, and a suggested approach for resolution follow.

## Medications

### Issue

Veterans with chronic pain may for very understandable reasons be highly focused on medication treatments for chronic pain. While this is not always the case, because medications are often a first line treatment, they are often a part of Veterans' daily lives. In addition, the biomedical model that is held by many providers as well as patients emphasizes the role of medications as a "fix" for most problems.

While use of medications is beyond the scope of this manual, clinicians should be aware that a frequent medication-related issue that presents in the context of treating individuals with chronic pain involves the use of opioid analgesics. Opioids have long been a mainstay in the treatment of acute and cancer pain, but increasingly have been used to treat chronic pain. Their use in those with chronic pain is the subject of considerable debate due to the possible adverse side effects that may be associated such as sedation, constipation, and the possible need for tolerance-related dose escalation, as well as the significant issue of overdose-related deaths. Because of these and other issues, some Veterans may have had opioid medications decreased or discontinued. This can be the source of much frustration for a subset of individuals and may be a focus in treatment. Veterans may wish to increase the dose or resume the use of opioid analgesics, and may feel disgruntled when their request is denied. At times, they may express feeling as if they have been treated "like a drug addict" unfairly. Veterans may find this particularly unjust since a physician initiated the medications and they feel that the tables have been turned on them.

Emphasis on medications by Veterans may be tied to a more general belief that “there must be something” that can reduce their pain and perhaps they have simply not discovered it yet. Others may be more specific and suggest classes of medications that they believe are appropriate or even a particular drug that they “heard about” from another Veteran or family member. Some may actually report that they have tried a friend or family member’s medication and found it “really helped” thus they are requesting that drug. Certain requests may be the result of seeing a pharmaceutical advertisement on television.

On the other hand, some Veterans may be frustrated by their perception that medical providers have “tried to push pills on me.” Many Veterans will express that they “don’t like pills” but have felt somewhat helpless in determining what else they may be able to do for their pain. They may be open to treatments other than medications, but feel they have not had sufficient opportunity to explore alternatives. These Veterans will often express clearly to providers that they are not seeking increased pain medication as a means to differentiate themselves from peers who are seeking pain medications.

## Approach

The key to managing a focus on medications, which will be true for many other issues as well, will be to redirect the Veteran. Veterans should be encouraged to discuss all concerns with their treating medical providers, and should be referred for medical assistance if their issues are not being sufficiently addressed. It is extremely helpful when the mental health clinician and Primary Care Provider (PCP) communicate the same messages about medication and present themselves as a team to help the Veteran better manage chronic pain. When communicating to Veterans, it is important to first listen and try to understand their frustrations. While they may be talking about medication, the subtext is often a more general disappointment with ineffective treatment and even desperation for a “cure.” In this context it may be most helpful if the therapist provides education about the complex nature of chronic pain and the need to approach it from various aspects in order to manage it most effectively. Encouraging Veterans to focus on what they can control – their own reactions and behaviors – often is therapeutic, as are reminders that CBT-CP focuses on a variety of self-management strategies rather than solely on medications.

It is often useful to remind Veterans that based on their previous reports regarding their current quality of life, medications alone have not been the solution. Even if they report a decrease in pain intensity with medications, it can be helpful to note that their functioning has remained poor or they are sedated and inactive. They also may need to be reminded that a medication that may help one individual may not be beneficial for another as each person has a different physiology and responds differently. For those who feel that they have had pills “pushed” as treatment and little else, providing education about medications as a primary tool for physicians and the often limited resources for other pain management approaches can be beneficial. Shifting the focus, however, to CBT-CP as one such resource is a positive reframing. Finally, always encourage Veterans to speak to their physicians about questions and concerns. Express appreciation for their frustrations and offer the role of CBT-CP in teaching them skills that they can use to foster direct communication with their PCPs and other healthcare providers.

The conversation below between Juan and his therapist provides an example of how to handle this sensitive topic with a Veteran:

Juan: I’m really angry today.  
Therapist: Why is that?  
Juan: Because my doctor won’t increase my oxycodone and my current dose is just not working like it used to. I need something to help with this pain.  
Therapist: Did you express your feelings to your physician?  
Juan: Yes but he just says that we already increased it before and we can’t do it anymore, but I think that a little bit more will help. I’m not a drug addict but they treat you like you are and it’s not fair.  
Therapist: It sounds like you are very frustrated. Let’s focus on how your functioning has been on the medication – you told me that you often feel fatigued and in pain, haven’t been able to hold down a job, and haven’t even been going out with your friends as often as you used to. So even with the medication it seems like you have a lot of dissatisfactions with life.



Juan: That's true. It does take the edge off my pain, but the meds also make me sleepy and a little foggy so I tend to nap and take it easy most of the time.

Therapist: Well, remember that we are here to focus on helping you take your life back and learn skills that are going to help you self-manage your pain more effectively so that you don't have to feel so reliant on medications. You said that was something that you wanted to do, right?

Juan: Yes, it is. I just get annoyed that the doctors never seem to listen to me about the medications.

Therapist: I understand, and I encourage you to continue to share your feelings about this with your physician. But pain is a complicated problem that has affected so many areas of your life. We need to be honest about that and about the fact that the meds have not fixed these issues for you, and have in fact enabled you to be more disengaged. We want to focus here on what you can do to take back some control of your life and make it better.

Juan: I get it. I want to learn other things that I can do for myself.

## Medical Interventions/Passive Modalities

### Issue

In addition to medications, those with chronic pain may be focused on passive medical interventions or other passive treatment modalities. As discussed here, “passive” is defined as something done *to* the Veteran, where they do not take an active part. Examples of such medical interventions would be surgeries or injections. While these procedures may be deemed appropriate for those with chronic pain and can be helpful, they are only one aspect of a comprehensive plan for optimal management. Similarly, modalities such as massage therapy, chiropractic, or acupuncture may be valuable in managing pain, but these are at most only one component of treatment. In the same way as medications are sometimes viewed as a ‘fix’ by Veterans, similar attitudes may be encountered by those who are highly focused on a particular surgery or injection as the solution. When people put all their eggs in one basket, so to speak, it is rare that the outcome is not disappointing. The best plan for long-term chronic pain management requires a multi-pronged approach.

### Approach

An effective tactic when addressing a focus on passive modalities is to emphasize the benefits of self-managed, active approaches. Share with Veterans that if someone else needs to be present in order to make them feel better, then they are limited in their means of obtaining relief. For example, if they rely solely on a chiropractor, that person will not be available to assist for a pain flare-up that occurs at 2 a.m. Acknowledge that passive modalities such as injections and acupuncture may provide assistance in managing pain and encourage individuals to use other methods as indicated; however, this should be balanced with the use of as many self-managed tools as possible. Making a statement such as, “The more tools you have in your toolbox, the better prepared you will be to manage your pain,” is often helpful. Focus on highlighting the pros of self-management and the need to use all available options to maximize comfort.

## Changing or Vague Complaints

### Issue

Some Veterans with chronic pain may be more comfortable focusing on somatic complaints than emotional ones. Over the course of their CBT-CP treatment, new physical problems may be presented. For example, if their original complaint was primary low back pain, a shift to discussions about headaches or hip pain may become prevalent in the middle of the protocol. This may occur when the primary pain begins to improve because more attention is now focused on other areas of the body. The Veteran may have always had minor hip pain, but since the back pain has improved additional attention is placed on the hip discomfort.

Similarly, if headaches were infrequent and easily managed with ibuprofen in the past, they may be brought up as more bothersome when the back issue lessens.

Sometimes the new presenting complaint is not pain specific, but rather focuses on other physical sensitivities that may be vague or difficult to define. For example, Veterans may complain of things such as dizziness, fatigue, nausea, or malaise. They may not be interested in further evaluation or treatment of these concerns, but voice the complaints in session.

## Approach

When the focus of pain location shifts, particularly after improvements have been noted in the original site, there are several approaches that might be helpful. First, simply redirecting back to the primary pain, such as the back, and noting the positive gains may be sufficient. For example, if Veterans' low back pain has improved and the focus has shifted to headaches, applaud them for their efforts and remind them of how much better their back is since treatment initiation. A simple question such as, "But your back pain seems to have really improved, right?" may be sufficient to change the conversation. Another option is to remind Veterans that the tactics that they have learned to manage back pain, such as distraction and relaxation, are also beneficial for managing other pain locations. This allows a re-focus on acquired skills and active modalities, which are generally useful. Of note, a new pain complaint should be addressed sufficiently by a medical provider. Referring Veterans to their PCP or pain specialist depending on the reported symptoms and severity may also be indicated.

Vague complaints can be handled in one of two ways. Initially, determine if the person is in need of additional medical attention. If that is not indicated and/or they are not interested, one approach is to simply let the complaint come and go in the session. In the same way that attending to pain behaviors may reinforce a negative focus on pain, it may be counter therapeutic to overly attend to such complaints. By moving forward and onto another topic, Veterans will often easily shift the conversation. A transition might be, "I know that you are very in tune with the sensations in your body, but sometimes it is actually most helpful to distract yourself with something more positive." On the other hand, vague complaints might also be deterred if patients are asked for details. For example, if the Veteran complains of "dizziness" or being "sort of out of it," asking for specific details about the course may actually be the impetus for a self-initiated shift.

## Resistance

### Issue

General resistance regarding chronic pain treatment may be encountered for several reasons. As mentioned previously, Veterans may feel suspicious of healthcare providers because of a perception that they have not been listened to or treated adequately in the past. They may have been in disagreement with discontinuation of medications and feel resentful or distrustful of physicians. Some Veterans report that they are not open to treatment because they have "tried everything and nothing has helped." Finally, Veterans may also be ambivalent about change for various reasons. They may be uncertain about taking a more active role in their own healthcare and the effort that it will involve. Or there may be some benefit to the sick role with significant others. For example, while the Veteran may have assumed a disabled role, the spouse may have also assumed the role of caretaker. If both are attached to these positions in the family, any attempt to encourage changes by the therapist may be undermined.

### Approach

First and foremost, be empathic and understanding regarding previous difficulties with healthcare providers. Take the time to listen and express sincere apologies for their frustrations. Normalizing that many with chronic pain have similar experiences can be helpful. At the same time, this may be an opportunity to provide education as a context for past interactions. For example,

sharing with Veterans that a physician may have used all the tools they had to address the Veterans' pain or may have made medication changes that were indicated based on concerns about adverse events may be helpful. In addition, this is an ideal time to provide education about the nature of chronic pain by discussing the likely lifetime course of the condition and the focus on learning to effectively cope despite the discomfort. If Veterans suggest that they have "tried everything," describe a poor quality of life, and express their hesitance at engaging in another treatment "that probably won't help," it is often effective to ask: "What do you have to lose? You've tried everything else and ended up here so isn't it worth at least giving it a shot?" Using information that Veterans have provided about their current pain-related dissatisfactions can also be mentioned as a means of increasing motivation.

## Conclusions

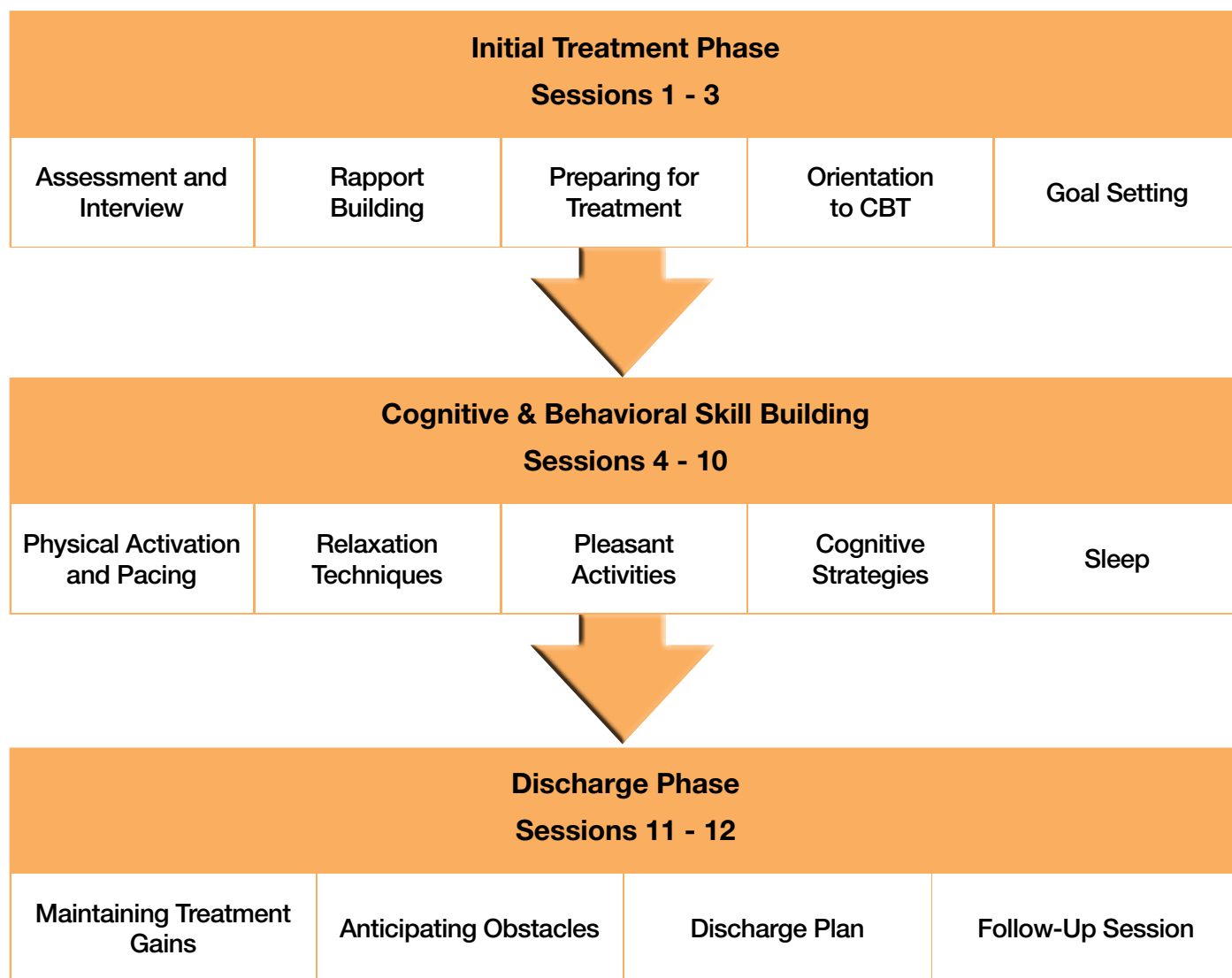
When providing CBT-CP with Veterans with chronic pain, it is essential to find a therapeutic balance between empathic understanding and directive communication. While the latter may be uncomfortable initially, increased experience and expertise will lead to more confidence in recommending the skills of CBT-CP and encouraging Veterans to take a more active role in their pain management. While individuals with chronic pain may present unique challenges, they are a rewarding group to treat. Imparting the self-management tools of CBT-CP can help Veterans with chronic pain improve their quality of life and overall wellbeing.



## **Part 2: Cognitive Behavioral Treatment for Chronic Pain**

# Structure of Treatment

The CBT-CP treatment consists of 12 sessions. The overall structure, components, and goals of the intervention will be reviewed. In addition, individuals who are likely to benefit from the intervention, as well as the specific structure of each individual session, are discussed.



## Who Can Benefit

Before discussing the specific aspects of treatment, it is useful to review what Veterans may benefit most from this protocol.

Many Veterans with chronic pain may find CBT-CP helpful. As already reviewed, there is growing empirical literature that provides evidence of the efficacy of CBT for a large and increasing number of painful medical conditions. Furthermore, there are no data that document specific contraindications for this intervention, including comorbid mild to moderate cognitive deficits or mental health conditions. Among patients with chronic pain, psychological intervention is typically indicated when:

Veteran could benefit from additional coping skills to self-manage pain maximally.

Veteran is not progressing as expected with indicated medical treatments.

Veteran presents with a negative, exaggerated, emotional, or behavioral reaction to pain.

The criteria below provides other guidelines for patient selection:

Veteran has a chronic pain condition and is experiencing pain-related impairment in various domains of functioning.

Veteran does not report current and significant symptoms of psychosis or mania such that it impedes ability to follow the structured content of CBT-CP.

Veteran is able to engage in some form of physical rehabilitation.

## Objectives

The objectives of CBT-CP are:

**Reducing the negative impact of pain on daily life.**

**Improving physical and emotional functioning.**

**Increasing effective coping skills for managing pain.**

**Reducing pain intensity.**

CBT-CP focuses on improving functioning and overall quality of life by reducing pain-related impairments and pain intensity. Increasing the use of various self-managed approaches provided in this protocol aids Veterans in achieving the best life possible, despite the presence of chronic pain, by adjusting thoughts and behaviors. Veterans will also develop individual goals to help motivate their personal completion and success in the treatment. Session 3 provides more specific information on how the use of individualized goals will be discussed and implemented through the treatment.

## Components

The CBT-CP intervention can be understood within the framework of six separate but mutually informative components. It is important to remember that while CBT-CP alone can be efficacious, empirical evidence and clinical practice strongly encourage an integrated and multimodal treatment plan for pain care. In VHA, this includes communication with other medical, mental health, and rehabilitation providers for coordination of care. This is expounded more fully in session 1 of CBT-CP.

## Assessment

Assessment of chronic pain typically involves chart review, clinical interview, and collection of clinical assessment measures. A review of the patient's medical history is crucial in order for a provider to be able to appreciate the various factors that may be contributing to the patient's experience of pain. The clinical interview allows the patient to tell their pain story and provide details about their experience, which also initiates the process of developing a therapeutic alliance. Clinical assessment measures can help identify specific areas that may need more clinical attention. In addition, they provide an empirical evaluation of impairment at the outset, mid-point, and conclusion of treatment to help direct ongoing care and measure progress.

## Reconceptualization of Pain

Reconceptualization of pain involves helping the patient move from a view of pain as purely sensory/biomedical to more multidimensional. Assessment results assist in this understanding by providing an opportunity to review the varied areas of life and functioning that are impacted by chronic pain. The education process continues throughout treatment as Veterans learn how pain is influenced by the adoption of active coping strategies and by changes in physical or emotional functioning.

## Skills Acquisition

This component of CBT involves learning cognitive and behavioral skills that may be used to reduce the impact of factors such as negative thinking or deconditioning on the experience of chronic pain. This process begins with providing a rationale for and description of the skill, followed by practice of the skill both during and after the session. Subsequent review of practice hones skills and reinforces learning.

## Rehearsal

Acquisition is unlikely to lead to long-term use of a given skill unless rehearsal of the skill occurs outside of treatment sessions. Rehearsal outside of treatment sessions also allows for identification of barriers and ways to better implement learned skills. Given the heterogeneity of factors that contribute to a patient's chronic pain disorder, the coping skills that prove most useful to a specific patient are often "discovered" during the rehearsal phase.

## Generalization and Maintenance

Generalization and maintenance of the coping skills learned in CBT results from the combination of successful learning on the part of Veterans and effective feedback from CBT therapists. Successful identification of effective coping skills can lead patients to feel increased self-efficacy in managing their chronic pain disorder. Therapists can assist this process by reinforcing the need to implement treatment components daily and create "good habits" as a foundation for effective pain management.

## Treatment Follow-Up

Many psychosocial interventions assume that it is normal for patients to become "rusty" with newly learned coping skills and potentially revert to prior ways of coping with conditions. Because of this, CBT interventions often include a component referred to as relapse prevention, referring to the common occurrence of "relapsing" to prior patterns of behavior. To address this possibility, CBT-CP provides a structure for careful discharge planning to anticipate potential challenges as well as the use of follow-up sessions. The "booster session," scheduled approximately one month after discharge, can be helpful to identify challenges encountered in independent CBT-CP implementation and to review previously learned skills based on what is needed.



## Sessions

Figure 6. CBT-CP Session Structure

1	<b>Interview and Assessment:</b> Clinical pain evaluation and baseline assessment measures.
2	<b>CBT-CP Orientation:</b> Pain education and familiarization with the CBT-CP approach to treatment.
3	<b>Assessment Feedback and Goal Planning:</b> Clinical implications of assessment and development of treatment goals.
4	<b>Exercise and Pacing:</b> Importance of movement and thoughtful approach to physical activities.
5	<b>Relaxation Training:</b> Relaxation benefits and techniques.
6	<b>Pleasant Activities 1:</b> Identification of meaningful pleasant activities.
7	<b>Pleasant Activities 2:</b> Implementation of selected enjoyable activities.
8	<b>Cognitive Coping 1:</b> Understand automatic negative thoughts and how they impact pain experience.
9	<b>Cognitive Coping 2:</b> Monitor and challenge automatic thoughts.
10	<b>Sleep:</b> Strategies for improving sleep despite pain.
11	<b>Discharge Planning:</b> Plan for flare-ups and review of CBT-CP skills.
12	<b>Booster Session:</b> Evaluate implementation of CBT-CP skills.

## Session Structure

The CBT-CP protocol targets a variety of behaviors and thoughts to improve the quality of life of Veterans with chronic pain. All session materials excluding measures are included in the Appendix of this manual. Each session is structured in order to ensure that important content is presented to the patient with sufficient time to address concerns or provide clarification. The exact content of each session will vary by topic but the following elements will occur in most sessions.

✓	Administer SUDS.
✓	Establish agenda.
✓	Review previous session.
✓	Present current session content.
✓	Discuss home practice.

**Administer and discuss SUDS rating.** Administration and discussion of the brief rating of Subjective Units of Distress Scale (SUDS) can provide a quick barometer of the Veteran’s mood state at the outset of each session. Therapists often use the results of the SUDS rating to discuss potential benefits or sticking points associated with skills introduced in prior therapy sessions. Increases in the SUDS rating can also help identify the potential need to add an additional item to the session agenda.

**Review agenda for session.** Reviewing the agenda for the session helps orient the Veteran to the topics that will be covered in the session. An essential part of discussing the agenda is asking Veterans if they have anything to add. This allows the Veteran to influence the agenda and emphasizes the collaborative nature of CBT-CP. While the CBT-CP protocol is highly structured, it is important to acknowledge that events may occur that warrant discussion and that may result in adjusting content covered in a specific session.

**Review issues and practice from prior session.** Providing a brief review of material covered in the prior session can create continuity between sessions and allow the Veteran to raise questions as needed. Consulting about potential questions reinforces the collaborative nature of the intervention and reduces the chance of important messages being misconstrued. In addition, referencing the previous session creates the ideal time to review the practice of skills and completion of activities between sessions. Completing the home practice is an essential component of CBT-CP and serves to build competencies in the use of adaptive pain coping strategies. It should also enhance Veterans’ sense of self-efficacy to manage their chronic pain condition by implementing acquired skills in the “real world.”

### Sample Questions for Bridging from the Previous Session

- What did you learn from the previous session?
- What message did you take home from the previous session?
- Are there things from the previous session that we need to follow up on in this session?
- Was there anything that bothered you from our previous session?

**Cover topics for session.** Provide a clear rationale to the Veteran for central topics of each therapy session. To ensure understanding, frequently elicit reactions from the Veteran to material covered. Through discussion that involves active listening, cuing, and reinforcing learning in a supportive and collaborative environment, the Veteran is able to acquire adaptive pain management skills.

**Discuss home practice.** After a new topic has been reviewed in the session, it is important for the Veteran 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 Veteran 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 Veteran.

## Final Considerations before Initiation

During the initial treatment phase, focus on establishing a strong rapport with the Veteran, as a solid therapeutic alliance is the basis for all future interventions. This is particularly true in patients with chronic pain since they may feel misunderstood by healthcare providers. Make it clear that the Veteran’s pain is believed to be exactly what the Veteran says it is. Furthermore, the alliance developed will help both Veteran and provider work together to implement the CBT-CP strategies most effectively.

Veterans will have a range of reactions about being referred to a mental health provider for their pain. While some may appreciate the opportunity to speak with a professional, others may feel it suggests that their pain is not “real” (e.g., “I don’t know why I’m here, I’m not crazy”). Since theirs is a physical problem, Veterans may be resistant to or lack understanding regarding why they would consult anyone other than a medical provider. Below is an example of how a therapist might address this in an initial session:

### **TALKING TIPS: *Why mental health?***

Some individuals are confused about how a mental health professional can help them with their pain. First, let me assure you that I believe your pain exists exactly as you describe it, and that it impacts your life in many negative ways. Chronic pain is a complex problem and addressing it from only one perspective, such as the medical, will attend to only part of the issue. My role is to help you find ways to cope better with the pain as well as to reduce the negative impact pain has on your life. Our focus will not be on finding a “cure” or “fix,” but on giving you more tools to manage the pain so that you can improve your quality of life.

In addition, some may be concerned that speaking to a mental health provider will negatively affect access to PCPs, pain specialists, or others. Veterans should be reassured that they will continue to see other providers and that engaging in this treatment will not create obstacles to medical contact. Further, explain that VA focuses on all areas that might influence the management of medical conditions and that this treatment may help facilitate more effective care by other disciplines.

# Content of Treatment: CBT-CP Protocol

## Session 1: Interview and Assessment

The focus of this session is the initial clinical interview, the patient assessment measures, and contact with the Veteran's PCP. During the interview, Veterans are able to share their chronic pain history and discuss how it has affected their lives. The assessment tools provide data that supplement information gained in the clinical interview. Finally, informing PCPs about CBT-CP and obtaining their support is a key to facilitate successful treatment. This important meeting establishes the first face-to-face contact with the patient and is vital in setting the tone for the rest of treatment.

### Session 1 Agenda

✓	Conduct clinical interview.
✓	Have Veteran complete assessment measures.
✓	Discuss next session.
✓	Contact PCP.

### Session 1 Materials

- CBT-CP Clinical Interview form
- All assessment measures except WAI-SR
- Communication with PCP

### Clinical Interview

The initial clinical interview in CBT-CP is an opportunity to gather much of the general information that is acquired at the beginning of any psychotherapy course such as psychosocial status, mental health issues, and substance abuse history. However, since this intervention is specific to chronic pain, additional pain-specific information should also be obtained, such as:

- Pain location, onset, and intensity
- Current medications
- Previous and current treatments
- Areas of functional impairment

It is important to obtain detailed information about the Veteran's pain history. Begin with asking about the primary, or most significant, pain location. Secondary pain locations are also reported. Information on when and how the pain began (e.g., single precipitating event, gradual onset) as well as the quality of the pain (e.g., sharp, aching, tingling) should be obtained. In addition, discussing current and previous treatments for pain and their effectiveness, including medications, will help clarify what has been helpful or not helpful. When a Veteran states that a treatment modality has not been beneficial, inquiring about why it was not helpful is recommended. For example, if someone states that physical therapy (PT) did not help, they may report that it "just made my pain worse." If they have become highly inactive because of pain and only attended one PT session, this is a personal example that may be used at a later point to illustrate the connection between deconditioning and increased pain. Asking for details related to exacerbating or minimizing factors related to pain intensity and what a typical day is like will allow for a fuller picture of the negative influences of pain on the Veteran's life. Perhaps the most important pieces of pain-specific information gathered are the ways in which pain has functionally impacted the Veteran's life – mood, physical and social activities, sleep, mobility, recreational hobbies, and the like.

The information collected through the interview will help the CBT-CP therapist begin to develop hypotheses about the patient’s core beliefs and patterns of thinking. In addition, the important alliance between therapists and patients will develop as Veterans share their personal experiences and struggles with chronic pain.

## Assessment

Another important piece of the initial phase of treatment is the completion of clinical assessment measures by the patient. These tools will allow the therapist to better understand the Veteran’s experience of pain and the functional domains that are impacted, as well as assess the gains that are made throughout treatment. Explain to patients that the questionnaires, while they may seem cumbersome, are another way for the therapist to gain a clearer picture of the effects of pain on their lives and will enhance the ability to tailor the CBT-CP to their specific needs. Again, focusing on completing the measures as a means to better understand the individual experience of the patient may be a helpful frame. The data may also be used as a way to demonstrate positive changes and treatment effectiveness to patients and others.

## Measures

A brief description of the assessment measures that are incorporated into the protocol as a way to inform treatment and monitor progress is provided. Some measures may be available through the VA’s Mental Health Assistant in the Computerized Patient Record System (CPRS). The recommended timing of administration follows the description of the measures. For the initial, mid, and discharge sessions where all measures are given, it may be helpful to ask Veterans to arrive 15-20 minutes early. This facilitates completion of the measures without interfering with the day’s session content.

Some patients may find the completion of assessment measures aversive or feel it is a waste of their time. In these cases, discuss with Veterans any thoughts or concerns they may have about completing the assessment measures. Sometimes the Veteran and therapist can collaboratively brainstorm ideas for how to overcome any potential barriers to completing measures. Furthermore, providing a rationale for the measures is encouraged.

Here is an example of how the therapist might discuss the use of self-reporting measures:

### TALKING TIPS: *Assessment*

I appreciate you taking the time to complete the measures that I provided. The information will help me better individualize this treatment to help meet your needs. I will also be giving you some direct feedback in a later session about what you reported and how we can incorporate it into our treatment.

I know that some people are hesitant about completing measures and view it as a waste of time. But the assessment actually serves a purpose similar to that of vital signs measured at a doctor’s visit. The information is useful and can highlight an area that needs attention, like if your blood pressure was high. It can also help us measure the progress that you are making over time in a more concrete way – that is information that is helpful to us both.

## Clinical Assessment Measures

**Pain Numeric Rating Scale (NRS;** Jensen & Karoly, 2001) Assesses pain intensity on a scale of 0-10 with 0 being “no pain” and 10 being “the worst pain imaginable.” Ratings for average, worst, and least pain over the last week are obtained.

**Pain Catastrophizing Scale (PCS;** Sullivan, Bishop, & Pivik, 1995) Assesses tendency to ruminate, magnify, and feel helpless about pain (i.e. catastrophize). Level of catastrophizing is a primary predictor of disability level. Decreased catastrophizing is associated with decreased depressive symptoms and improved pain-related outcomes (Sullivan & D’Eon, 1990).

**West-Haven Yale Multidimensional Pain Inventory-Interference Subscale (WHYMPI/MPI-INT;** Kerns, Turk, & Rudy, 1985) Assesses interference of pain in various areas such as socialization, work, daily activities, and relationships with others including family/marital.

**Patient Health Questionnaire (PHQ-9;** Kroenke, Spitzer, & Williams, 2001) Assesses the existence and severity of depressive symptoms, which have a high co-occurrence with pain. *Note:* Item 9 on the Patient Health Questionnaire-9 (PHQ-9) inquires about thoughts of death and suicidal ideation. It should always be checked during this session with follow-up care provided as clinically indicated.

**World Health Organization Quality of Life-Brief Version (WHOQOL-BREF;** Murphy, Herrman, Hawthorne, Pinzone, & Evert, 2000) Assesses perception of quality of life with general questions regarding overall health and satisfaction, and a series of four questions covering the following domains: physical health, psychological health, social relationships, and environment.

**Working Alliance Inventory-Short Revised (WAI-SR;** Hatcher & Gillaspay, 2006) Assesses the quality of the therapeutic alliance including level of agreement on the goals of therapy and patient-therapist bond. The therapeutic relationship is a strong predictor of psychotherapy outcomes.

**Subjective Units of Distress Scale (SUDS;** Wolpe, 1969) A one-item screen for clinical use that assesses level of overall distress rated from 0-10.

**Figure 7. Timing for Administration of Assessment Measures**

Session	SUDS Distress (0-10)	PCS	WAI-SR	Pain NRS	MPI-INT	PHQ-9	WHOQOL-BREF
Session 1 <i>(Baseline)</i>	SUDS	PCS		Pain NRS	MPI-INT	PHQ-9	WHOQOL-BREF
Session 2	SUDS		WAI-SR				
Session 3	SUDS						
Session 4	SUDS						
Session 5	SUDS		WAI-SR				
Session 6	SUDS						
Session 7 <i>(Mid-Point)</i>	SUDS	PCS		Pain NRS	MPI-INT	PHQ-9	WHO-QOL-BREF
Session 8	SUDS		WAI-SR				
Session 9	SUDS						
Session 10	SUDS						
Session 11 <i>(Termination)</i>	SUDS	PCS		Pain NRS	MPI-INT	PHQ-9	WHO-QOL-BREF
Session 12 <i>(Booster)</i>	SUDS						

### Support from Primary Care Provider

Particularly when working with patients with chronic pain, it is important to have coordination with and support from their PCP as well as others who might be involved in their care (e.g., physical therapist, neurologist). CBT-CP typically is only one piece of a patient-centered, multimodal, multidisciplinary plan of care. Maintaining contact with providers by adding them to notes in the electronic medical record, sending emails, or having face-to-face discussions can be critical in developing a coherent treatment plan and delivering a consistent message to the patient. Alert those in Primary Care or the Pain Clinic to the services that are being offered through CBT-CP as well as the type of Veteran that is most appropriate for referral. Typically, those in other disciplines will be grateful for the assistance in offering alternatives for helping Veterans better manage their chronic pain.

After the initial meeting, the CBT-CP therapist must contact the Veteran’s PCP directly via email or as an additional signer on the session note (see Appendix for template). The physician is made aware of the general nature of the intervention and told that the patient will be engaging in CBT-CP. Second, the PCP is asked to provide approval to indicate that the Veteran is physically capable of engaging in a mild, graduated, tailored walking program. If it is indicated that walking is not appropriate, the PCP is asked to provide an alternative activity. Make it evident to the physician that the importance of physical activation is a critical part of the CBT-CP process. The communication fostered between the CBT-CP therapist and the PCP will facilitate the Veteran’s optimal management of chronic pain by providing a consistent message with a focus across providers on increasing activity and improving overall quality of life.

### Support from Mental Health Provider

Communication among mental health providers is also important in the effective implementation of CBT-CP. Many of the referrals for this intervention will originate from mental health providers who do not have the specific skills to treat chronic pain in Veterans. Other healthcare providers such as a PCP or physical therapist, however, may also refer patients for CBT-CP. Since many Veterans will already have an established clinician treating other mental health issues (e.g., depression, PTSD), alerting that provider to the proposed plan for CBT-CP is recommended. Provide information on the content of the intervention such as the general structure and goals. In addition, confirming that CBT-CP will be complementary and synergistic rather than potentially deleterious to the ongoing mental health treatment is critical. For example, in the case of a Veteran who has only recently become engaged in substance use disorder treatment, legitimate concerns may be raised about the timing of additional treatment that could distract the patient from the primary goal of sobriety. When a shared decision is made to provide concurrent treatment, it is important to negotiate specific complementary objectives and roles. Plans for communication such as adding providers to notes in the electronic medical record, sending emails, or having face-to-face discussions can be critical in delivering a consistent and therapeutic message to the patient. Finally, if services are being provided in the community (i.e., outside VHA), with the consent of the Veteran, the CBT-CP therapist should engage in similar discussions with non-VA providers in order to facilitate the best possible outcomes.

## Session 2: Treatment Orientation

This session will be used to provide an orientation to the CBT-CP treatment model as well as education about the complex nature of chronic pain. In addition, the therapeutic alliance will begin to develop and will be measured at the conclusion of the session.

### Session 2 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Ensure all measures from previous session are completed.
✓	Present Session 2 content: CBT-CP treatment; pain cycle and biopsychosocial approach.
✓	Ask Veteran to complete WAI-SR at session conclusion.

### Session 2 Materials

- CBT-CP Model Handout
- Chronic Pain Cycle Handout
- Factors That Impact Pain Handout
- WAI-SR

## CBT-CP Orientation

It is important to orient the Veteran to both the structure and process of CBT-CP. This may include information about CBT and how it differs from other types of therapy.

Orientation to CBT-CP involves the therapist providing the following types of information:

<b>CBT-CP Orientation</b>	The structure of treatment
	Expectations for attendance and participation
	Role of the therapist
	An overview of the CBT-CP model
	Rationale of home practice
	Responses to any questions from the Veteran about CBT-CP

The therapist will introduce the specifics of the CBT-CP treatment intervention. The goal is to provide the Veteran with a roadmap for what can be expected during treatment and to establish clear expectations for both the therapist and the Veteran. The information below is straightforward and can be presented while allowing time for questions:

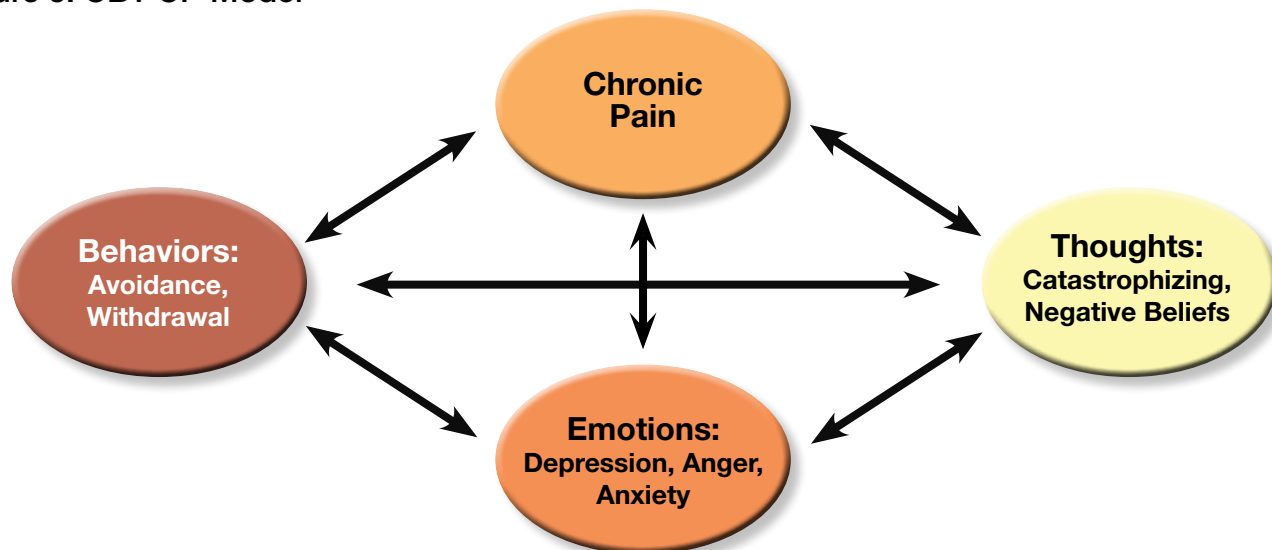
- Treatment Structure (see Figure 6)
  - A brief overview of the treatment
  - The length and frequency of sessions (11 weekly individual sessions and one follow-up session)
  - A review of the session format – example provided below

✓	Check on mood and complete one measure.
✓	Set an agenda for that day.
✓	Review material from the previous session including the home practice.
✓	Introduce the new material and answer questions.
✓	Discuss helpful practice for the next session.

- Expectations for attendance and participation
  - Regular attendance
    - Emphasize the importance of regular attendance as a measure of participation and as critical for learning CBT-CP skills
  - Completion of home practice
    - Review the importance of actively practicing skills learned between sessions so that mastery can be achieved
- The role of the therapist
  - Collaborative nature of this treatment
  - Since the focus is on learning specific tools for pain management, explain that the therapist may need to redirect the conversation to stay on task but is always listening and interested in input from the Veteran
- Overview of the CBT-CP
  - CBT-CP targets thoughts, emotions, and behaviors in order to improve functioning and promotes a problem-solving approach that emphasizes personal responsibility [Use the CBT-CP Model Handout (figure below) to illustrate the CBT-CP model]
  - It 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
- Q & A
  - Ensure understanding and elicit feedback from the Veteran throughout the orientation process



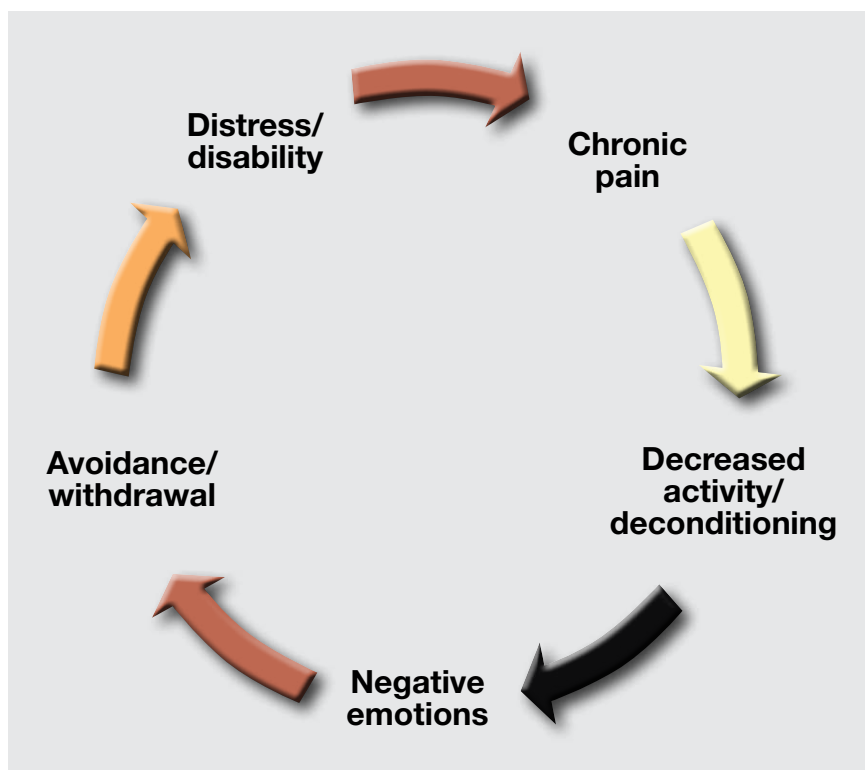
Figure 5. CBT-CP Model



### Chronic Pain Education

Chronic pain is a condition that affects various aspects of daily functioning and areas of life. Use the Chronic Pain Cycle Handout (see Figure 4) 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. Most Veterans will be able to recognize this process in their own lives. The CBT-CP Model Handout can also be used to illustrate how pain, thoughts, emotions, and behaviors interact and affect each other.

Figure 4. Chronic Pain Cycle



Below is an example of how the therapist might discuss the cycle of chronic pain:

### **TALKING TIPS: *Chronic Pain Cycle***

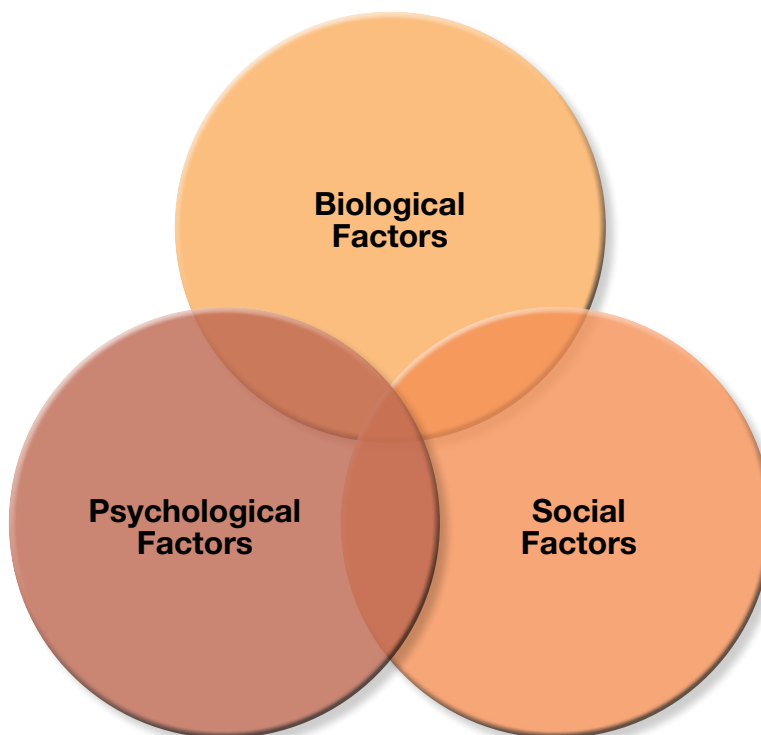
Think of yourself like a machine. All the gears work together to keep your body going. When you are not in pain life tends to be easier, you feel good and it's easier to get things done. When you have chronic pain, it's like having a bad gear that doesn't go away. It disrupts all the other gears and slows down the whole machine. Over time, it can bring the entire machine to a stop.

Chronic pain touches many parts of your life, and each piece affects how the others run. Once we discuss more about the areas of your life that are affected, we will talk about how this treatment may be able to help you manage the effects of your 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 3 shows the overlap between these areas.

**Figure 3. 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 Veterans how pain has impacted their lives from all aspects: (a) the biological or medical factors (e.g., pain condition; comorbidities); (b) the psychological factors (e.g., negative mood; lowered self-esteem; and (c) the social factors (e.g., relationships; employment). Explain that each of these areas must be addressed in treatment – 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.

Below is an example of potential pain effects and the ways in which participating in CBT-CP may be helpful to Veterans. Sharing how this intervention can be beneficial across domains will help motivate Veterans while tying together the discussion of CBT-CP, the chronic pain cycle, and the biopsychosocial model.

### **TALKING TIPS: *Effects of pain and what you can do!***

**BELIEFS** – You may begin to believe that it is better to try and restrict your movement.

**CBT-CP and You** – You will learn about your body and make some changes that will show moving is actually helpful.

**ACTIVITY** – Cutting back on activity can make your muscles stiff and cause you to lose strength.

**CBT-CP and You** – We will focus on slowly introducing activities to get you back to things that you enjoy and want to do.

**PHYSICAL** – Not moving may have led you to gain weight or to feel fatigued and tired much of the time.

**CBT-CP and You** – Starting to move and walk will improve your physique and give you more energy.

**MOOD** – The effects of chronic pain may make you feel down, frustrated, anxious, angry, and more.

**CBT-CP and You** – Beginning to engage in pleasant activities and resuming regular activities will help improve your mood and self-esteem.

**SOCIAL LIFE** – You may have withdrawn from others and feel irritable or guilty from your pain and its effects.

**CBT-CP and You** – We will focus on interacting more with others and having positive social experiences.

**THOUGHTS** – You may spend a lot of time worrying about your pain or thinking negative thoughts.

**CBT-CP and You** – We will help you learn how to change your thinking so that you can manage your outlook.

## **Treatment Initiation Assessment**

Now that the interview, assessment, and general chronic pain education has occurred, discuss with Veterans whether they would like to participate in the full course of CBT-CP. Use the following questions to determine interest in continuing treatment beyond this session:

- *Based on what you have learned, do you think CBT-CP may be a good fit for you?*
- *If you have any reservations about participating, what are they?*
- *Do you feel ready to take a more active approach to managing your chronic pain?*
- *Do you have any other questions that you would like answered regarding CBT-CP?*

If Veterans do not wish to continue with treatment, recommendations for follow-up care should be made. If they do wish to participate, Veterans will return for Session 3. In the case of the latter, remember to congratulate them on taking an important step towards learning to better manage their pain and improve their lives.

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## **Session 3: Assessment Feedback and Goal Setting**

During this session, the therapist provides direct feedback to the Veteran on information reported in the assessment measures. Using the Veterans' report is a valuable way to reflect back the pain-related impairments in their lives, and perhaps draw attention to the significant impact of pain across domains. Areas where the patient is using adaptive coping strategies should also be noted. The feedback delivered will help inform the second part of the session, which is to develop individualized goals for treatment. Providing assessment feedback will highlight specific areas that may need the most attention and facilitate the formulation of meaningful, Veteran-centric goals.

## Session 3 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 2.
✓	Present Session 3 content: Assessment feedback and goal planning.
✓	Discuss home practice.

## Session 3 Materials

- SMART Goals Worksheet

## Assessment Feedback

Spend time after the initial sessions reviewing the results of each self-report measure to gain a better understanding of the Veteran's experience of pain. Combining data from the assessment tools with the information provided during the clinical interview will help in developing an overall picture of the pain-related interference in various domains and general emotional functioning.

Reviewing the results of the self-report measures in session can elucidate the negative effects of chronic pain and help motivate Veterans to engage in treatment. The summarization of pain-related impairment can help with connecting how the short-term effort involved in CBT-CP will be worthwhile for the potential long-term gains. In addition, the information revealed through the assessment can greatly assist in determining goals for treatment that will be developed later in the session.

In delivering assessment feedback, provide the brief but meaningful messages ascertained from each tool. It is unnecessary to review numerous specific items in detail; on occasion, however, it may be relevant to discuss a particularly relevant, representative, or concerning response. Below is a basic structure for reviewing each of the measures that include a general note on focus accompanied by an italicized example of how the therapist might relay the feedback. In addition, the case example provides sample feedback to Sheila.

### **Pain Numeric Rating Scale (NRS; Jensen & Karoly, 2001)**

- Acknowledge reported pain intensity and note significant highs/lows or patterns (e.g., consistency across time).
- *Based on your report, it seems that your pain intensity stays around a seven most of the time without much fluctuation.*

### **Pain Catastrophizing Scale (PCS; Sullivan, Bishop, & Pivik, 1995)**

- Note general tendency to catastrophize or not; use specific items as examples.
- *You often agreed with pain-related statements such as, "It's terrible and I feel it's never going to get better." Based on your responses, you seem to experience a lot of negative pain-related thoughts, which may lead to frustration or sadness for you.*

### **Multidimensional Pain Inventory-Interference (MPI-INT; Kerns, Turk, & Rudy, 1985)**

- Review areas where there is specific pain-related interference, highlighting the most significant areas.
- *While pain affects many areas of your life, it seems to cause significant issues in your relationships. I recall you mentioning this several times during the interview as well so this may be an important area of focus during treatment.*

### **Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001)**

- Provide feedback on general level of depression, noting specific areas of concern.
- *Your report suggests that you are experiencing a moderate level of depression, and that it interferes with things such as your energy level and concentration.*

**World Health Organization Quality of Life-Brief Version (WHOQOL-BREF; WHOQOL Group, 1995)**

- Comment on general level of reported health.
- *You seem to feel that your health is poor, and are discouraged that you don't feel the level of interest in things that you used to.*

**Working Alliance Inventory-Short Revised (WAI-SR; Hatcher & Gillaspay, 2006)**

- Note any areas of strong disagreement and agreement, and determine how issues might be resolved or enhanced depending on need.
- *I know we have only seen each other for a brief period, but thus far it appears that you are comfortable with my style and feel that we are on the same page regarding your treatment.*

Elicit Veterans reactions to the assessment results and the consequences of their pain conditions. Ask them to identify the benefits of reducing the negative impacts of their pain. This is an ideal way to transition to the development of goals in the latter portion of the session.

The following is an example of therapist feedback provided to Sheila:

- Therapist: First, thank you for completing the packet of questionnaires. This information helps me to better understand what you are going through and what you may want to get out of treatment. I'd like to take some time to review it with you and discuss your experiences.
- Sheila: Yeah, that sounds good. There were a lot of questions; I can't even remember what I said!
- Therapist: Well this should help serve as a reminder then. You indicated that your pain intensity ranges from a high of 9 to a low of 4. Is it accurate then to say that your pain fluctuates quite a bit?
- Sheila: Yes, I never know what to expect with this fibromyalgia.
- Therapist: Tell me about how that impacts your daily functioning.
- Sheila: It's frustrating. I'm always hurting, but some days it's manageable and I can really get things done. But when it gets up to an 8 or 9, I have to spend the day in bed.
- Therapist: Yes, the frustration that you're describing was apparent in some other measures as well. You seemed to strongly agree with statements like, "It's awful and I feel that it overwhelms me." From your responses, it seems like you spend a lot of time thinking about your pain, worried about the bad things that may happen. Would you say that's accurate?
- Sheila: I try not to, but when you hurt like I do it's impossible not to focus on the pain and worry about how bad the next flare up is going to be. And when my pain is bad, my PTSD seems worse too. So it just never ends.
- Therapist: Through your report in our interactions as well as on these measures, it seems that there is a powerful relationship between your pain and emotional experiences. On another questionnaire you reported significant symptoms of depression, which is consistent with the others things that you have told me.
- Sheila: Yeah, again between the pain and the PTSD, I get overwhelmed and down easily.
- Therapist: We will work together with the help of these tools to develop some specific treatment goals. These measures tell us that you are experiencing pain-related impairment in a number of areas, and that it has caused you to feel quite down about yourself. This information can help shape your personal goals for treatment.
- Sheila: Okay. I know I have work to do and I'm not sure how I can better manage my pain but there are a lot of things I want to change about my life.
- Therapist: Well that's why you're here. We are going to work on achieving some of those things together. But the first step is gaining awareness as to exactly how pain is affecting you, which is why we are reviewing the results of the assessment.

## Goal Planning

### CBT-CP Objectives

The focus of CBT-CP is to improve quality of life by improving functioning in multiple domains. 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 Veterans shift their preoccupation away from pain and towards functioning. It is important to be clear and direct about the objectives of treatment so that expectations are realistic for patient and therapist.

General objectives of CBT-CP are to improve quality of life by:

Reducing the negative impact of pain on daily life.

Improving physical and emotional functioning.

Increasing effective coping skills for managing pain.

Reducing pain intensity.

### Individual Goals

For many patients in CBT-CP, chronic pain has become the center of their lives and attention. Therefore, in addition to the general therapeutic objectives, it is important to develop individualized, meaningful goals with Veterans. Establishing goals will help patients focus on the purpose of engaging in treatment and will help divert attention from pain. Veterans' goals will help guide treatment by identifying areas that may need additional emphasis.

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 the examples provided below:

- *What is something specific that you would like to see change in your life over the next few months?*
- *What would you like to be able to do (do better, do more of, etc.)?*
- *Are there relationships that you would like to improve?*
- *If CBT-CP worked, how would your life be different?*

In order to assist in goal setting, the SMART model will be used to develop individualized goals that are:

<b>Specific</b>	Identifies a specific action or event that will take place.
<b>Measurable</b>	Should be quantifiable (countable) so progress can be tracked.
<b>Achievable</b>	Should be attainable and realistic given resources.
<b>Relevant</b>	Should be personally meaningful.
<b>Time-Bound</b>	State the time period for accomplishing the goal.

*Adapted from Doran, 1981*

The SMART Goals Worksheet should be used with the Veteran in session. This worksheet includes both short-term goals that can be accomplished over the course of the 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. It is critical that these are Veteran-centric and are personally meaningful to the patient. While engaging in CBT-CP requires time and effort, these goals should help illuminate why the long-term benefits

outweigh the short-term investment. Once individualized treatment goals are established, they should be monitored on an ongoing basis for positive reinforcement and to make adjustments in goals and treatment as indicated. It is recommended that both the Veteran and therapist have a copy of the goals sheet available throughout the course of treatment so that it can be referred to regularly.

Consider the following exchange between Juan and his therapist regarding goal planning:

Therapist: Today I would like to discuss your personal goals for treatment. I understand that you would like to better manage your pain, but I'd like to talk about the specific things that pain is affecting in your life that you would like to change.

Juan: Well, for starters, I can't work because of the pain.

Therapist: How is it that pain affects your ability to work?

Juan: I work on computers all day, which requires a lot of sitting, and sitting for more than 15 minutes increases my pain.

Therapist: So if I hear you correctly, one goal would be to be able to sit for longer periods of time so that you can work?

Juan: Yes. If I could sit for even 30 minutes and be mostly comfortable that would be a big help.

Therapist: What would be another goal?

Juan: I'd like to not feel like an old man.

Therapist: Can you be more specific? What is it that makes you feel like an old man?

Juan: Staying at home every day watching my body get bigger. I used to be out all the time, at the gym or at the clubs. I'm still a young guy, I should be hanging out with my buddies, having fun, working out.

Therapist: So spending more time in fun activities, such as going out with friends?

Juan: Yeah.

Therapist: How often are you hanging out with your friends now?

Juan: My buddies get together a few times a week. They usually text me where they'll be, but sometimes I just don't even answer.

Therapist: So if we think about making "going out with friends" a measurable goal, how often would you feel that you'd like to go out so that you'd realistically be able to achieve this goal while still feeling like you're "a young guy?"

Juan: I'd like to go out and do something at least once a week.

Therapist: Okay. And what other goals do you have?

Juan: Well, my weight. My doctor told me I'm becoming "obese." This really upset me because as a Marine, I was in the best shape. With my back pain I can't lift weights anymore so I'm all soft. But I know I need to exercise.

Therapist: So I hear you saying that your weight is a concern. How much weight would you realistically like to lose over what period of time?

Juan: I'd love to lose 40 lbs. But realistically, if I can lose 20 lbs. by the end of the year, I think that would be a good start.

Therapist: Okay, so we discussed three goals:

1. increasing your ability to sit for periods of 30 minutes or more so that you can work,
2. going out with friends at least once per week, and
3. losing 20 lbs. by the end of the year.

## Practice

Ask Veterans to continue to contemplate both short- and long-term goals. Stress the importance of following the SMART formula reviewed during the session. Remind Veterans that the general CBT-CP objectives will be the framework for all sessions, while the individualized objectives will help motivate Veterans to engage in activities that will improve the quality of their life and reduce the negative consequences of pain. The SMART Goals Setting Worksheet should be completed at home prior to the next session.

## Session 4: Exercise and Pacing

This session introduces several critical issues in conceptualizing and managing chronic pain effectively. Providing an explanation of the difference between the physical sensation of hurt and the physical damage of harm will help Veterans understand important differences between the management of acute and chronic pain. Because pain is often associated with avoidance of activity, fear of movement, and a cycle of negative consequences, elucidating this pattern highlights the need for physical activation. With the support of a medical provider, Veterans will be asked to begin a walking program to initiate gradual exposure to movement. Finally, introducing time-based pacing as a means to manage pain more effectively through thoughtful activity will help define the parameters for consistent, moderate engagement in physical, recreational, and social activities.

### Session 4 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 3.
✓	Present Session 4 content: Hurt versus harm, exercise program, and time-based pacing.
✓	Discuss home practice.





### Session 4 Materials

- Chronic Pain Cycle Handout
- Walking Log
- Pacing Activities Worksheet





### Hurt versus Harm

Often times, one of the greatest challenges for those with chronic pain is the belief that they can no longer engage in life fully or do the things that they want to do. Veterans with chronic pain may believe that activity will lead to increased pain and cause physical damage. This belief, while typically true in acute pain, is often inaccurate in chronic pain.

#### Acute Pain

-  Less than 3 months
-  Is a symptom
-  Identified cause; body's response to injury
-  Diminishes with healing and responds to treatment

#### Chronic Pain

-  More than 3 months
-  Is a condition
-  May develop after incident; may have known or unknown cause
-  Persists beyond expected healing time and/or despite treatment

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 occurring. Even though these two different types of pain sensation may feel very similar to the person experiencing them, chronic pain does not serve as a reliable warning sign. Both acute and chronic pain may motivate Veterans to withdraw from situations that cause pain; however, while this is typically indicated in acute pain, it is maladaptive in chronic pain.



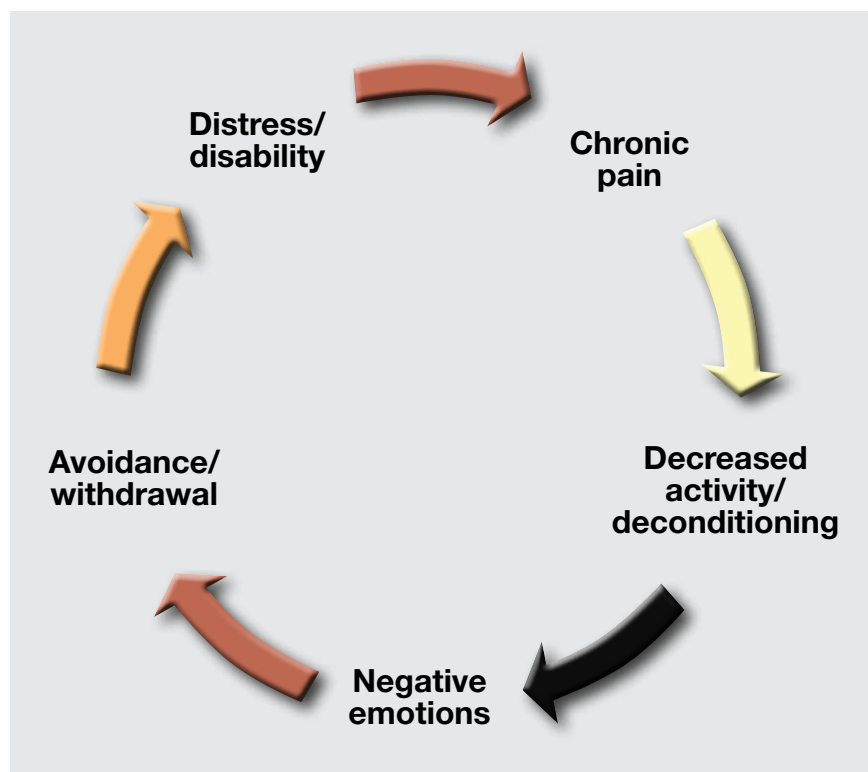
By avoiding activity, chronic pain worsens over time because of deconditioning. Inactivity leads to issues such as decreased flexibility and stamina, increased weakness and fatigue, and even spasms from tight muscles. The problems related to deconditioning often lead to increased risk of injury and weight 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 has been termed *kinesiophobia* (Miller, Kori, & Todd, 1991), or fear of movement, and may develop to varying degrees in those with chronic pain. Unfortunately it creates a self-fulfilling cycle – not moving only makes patients’ next attempts to engage in activity more difficult and painful, reinforcing this fear. The negative consequences that often accompany kinesiophobia make coping with the daily challenges of chronic pain even more difficult. For those with chronic pain, decreasing fear and engaging in activity is a key to improved functioning.

Another common response to chronic pain is compensating with or favoring another area of the body that does not hurt. 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. For example, someone with a right knee injury may begin overusing the left knee. Now that the left knee is the object of additional pressure, it may ultimately become injured and another chronic pain location created inadvertently. Again, although Veterans may guard certain painful areas and favor others in an effort to protect their body and minimize pain, they are more likely to experience increased pain and even initiate new injuries.

Use the Chronic Pain Cycle Handout to discuss the negative consequences that often result from inactivity. A sample of how this information may be presented by the therapist follows Figure 4.

**Figure 4. Chronic Pain Cycle**



Below is an example of how the therapist might discuss all of these related and very important concepts with the Veteran:

### **TALKING TIPS: *Hurt vs Harm, Kinesiophobia, and the Chronic Pain Cycle***

There is a difference between acute and chronic pain. Acute pain is a signal that an injury or damage has occurred, like with a broken arm. You need to protect that arm until the injury has healed. Chronic pain lasts beyond 3 months and persists after all the healing that is going to occur has already happened. Although you are still hurting, the pain is no longer alerting you of additional injury or damage. Acute pain is a symptom; chronic pain is a condition.

Often when people have chronic pain, they decrease their level of activities because it hurts to move. The term *kinesiophobia*, or fear of movement, is the name for that hesitation that often develops. While this is understandable as a means of protection from pain and injury, the inactivity actually makes the pain worse over time. As you can see in the Pain Cycle Handout, inactivity can cause you to get into a rut that creates deconditioning with problems like decreased flexibility and stamina, increased weakness and fatigue, and even spasms from tight muscles. All of this can lead to increased risk of injury, weight gain, and feelings of sadness, frustration, or boredom. Unfortunately, these experiences may only make you feel worse and encourage you to further avoid people and places.

But there is good news – we are going to help you find ways to break out of this destructive cycle!

### **Exercise Program**

In order to break the chronic pain cycle, it is necessary to begin increasing physical activity. This is often a daunting idea for Veterans who may be sedentary or believe that they cannot or should not engage in physical activity. It is important to stress that the initiation of any activity will be based on Veterans' current level of functioning and will increase at a gradual pace. Furthermore, assure patients that their current PCP has provided support for the planned activity. It may also be helpful to remind patients about the negative consequences of pain that they have previously shared, and the ways in which increasing activity may positively impact those areas. Implementing a regular walking program for Veterans is one simple way to incorporate sensible and achievable activity into their lives.

As people age they do not develop as much synovial fluid (i.e., lubrication) in the joints, often making movement more challenging. Because of this, those in orthopedics sometimes say that "*motion is lotion*" for the joints, since movement is a critical piece of good overall health. Walking is a low-impact, accessible, aerobic form of movement that can benefit almost everyone, especially those with chronic pain. It can increase flexibility and strength, decrease pain and flare-ups, and improve mood. In addition, since walking is an integral part of most daily activities it can enhance overall functioning by making engagement easier (e.g., trip to the grocery store). While patients may experience increased pain secondary to increased soreness after initiating activity, explaining that this is a normal process for those with and without pain can be helpful.

Before beginning any walking or exercise program, each therapist has already requested and received permission from the Veteran's PCP. *No exercise program should be initiated until approval is obtained.* If the PCP has responded and indicated that participation is appropriate, a walking program should be coordinated with the input of patients based on current level of ability. Veterans should be encouraged to walk on a flat, even surface and to maintain constant movement, even if the pace is slow. In addition, the following directions for general proper walking mechanics are helpful and should be used as basic guidelines:

- Hold head high
- Focus eyes 15 to 20 feet in front of you
- Keep chin parallel to ground
- Move shoulders and arms naturally, freely
- Position feet shoulder-width apart

Use the Walking Log to help Veterans develop a plan. If patients can currently walk 6 minutes without stopping and plan to walk 5 days this week, days 1 and 2 can be set for 6 minutes, with an increase to 7 minutes on days 3 and 4. Again, the emphasis should be on making purposeful movement part of the routine and overcoming fears associated with activity. It is important that

walking is a planned part of the day, and is not simply incorporated into other activities. For example, Veterans may say that when they have an appointment at the VA they are sure to walk for “more than the six scheduled minutes” getting to appointments. While this may be accurate, during this part of the protocol it is important to plan for separate walking times. Getting Veterans into the habit of incorporating exercise into daily life is part of the goal. By doing so, walking that arises during trips to VA or grocery store will become easier.

Other forms of exercise that may also be explored with patients include:

- Yoga or Tai Chi
  - Exercises that involve slow, purposeful movements that can often be adapted
- Aquatic therapy
  - A favorite choice as buoyancy decreases weight bearing on joints and muscles and water resistance prevents sudden movements that could cause re-injury while maximizing muscle strengthening
- Riding a stationary or recumbent bicycle
  - No force on joints and spine makes riding a bike both indoors and outdoors an attractive option

Be sure that Veterans check with their physician prior to initiating any new form of exercise to ensure that it is safe for them.

### **TALKING TIPS: *Exercise***

**\*\*NOTE: This is one of the most difficult ideas for people to accept – it seems unnatural that movement will make their pain better. Emphasize that movement is the foundation for building a better body, that walking is safe (PCP approved), and that engagement and increases will be individualized and gradual.\*\***

Tight muscles, decreased stamina, fatigue, and extra weight can worsen your chronic pain and make it harder for you to do different activities. But adding exercise and walking to your life has been shown to help your body combat chronic pain and improve your mood. Physical activity helps:

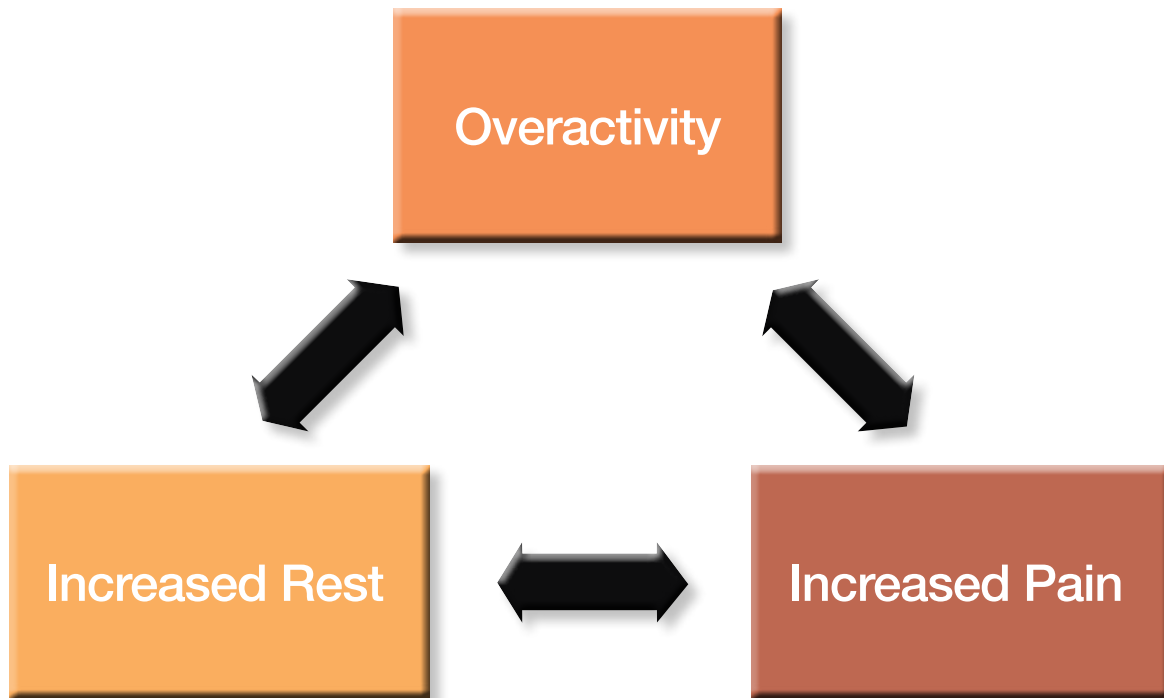
- Increase endurance and strength
- Return muscles to normal size
- Help you have less pain when you move

While starting something new is tough for all of us, as you practice walking and engage in more activities, things will get easier each day as your muscles are strengthened.

## **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 times, 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, and increased rest seen in Figure 8 often happens on a recurring basis. It can lead to various negative consequences such as increased stress and anxiety, decreased efficiency, lowered self-esteem, and avoidance of any activity.

Figure 8. Overactivity Cycle



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. It allows Veterans to consistently engage in activities without causing detrimental consequences. Pacing is often about balancing activities and planning ahead, or working “smarter not harder.” Breaking tasks into “chunks” such as painting a room for 45 minutes per day over 4 days instead of for 3 hours on a single day is one example of pacing. Being more thoughtful about activity allows Veterans 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 session, use the Pacing Activities Worksheet to explore how to pace an activity with the Veteran. Use examples to illustrate how pacing can enable Veterans 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 Veterans with chronic pain to engage in reasonable amounts of activity and improve quality of life.

**TALKING TIPS: *Time-Based Pacing***

Pacing involves taking breaks at regular times, not just when the task is done. By resting regularly, you can actually get more done in the long run and not “pay for” extended periods of activity. Pacing helps you maintain a consistent activity level over time, which is good for your body and mind.

Remember:

- Take breaks based on how much time you have worked not on how much you have accomplished.
- Take breaks before the pain begins to increase, not after it gets bad.
- Practice makes perfect – your body must learn how to respond.

This is about working smarter not harder!

Once the concept of pacing has been reviewed, it is important to discuss in session how Veterans will apply it to their own lives. Ask the Veteran 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 following steps to develop a plan for incorporating the activity into the week:

- Ask Veterans to identify one activity that they are planning to do or would like to do this week, particularly something that they are concerned may increase their pain.
  - Write this in the *Activity* row
- In collaboration with the Veteran, approximate how long they can safely do the activity without causing a significant pain flare up.
  - Add this to the *Active Goal* row
- In collaboration with the Veteran, estimate the amount of rest time that will be needed in between periods of engagement/exertion.
  - Add this to the *Rest Goal* row
- Ask the Veteran to complete this form over the next week for one to three activities.

The minutes set initially are approximations and it is expected that they may need to be increased or decreased. Remind Veterans that pacing is a skill that must be practiced in order to be effective, so they should avoid pain-based decisions of what to do and not do on a daily basis. Although this may be a very difficult concept, it is critical in effective self-management of pain.

The following is an example of how Reggie and his therapist might determine his pacing of completing a common household chore:

Therapist: I remember you mentioned before that you feel “guilty” that you are not able to help your wife more around the house. What is something that you would like to help with?

Reggie: Well my wife wants all kinds of help around the house but I tell her I can’t because even something like the laundry hurts too much to do.

Therapist: Would you be open to developing a plan for how you might use pacing to help with the laundry?

Reggie: Sure, I’m open. She does so much for me and I know it would make her happy.

Therapist: What is the biggest issue when you do the laundry?

Reggie: Just too much standing and bending. Especially with the clean clothes that come out of the dryer and have to be folded and hung. It’s too just much on my ankles and knees.

Therapist: Okay. How long are you able to stand now before your pain increases?

Reggie: I don’t know, maybe 5 minutes.

Therapist: So let’s make your active goal time for getting the clean laundry 5 minutes. How much rest do you think you would need before you could stand again?

Reggie: Just a few, maybe 3 minutes.

Therapist: Great. We’ll make 3 minutes your resting goal time. Once 3 minutes are up, you can return to the laundry room for another 5 minutes and repeat this cycle until the laundry is done.

Reggie: Sounds good, I could try that.

Therapist: Perfect. And if you find that you can stand for longer or that you need more rest, you can just make adjustments as you go. The key is to be mindful of the clock and not over- or under-do. That way, you can accomplish the chore with the least strain.

## Practice

Ask Veterans to begin implementing walking plans and tracking the number of minutes that they complete each day using the Walking Log. This will help maintain a gradual increase of activity and can facilitate a discussion about successes or issues next session. In addition, they should begin to initiate pacing of activities during their days using the Pacing Activities Worksheet. Again, remind them of the importance to log what they do so that it can be shared in session and adjusted as needed.

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## Session 5: Relaxation Training

This session introduces Veterans to the pain management benefits of relaxation and then reviews three specific techniques: diaphragmatic or deep breathing, progressive muscle relaxation, and guided imagery. Since these are used in the treatment of various mental health conditions, many therapists may already be familiar with them. Two of these strategies will be practiced with the Veteran during this session, and all of them will be continued as home practice between sessions. Emphasize that practicing these techniques regularly between sessions is critical to mastery and effective application.

### Session 5 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 4.
✓	Present Session 5 content: Relaxation rationale and strategies.
✓	Discuss home practice and ask Veteran to complete WAI-SR at session conclusion.

### Session 5 Materials

- Relaxation Benefits and Tips Handout
- Deep Breathing
- Progressive Muscle Relaxation
- Guided Imagery
- Relaxation Record
- WAI-SR

### 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. In the case of chronic pain, however, the physiological stress response is prolonged, is no longer adaptive, and creates additional wear and tear on the body. Since the body is chronically stressed due to persistent pain, it does not have the chance to recuperate (Benson, 1975).

Veterans 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. These types of reactions only increase tension levels and pain intensity, but are

often done unconsciously. 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 there is an opposite physiological process that slows down and stops the fight or flight reaction. This parasympathetic nervous system, or relaxation response, has the effect of reversing physiological arousal and bringing the body back to a calm state. The better news is that human beings are capable of developing control over this relaxation response and engaging it as a means of managing stress and/or pain. 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.

## Clinical Considerations

While many Veterans will agree that pain is a stressful experience, they may still doubt that relaxation can be beneficial. It often helps to share that research supports the use of relaxation and shows that it has numerous benefits including decreased muscle tension and fatigue, improved sleep, and increased energy (Laevsky, Pabst, Barrett, S., Stanos, 2011; Persson, Veenhuizen, Zachrisson, & Gard, 2008)). Some Veterans may worry that using relaxation equates to slowing down and doing less, but using these skills will actually help them by increasing clarity, productivity, and overall functioning. Finally, some patients are uncomfortable engaging in relaxation techniques because it can expose vulnerabilities. Particularly for those with PTSD, relaxation can trigger negative thoughts of traumatic events. Depending on the clinical needs of Veterans, suggest helpful adaptations such as keeping their eyes open or using one of the more physically engaging techniques such as progressive muscle relaxation.

### TALKING TIPS: *Relaxation*

Relaxation is a skill that can help people better manage stress and muscle tension that can increase pain. There are many relaxation skills that are easy to use, and we want to find some that work for you. It's important to make them part of your daily routine, and they can help when you have a pain flare-up.

The goal of relaxation is to reduce the effects of stress on your health. Chronic pain taxes your body and creates increased muscle tension so even if you don't feel "stressed" emotionally, it is likely that your body is impacted. While we can't avoid all stressors or pain, we can change how we respond. Relaxation is more than resting or enjoying a hobby. It involves taking a break and reducing tension in your body and mind.

## Implementation Assistance

It is useful to discuss specific benefits of relaxation and tips that may make implementation easier. One point that should be emphasized is the importance of practicing relaxation at least once every day. Explain to the Veteran that, as with any new skill, practice is necessary for 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:

**Pair relaxation with a daily activity such as having a meal.**

**Use a relaxation "app" on a smart phone.**

**Select a phrase or mantra that serves as a cue such as calm, peace, or positivity.**

Use the handout on Relaxation Benefits and Tips in session, which further outlines the advantages to developing the skill of relaxation and ways to implement it successfully.

Consider the following exchange between Reggie and his therapist regarding practicing relaxation training:

Therapist: What are your thoughts on the relaxation techniques we discussed?  
Reggie: I don't know about that. When I relax, what works for me is listening to music or going fishing.  
Therapist: Listening to music and going fishing can be peaceful, but those activities are actually considered "distraction" techniques. Active relaxation is different in that it aims to create a physiological change in your body, for example by slowing your breathing or reducing muscle tension.  
Reggie: I've tried an imagery exercise in the past, but it didn't work for me. I wasn't able to focus because my mind just kept wandering.  
Therapist: The mind wandering is natural, and it doesn't necessarily mean that it wasn't working. Whenever thoughts occur, simply acknowledge them and let them go. Imagine the tide rolling in, and just as easily rolling out. It may also be helpful in those moments to refocus on your breath.  
Reggie: I hear what you're saying, but I'm not really into the imagery thing.  
Therapist: There are a number of different relaxation techniques you can try. I think it's good to try a few to find one that works best for you. If you don't like imagery exercises, try breathing exercises or progressive muscle relaxation.  
Reggie: I can try that muscle relaxation one.  
Therapist: Great. And remember that it's a skill that takes practice. You may find that you need to do it a few times before getting the hang of it, and that's okay. Practice it at home at least once a day. We can discuss any problems you experience.

## Techniques

Three relaxation techniques will be introduced, though only the first two will be practiced with the therapist in this session.

All relaxation techniques have two basic foundational components:

1. Focusing attention on something such as a process, image, phrase, or sensation.
2. Passive disregard of everyday thoughts when they occur in order to return to focus of attention.

## Get Prepared

- Sit in a comfortable chair or on a mat.
- If you get in bed you may fall asleep so it is not recommended, unless you are using the technique to aid in sleep initiation.
- Lower the lights.
- Take off your shoes and loosen tight clothes.
- Close your eyes.
- If you want to keep your eyes open, then focus them on one spot.
- Turn off your phone, TV, and radio.
- Put pets in another room.
- Let others in the house know you need some time alone to focus on your health.

## Deep Breathing

The first relaxation technique is diaphragmatic breathing, often called "deep breathing," and it is the foundation for all other relaxation techniques. It uses deep breathing to contract 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 clinician can help model effective technique by engaging in the exercise along with the Veteran.

## STEPS

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

During the exercise, the clinician may wish to coach the Veteran 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 the Deep Breathing Handout for a sample script of this exercise, which will be provided to the Veteran.

### TALKING TIPS: *Mini-Breathing*

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:

- Take a deep breath in; as you breathe out imagine the tension and negativity leaving your body.
- On your next breath, imagine breathing in feelings of calm and relaxation.
- Count to six taking a slow, deep breath; breathe out slowly, again to a count of six.

Before you know it, you will feel less tense and more in control. What are some other situations where you might be able to do a mini-session during the day?

## Progressive Muscle Relaxation

The second technique is progressive muscle relaxation (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 Veterans who fear that contracting a particular muscle will increase pain in that location, it is helpful to review hurt versus harm. On rare occasions, Veterans will report a muscle spasm that originates upon tensing a muscle group. If this happens, it is recommended that the patient first try to modify by squeezing the muscles more gently. If the spasm still occurs upon contraction, then Veterans can visualize the muscle and imagine tensing that area when it is their “turn.” Veterans should continue to contract the other muscles in the body as the PMR exercise continues.

## Major Muscle Groups

Please also refer to the handout entitled Progressive Muscle Relaxation for a sample script of this exercise. The following are the muscle groups to be tensed and relaxed:

1. Lower arms/upper arms
2. Lower legs
3. Upper legs/buttocks/lower back
4. Abdomen
5. Chest
6. Neck/shoulders/upper back
7. Mouth/jaw/throat
8. Eyes/upper forehead/scalp

## STEPS

- Start with relaxed, deep breathing.
- Systematically tense and relax each major muscle group.
  - Tension should last 5-10 seconds then relax for 10-20 seconds.
  - May spend additional time on muscles that are difficult to relax.
- Conduct a mental scan of the body.
  - Mentally scan the body in systematic order of muscle groups, looking for remaining tension.
  - Allow Veteran to relax any residual tension.

## Guided Imagery

The last relaxation exercise to discuss is a guided imagery technique. While this option should be mentioned and reviewed conceptually, it will be used and applied at the beginning of the next session. It is recommended, however, that Veterans try this technique on their own as practice. Like the other options, they will be provided with instructions on a handout.

This guided exercise is designed to train the Veteran to create mental images that foster a relaxed state. The Veteran should choose a location to mentally visit during the exercise; the only “rule” is that the Veteran must pick a place that is peaceful and calm. The key to developing a deeply immersive experience, where the Veteran completely engages in the imagery exercise, is to give full attention to all the specific details of the scene. Provide examples such as smelling fresh-baked cookies in the air, feeling warm sand in the hand, or hearing the crush of leaves underfoot.

## Anticipating Obstacles

Discuss anticipated barriers to the Veteran’s practice of relaxation exercises at home and collaboratively generate possible solutions. Below are some frequently cited barriers and strategies for addressing them in session. These issues may arise while discussing and practicing relaxation in Session 5 or while reviewing the home practice.

***“I’m in too much pain to relax.”***

Remind Veterans of the bidirectional stress-pain cycle. Discuss the incremental benefits of relaxation exercises (reference guitar example) and mention that learning to relax is a process that will continue to improve as Veterans practice and become more experienced.

***“If I slow down, the pain really catches up to me. I have to keep moving to keep the pain away.”***

Review the importance of pacing and the dangers of over-doing. Stress pacing as an important tool that emphasizes thoughtful movement and rest breaks as one way to help avoid pain flare-ups.

***“I relax all the time, that’s part of the problem!”***

Emphasize that using active relaxation techniques is not the same as lounging, resting, or avoiding. The strategies they are being asked to use require engagement that can create a physiological process that reduces muscle tension and helps manage chronic pain.

***“I’ve tried to relax before but I just can’t”***

Share that Veterans who have the most trouble with adopting relaxation skills are typically the individuals who need it the most. It is a skill that takes practice to acquire. Assure patients that the time it takes to train the body to respond differently to stress and tension is a worthwhile investment.

***“With everything going on in my life, I’m really just too busy to relax.”***

Emphasize that relaxation assists in better managing the stress of a demanding life. For those who have significant pressures, developing relaxation skills will help enhance productivity and concentration.

## Practice

Encourage Veterans to practice relaxation techniques at least once per day over the next week, more if possible. Instructions for all three types of relaxation reviewed are provided. In addition, ask them to use the Relaxation Practice Record to track practice and progress. Ask the Veteran to write down a tension rating before starting the exercise and then return to the record afterward to self-assess and rate tension again. Set realistic expectations by sharing that there may not be tension differences before and after the practice the first couple of times the exercise is used. Remind patients, however, that as the skill develops, the techniques will become easier and benefits will increase.

- Handouts of Relaxation Techniques
- Relaxation Practice Record

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## Session 6: Pleasant Activities 1

Many Veterans living with chronic pain tend to avoid engaging in activity, including enjoyable activities. One reason may be that they believe they are no longer able to do the things they once enjoyed, such as golf or gardening, because of pain. Since activities often include interacting with others, they may want to avoid talking about their pain or feel embarrassed about their limitations. Not only may this avoidance contribute to physical deconditioning, but it can also lead to lowered self-esteem and increased depressed mood.

Sessions 6 and 7 are designed to help Veterans increase the number of pleasant activities in their lives. The benefits include providing opportunities for healthy distraction, increasing socialization, improving concentration, and developing a sense of purposeful direction.

Session 6 will provide the opportunity to articulate and clarify what types of activities Veterans have enjoyed historically while exploring new ideas for the future. Session 7 will create an action plan to implement activities in a paced manner.

## Session 6 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 5 and do visualization exercise.
✓	Present Session 6 content: Exploring pleasant activities.
✓	Discuss home practice.

## Session 6 Materials

- Guided Imagery Handout
- Pleasant Activities List

## Guided Imagery

After reviewing home practice of the relaxation techniques from Session 5, begin this session with the guided imagery exercise. Ask Veterans for information about the idyllic place that they would like to mentally visit, reminding them that the place should be peaceful and calm, with positive associations. While the majority of this session will be focused on exploring pleasant activities, starting with thoughts and images about a pleasing place that create a relaxed state will set the stage for gathering that information.

Veterans' choices for this technique may vary widely – some may find the beach or mountains relaxing, others may have a city of which they are fond. Some may have a specific location/time such as a childhood memory of grandma's kitchen while she bakes cookies or being on a farm with a sibling. Allow the Veteran flexibility and creativity in selecting the location. The key to developing a deeply immersive experience, where the Veteran completely engages in the imagery exercise, is to give full attention to all the specific details of the scene. Encourage a focus on detailed images that take the Veteran away from stressful thoughts and bodily tension. It is crucial to involve all five senses, to consider specifically what would be seen, heard, smelled, felt, and tasted in this location (e.g., white sand path beneath feet, sweet and sour taste of cold lemonade, vivid color of tree leaves, soft texture of blanket, smell of cookies baking).

Once the mental scene and the details of the patient's relaxing place are gathered, guide Veterans through the steps below. A sample for the therapist is presented below. Please refer to the Guided Imagery Handout for a sample script of this exercise.

## STEPS

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

### **TALKING TIPS: *Guided Imagery***

Before we begin talking about pleasant activities that we can incorporate into your life, I want you to think about a pleasant location. This can be a positive memory or an ideal place that creates a relaxed feeling. Consider how the place looks, feels, and smells. Close your eyes and put yourself there.

Imagine yourself walking slowly down a path toward your relaxing place. The path is comforting and peaceful. As you walk down this path, imagine that all of your stresses, worries, and tension are leaving you. Enjoy this journey to your relaxing place.

Reach out and touch something in this place... Notice its texture and how it feels against your skin. Notice the different objects around you...their shapes, textures, and colors. Notice the light and shade of this place and how the light reflects off of these objects...

## **Exploring Pleasant Activities**

As previously discussed, living with chronic pain can affect Veterans' lives in various ways. One of the most significant has likely been decreased involvement in pleasant activities. Many with pain may have stopped participating in hobbies, spending time with others, or engaging in physical activities. They 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. Regardless of the reason, a lack of pleasant activities decreases quality of life and often increases negative mood. The goal of this session is to explore things that patients enjoy and determine ways to regularly incorporate these activities.

Identifying pleasurable activities for those with chronic pain may be challenging for several reasons. Pain-related negative mood 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, Veterans may mention things that they would like to do but "can't" because of pain limitations. Particularly among those who have been in the military, they may perceive themselves as athletes and feel they can no longer participate in sports and other physical activities as they once did. While this may be true, explaining the benefits of engaging in pleasant activities and exploring creative and adaptive ways to participate despite pain is the goal of this session.

Potential benefits of engaging in pleasant activities:

**Positive distraction from pain**

**Improved mood and self-esteem**

**Increased socialization**

**Enhanced attention and concentration skills**

**Enhanced sense of purpose and direction**

Use the Pleasant Activities List, to explore options. Begin by asking Veterans about activities they used to enjoy doing, engage in to a limited but not ideal degree currently, or have always wanted to try. This discussion will likely generate a forum for examining alternative ways to engage in previously enjoyed hobbies. Veterans, especially those prone to black and white thinking, may not have considered more creative solutions for how to be involved in pleasurable activities. For example, if Veterans report that they used to enjoy bowling but are now unable to, inquire about their willingness to teach bowling to children or adolescents. Remind Veterans that coaching is a path to share knowledge and experience regardless of pain, as many are unable to play sports

in the same capacity as they age. In addition, Veterans may like the idea of being able to “give back” and help young people. If Veterans are uninterested in coaching, suggest the option of using a gaming system. Many on the market (e.g., Nintendo Wii) have bowling and other games that involve a limited amount of physical activity with a realistic experience of the sport.

In addition, many VA facilities have a recreation therapy (RT) department. If RT is available, they may be able to offer a wealth of resources for pleasant activity development. For example, instruction in areas such as wood and leatherwork, painting, or assembling models may be available, and craft kits often are available for home use. In addition, some VAs offer consultation for adaptive sporting options such as golfing, kayaking, or horseback riding. This service provides a personal evaluation and allows Veterans’ input on how they may modify their body mechanics when playing a sport, or how to use adaptive equipment. Finally, speaking with someone in RT or the Vocational Therapy department at VA about potential volunteer opportunities may be recommended. Many Veterans with chronic pain are not currently employed and feel a lack of purpose in their lives. Discussing volunteer options related to their interests such as being a Big Brother or Big Sister, helping with books at the local library, or volunteering at VA in service to their fellow Veterans may be appealing. Such activities not only help provide structure to the week, but patients often find them rewarding.

Since it may have been a while since the Veteran engaged in something for pleasure, the Pleasant Activities List may help generate areas for exploration.

The following is an example of an exchange between Sheila and her therapist regarding identifying pleasant activities:

Sheila: I know that I should do more fun stuff with Tim, but it seems like I’m always either in too much pain or just too tired.

Therapist: I noticed that you said you “should” do more. Do you want to do more?

Sheila: I don’t know. I think I said “should” because it’s really affecting my relationship. We used to go out with friends all the time. I used to be a fun person. Now Tim says I’m using pain as an “excuse” not to go out.

Therapist: Tell me more about using pain as an “excuse.”

Sheila: Well, sometimes we’ll have plans and I cancel because I’m just not feeling well. Tim gets upset and says, “You *never* feel well!” I know he’s sick of me being sick.

Therapist: What do you mean by that?

Sheila: He used to stay home with me but now he goes out without me. Whenever I tell him I can’t do something because I’m in a lot of pain, he just gets angry and leaves.

Therapist: What do you do?

Sheila: Stay home by myself. I watch TV then go to bed. I usually end up feeling even more down and am asleep before he gets home.

Therapist: You mentioned “fun stuff” – what is an example of something that you would like to do?

Sheila: Honestly, I don’t know what I can do that won’t cause an increase in pain or wear me out so that I can’t work the next day.

Therapist: I hear you saying that you are concerned that your relationship is being affected because you’re not “fun” like you used to be, but at the same time you’re not sure how to have fun anymore or even if you can. Is that right?

Sheila: Exactly.

Therapist: To get you going, here is a list of activities that some people enjoy. For homework, look over this list. Choose at least three activities that are either already on the list or that you add to the list. We will discuss them next time we meet and come up with a plan for how to incorporate them into your life.

## Practice

Before the next session, Veterans should continue to contemplate pleasant activities to incorporate into their lives. For practice, ask them to identify at least three activities using the assistance of the Pleasant Activities List. Although the next session will focus on implementation of activities, suggest that they try to engage in at least one of their chosen activities before the next meeting. This will facilitate a discussion about potential obstacles.

## Session 7: Pleasant Activities 2

Session 6 focused on identifying pleasurable activities. During Session 7, Veterans will solidify the activities that they wish to pursue and develop a concrete plan for implementation. In all activity scheduling, pacing should be used to maintain a balanced approach.

### Session 7 Agenda

✓	Veteran completes assessment measures.
✓	Establish agenda.
✓	Review Session 6.
✓	Present Session 7 content: Establishing and scheduling pleasant activities.
✓	Discuss home practice.

### Session 7 Materials

- All assessment measures except WAI-SR
- Pleasant Activities List
- Pleasant Activities Schedule

### Pleasant Activity Implementation

Review the home practice and discuss any engagement in pleasant activities since the last session. If Veterans are still uncertain about activities that they would like to adopt, more time should be spent discussing the list of possibilities and any other considerations. Activities such as excessive television watching or computer activities are discouraged due to their passive or often solitary nature.

Once two to three activities have been identified, scheduling these activities into each week will increase the likelihood that Veterans will follow through with implementation. Remind patients of the benefits of increasing pleasurable activities such as improved mood and increased socialization, as well as a healthy distraction from pain. It is important that the activities chosen as well as the schedule devised is feasible for Veterans to achieve. Creating an unrealistic plan only sets the stage for lack of completion and the accompanying negative emotions. In addition, the use of pacing during chosen activities is critical. Remind Veterans to use pacing and discuss in detail how it may be applied to their chosen activities.

Use the Pleasant Activities Schedule to plan how the selected activities will be implemented over the next week. Have Veterans add their choices in the *Activity* column. While playing basketball would require pacing, playing cards may not. Encourage Veterans to start with easily achievable activities in order to develop a sense of mastery, and move to more difficult tasks after some proficiency has been established. Veterans may feel motivated to expand the schedule of activities after initial successes have boosted mood and self-esteem. It may be helpful to provide a reminder that when adopting a new activity, the enjoyment may increase over time like with the guitar example from last session.

Discuss the details of the plan and be as specific as possible. Review not only the day or days of the week that will be best for the activity, but the time of day, location, frequency, and other relevant information. Being specific will help Veterans visualize enacting the plan, which has several benefits. First, it will bring attention to barriers that may be encountered and these can be addressed in session. For example, if a Veteran wants to play basketball, what if it is raining and the outdoor court is not an option? Is there an indoor court that might be accessible? It is helpful to process such real life circumstances with Veterans. Second, reviewing the specific details will encourage adherence to the plan. If Veterans have a clear picture when they leave session of what they will do and what to expect, they are more likely to implement activities as discussed.

Scheduling activities helps improve daily functioning, so encourage patients to have something planned each day, balancing physical activity with leisure and recreational activity.

- Therapist: From our discussions, you said that lately you spend most of your time sitting in the recliner. However, it appears that you have a lot of interests, like listening to music, going fishing, spending time with your grandchildren, attending church functions. What is it that makes you most happy?
- Reggie: My biggest love was playing basketball. But I can't do that anymore.
- Therapist: In the context of basketball, let's talk about what you CAN do. Many people do not play basketball, but participate in other ways. Which ways can you think of?
- Reggie: I do watch it on TV. Also, my granddaughter is on her school's basketball team. I used to watch her play, but haven't been to a game this year.
- Therapist: Have you helped her practice?
- Reggie: Not in a while. I'm sure there are still some moves I can teach her, though.
- Therapist: What are some of the reasons that you haven't gone to your granddaughter's games or "coached" her at the house?
- Reggie: I just haven't been leaving the house much lately.
- Therapist: What are your thoughts about creating a plan for engaging in these activities?
- Reggie: I can go to her games, she has one this weekend. My family also gets together for dinner after church on Sundays. I plan to start going to services again this weekend, I already told my wife and she told my kids so everyone's expecting me. The grandkids usually play ball afterward. I can go outside with them then. I would like to spend more time with the grandkids anyway.
- Therapist: That's a great plan. Remember, too, that you can always meet with the Recreation Therapist here at the VA about possibilities for adaptive sports.

## Anticipating Obstacles

Discuss anticipated barriers to Veterans' participation in scheduled activities and collaboratively brainstorm possible solutions or backup plans. Below are some frequently cited barriers and strategies for addressing them in session. These issues may arise during Session 6 while reviewing activity options or in Session 7 when discussing how Veterans will implement activities into their lives.

***"With all this pain, I can't think about anything else that could be important."***

Reinforce that a primary goal of this treatment is to help create a life worth living despite the presence of pain. Remind Veterans that having a positive distraction can help take their minds off of pain, even if temporarily.

***"I have too many other things going on to try and schedule things for pleasure."***

More structured planning can actually improve time management skills and create opportunities for this additional activity. Discuss the importance of having pleasant activities to improve wellbeing and increase effectiveness in other areas. Stress the role of balance in overall health.

***"There's no way I can do any activity no matter how much I pace myself."***

Remind Veterans of progress they have already made with other physical activities such as walking. Encourage behavioral trials to test negative expectations and start with activities that are comfortable. Reinforce incremental achievements along the way.



***“I will think about hobbies when my pain improves.”***

Stress the importance of not allowing pain to dictate what Veterans do and do not do. Remind them of the biopsychosocial model, and the influence of activity and mood on pain experience.

***“I can’t find the motivation to do this. It’s hard enough just getting up every day.”***

Review the benefits of engaging in pleasant activities on both mood and pain. Tell Veterans that pushing themselves to engage in the behavior, even when they don’t feel like it, will improve their mood and overall motivation to try again.

## Practice

Ask Veterans to complete the Pleasant Activities Schedule. Once their plan is complete, request that they track their progress and note, not only when they participated in the scheduled activity but, when they did not and why. Remind patients that multiple attempts are common and provide reassurance that through collaboration with the therapist they will find an activity schedule that is realistic and enhances their lives.

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## Session 8: Cognitive Coping 1

Sessions 8 and 9 target the cognitive component of the CBT-CP model by helping Veterans develop cognitive coping skills. Session 8 focuses on understanding the dynamic interplay between thoughts and pain, and recognizing common cognitive distortions. This will help Veterans gain awareness about how their thoughts relate to pain or negative mood. Session 9 helps Veterans actively challenge negative thoughts with the use of a thought record and coping plan.

### Session 8 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 7.
✓	Present Session 8 content: Recognizing and monitoring negative thoughts.
✓	Discuss home practice and ask Veteran to complete WAI-SR at session conclusion.

### Session 8 Materials

- Pain Thoughts Handout
- Catching ANTs Worksheet
- WAI-SR

### Relationship Between Thoughts and Pain

For those with chronic pain, the role of negative cognitions can be powerful. As pain fails to improve over time, Veterans’ thoughts may become increasingly negative and exert a greater influence on pain. Research shows that negative thoughts are directly associated with pain perception (Lawrence, Hoefl, Sheau, & Mackey, 2011). Often times, negative thoughts are automatic and outside of a person’s awareness but may still significantly impact emotions and behaviors.

Use the previously reviewed CBT-CP model and Chronic Pain Cycle to discuss the relationships between thoughts, pain, mood, and behaviors. Veterans will often recognize that with increased stress or negative emotions, they also notice an increase in pain

intensity. While patients may be able to easily identify experiencing emotions such as anger or frustration, discuss that *negative thoughts* often accompany these feelings and may be a precursor. For example, while waiting at a doctor’s visit may increase irritability, negative thoughts associated with that experience impact the emotional response (e.g., “I hate waiting,” “This person is always late,” “My pain is just getting worse the longer I sit here.”). Explain to Veterans that all human beings have automatic thoughts that may be negative or positive. The presence of pain, however, sets the stage for an increase in such distorted negative thinking since an uncomfortable stimuli is always present. It may be important to tell Veterans 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 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 on their pain experience.

**TALKING TIPS: Negative Thoughts**

So far we have focused on things that you can physically do to manage your pain such as walking and engaging in activities you enjoy. Today we are going to talk about something different - how your thoughts can affect your pain and how changing them can help improve your satisfaction with life.

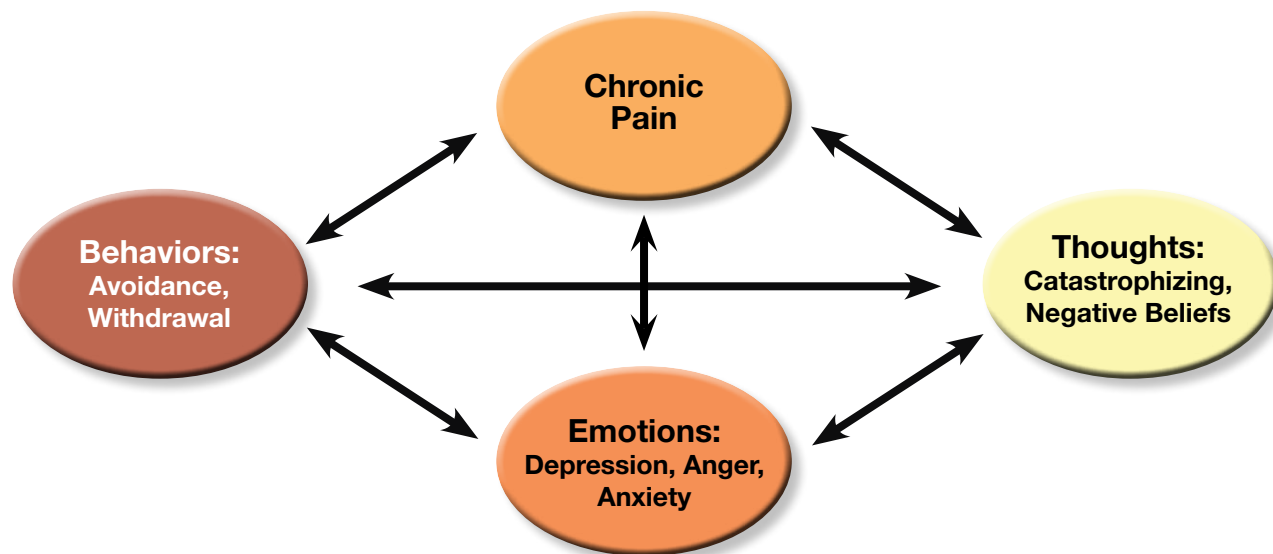
When you are in pain, what kinds of thoughts go through your head? In general, we find that as pain gets worse, thoughts become more negative. And research even shows us that negative thoughts actually increase pain. Negative thoughts also get in the way of doing the things that we know help make pain better. Unhealthy thoughts lead to unhealthy choices.

Everyone has negative thoughts! Often these thoughts are automatic. For example, you may have thought, “My pain is never going to get better,” or “I can’t do anything with this pain.” Embracing these thoughts may lead to avoiding activities and people, and make it less likely to use the pain management skills you have.

This chain reaction of negative, unhealthy thinking, feeling upset, avoiding others, and not using active coping skills is the cycle that we are trying to break!

Introduce the term *automatic negative thoughts*, or ANTs, as this will be the helpful acronym used during these sessions and in practice. Ask Veterans for one or two negative thoughts they have in response to their pain. Use their examples to review the relationship between thoughts, feelings, and behaviors using the CBT-CP model from Session 2 (Figure 5 below). Discuss the downward spiral that can contribute to increased anxiety, tension, and pain followed by isolation and avoidance. Again, ask Veterans for examples from their own lives where ANTs may have contributed to the experience of pain or where negative thoughts occurred in response to an increase in pain.

Figure 5. CBT-CP Model



## Cognitive Distortions

Another method for discussing negative thinking and its potentially automatic nature is through a discussion of common cognitive distortions, or erroneous thought processes. In this session these will be introduced to Veterans through the use of the Pain Thoughts Handout, which includes all-or-none thinking, should statements, and emotional reasoning. While it is not necessary to review this entire list with Veterans, 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. In addition to presenting the types of cognitive distortions, the Pain Thoughts Handout also provides examples of these unhelpful thoughts as well as alternatives that are more balanced and healthy. While challenging ANTs will not be fully explored until next session, this is a passive way to introduce another way of thinking.

## Self-Monitoring of Thoughts

Having explored the role of ANTs in the CBT-CP model, Veterans must now begin the process of increasing awareness of the frequency of negative thoughts associated with pain or negative mood. Clarify to Veterans that since many of these thoughts happen without conscious awareness, this initial process requires some effort. Knowing *when* to look for the ANTs is an important part of this process. While they may occur at any time, they are most likely to occur during situations that are stressful, painful, or a combination of the two. The questions below can also help in identifying ANTs in situations where Veterans have noticed higher levels of negative mood, stress, or pain.

- *What was going through my mind just before or just after I started to feel this way?*
- *What is the thing I am most afraid might happen?*
- *What is the worst thing that could happen?*
- *What memories does this lead me to experience?*
- *What does this mean about my future, my life, my health?*

Consider the following exchange between Reggie and his therapist regarding cognitive coping:

Therapist: What do you think about recognizing ANTs?  
Reggie: I hear what you're saying. But, it sounds difficult because I have so many thoughts. How do I know which ones to focus on?  
Therapist: When you notice yourself experiencing a negative emotion – you feel angry, depressed, anxious, or annoyed, that is a sign to pay attention to your thoughts. Can you think of an example of when you had a negative feeling?  
Reggie: Yeah, I was in PT and I got upset because the therapist was asking me to do things that hurt.  
Therapist: What was the emotion that you experienced?  
Reggie: I was angry.  
Therapist: And what were your thoughts?  
Reggie: That my pain was getting worse instead of better and that they didn't understand me.  
Therapist: And what did you do?  
Reggie: I stopped going to PT.  
Therapist: From this example, we can understand an *automatic negative thought* (“My pain is getting worse instead of better.”) that was associated with a *negative emotion* (anger), and the *behavior* that followed (not returning to PT). The next time you feel anger, take that as your cue to pay attention to your thoughts. Later we will work on how you might think about this situation differently.

Explain to Veterans that the first step in improving thoughts is to increase recognition of those that are unhealthy or inaccurate. They need to recognize ANTs in order to “catch” them. Once they are able to do this, patients will learn to replace them with more balanced, realistic thoughts (Session 9). Introduce the Catching ANTs Worksheet and review the columns of the thought record. For practice this week, Veterans will only focus on “catching” or recognizing negative thoughts and determine

if they are helpful or harmful to pain and/or mood; the final column on how to challenge these thoughts will be explained in the next session. At least one example on the worksheet should be reviewed with Veterans during the session to ensure that they understand the types of thoughts and how to complete the worksheet.

## Practice

Encourage Veterans to review the Pain Thoughts Handout on their own to facilitate the understanding and identification of their own ANTs. Stress the importance of completing as many examples as possible on the Catching ANTs Worksheet. The goal is to increase Veterans' awareness of their own thoughts and to catch as many ANTs as possible. Once they identify thoughts, circling whether it had a helpful/positive or harmful/negative effect on their pain and/or mood will help to connect the important role of thoughts in pain management. Patients should begin to note consistencies in their thought patterns that lead to negative emotions or increased pain.

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## Session 9: Cognitive Coping 2

Now that Veterans have been asked to monitor their negative thoughts and have increased their awareness of such thoughts' power and prevalence, Session 9 highlights how to make adaptations to unhealthy, inaccurate thoughts. As this session focuses on ways to challenge ANTs, it may be helpful at session initiation to remind Veterans that since they can *choose* the way that they think about and react to experiences, they are empowered to help determine the course of each day.

### Session 9 Agenda

✓	Administer SUDS.
✓	Establish agenda.
✓	Review Session 8.
✓	Present Session 9 content: Challenging negative thoughts.
✓	Discuss home practice.

### Session 9 Materials

- Catching ANTs Worksheet
- Coping Statements Checklist

### Challenging Negative Thoughts

Briefly discuss Session 8 with Veterans and inquire about the process of identifying and evaluating ANTs. Ask about the types of thoughts they noticed and if they were surprised at the frequency. In addition, discuss any impact that their negative thoughts had on pain experiences or moods, as well as any barriers encountered in the process. If they did not arrive at session with the home practice completed, inquire about why. Since it is important for Veterans to have some experience in recognizing ANTs and considering their impact, complete two retrospective examples in session together. This important session focuses on the task of challenging ANTs and trying to help Veterans minimize their occurrence and impact in the future.

Using the same Catching ANTs thought record introduced in Session 8, explore how these negative thoughts can be challenged. The idea is not to generate happy, unrealistic thoughts but to create a more balanced, accurate way of looking at experiences. After identifying an ANT, Veterans are encouraged to weigh the evidence that supports and does not support the cognition. This promotes a more realistic and healthy way to interpret the world.

## TALKING TIPS: *Challenging Negative Thoughts*

Once you notice an ANT, pause to consider the cognition. Challenge the negative thought by trying to collect the facts. Ask questions such as:

- Is this 100% true?
- Is there a different way to look at this issue?
- What would I tell a close friend if they had this thought?
- Is this thought helpful to me?
- Is there evidence that I am not taking into account?

When you answer these questions, you have a more balanced and realistic view of the situation. Replacing unhealthy thoughts with more accurate ones will help you cope better and allow you to practice more effective pain management.

During the session, use at least two examples provided by the Veteran to complete the *Challenge It* column on the worksheet. Review the full thought record and determine if participants understand the process and rationale. It may be helpful to remind them that while it is understandable to have pain-related ANTs, they often lead to increased pain and reinforce the maladaptive cycle CBT-CP is helping Veterans change.

The following is an example of an exchange between Juan and his therapist regarding recognizing and replacing maladaptive thoughts:

- Therapist: To understand the concept of replacing thoughts that are not helpful with ones that are more helpful, it's useful to use an example from your life. I recall us having a conversation that could be used to do this. Let's break down the *situation* you discussed previously, in which you were changing a tire with your father and experienced extreme pain. What were the *thoughts* that went through your head?
- Juan: I remember thinking, "My back is broken. I can't cope with this."
- Therapist: And what *emotions* did you experience?
- Juan: I initially felt scared when I thought I broke my back. When I realized I hadn't, I got down thinking that I am too young to have pain like this and I can't cope. I felt depressed.
- Therapist: So then it sounds like you would say these thoughts were *harmful* or not helpful and made your mood worse?
- Juan: Definitely. I felt down the whole day and stayed in my room. Not doing anything probably made my pain worse too.
- Therapist: Can you think of a more *balanced thought or coping statement* to replace the ANT of "I can't cope with this?"
- Juan: I guess a more accurate one would be, "I've been through pain increases like this before, I just need to focus on something else until it passes."
- Therapist: That is a very good way to re-frame your thought into something more accurate and positive. From the example you provided, we can see how replacing an unhelpful thought could have helped avoid some of the increased pain and depressed mood that you experienced.

## Coping Statements

Completing the process of identifying and challenging ANTs is beneficial in understanding the cognitive processes that influence mood and pain. Another technique that can also be helpful in managing pain flare-ups or negative mood is to use positive coping statements. Evidence suggests that those who use positive coping statements tolerate pain more effectively than those who use catastrophizing statements (Roditi, Robinson, & Litwins, 2009). The ideal coping statement helps patients remain calm during stressful situations. Coping statements provide "go-to" phrases that can replace unhealthy thoughts or help Veterans 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 Veteran. The Coping Statements Checklist helps Veterans 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 such as a 3x5 card that has been cut in half and can be kept in a wallet. For those who use a smart phone, a coping statement note can be created that contains helpful phrases. A similar document could be kept in a journal or on a computer/tablet for use at home as well, but having statements ready at all times is ideal.

Consider the following discussion about replacing negative thoughts with Coping Statements:

Sheila: I've been in therapy a long time for my depression and PTSD. I've learned about CBT and replacing negative thoughts. But, my thoughts about pain are harder for me. They're true. I AM in pain. The pain IS awful.

Therapist: Those thoughts may be true. But, does thinking about how much pain you're in or focusing on how awful your pain is help you cope with the pain?

Sheila: No.

Therapist: The goal is to recognize thoughts that are not helpful and replace them with ones that are helpful. Here is a list of example coping statements. Read this list and tell me which ones stand out to you.

Sheila: I like "I just have to make it through this moment." Some days I wake up and feel overwhelmed thinking about how I'm going to make it through the day, which makes it hard to even get out of bed. If I focus on making it through each moment rather than getting through the whole day, I think that would be easier.

Therapist: Great. What are your thoughts about using coping statements as one way to help you get through bad pain days?

Sheila: I think that when I am lying in bed in pain, it's hard to think about anything else.

Therapist: And that's why we have this list for reference and as a reminder. Some people find it helpful to keep a list of coping statements on the refrigerator or in their phone. Where do you think would be a good place for you to keep them so that you would use them?

Sheila: I sleep with my phone by my bed. I can set an alert for the mornings so that when I wake up I get a reminder that "I just have to make it through this moment."

## Practice

Veterans should continue to add personal examples to the Catching ANTs Worksheet, including positive/balanced statements to challenge ANTs. In addition, using the Coping Statements Checklist ask that they identify several statements that they find calming and reassuring which can be used before the next session.

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## Session 10: Sleep

Sleep is among the most common complaints voiced by individuals with chronic pain (Turk et al., 2008), and the relationship between sleep and pain is complex. The presence of pain may make falling and staying asleep more difficult and disturbed, and insufficient sleep may increase next day pain. Furthermore, chronic pain may "lighten" sleep and prolong return to sleep following awakenings (Harman et al., 2002). Session 10 reviews the relationship between pain and sleep and explores approaches for improving sleep among those with chronic pain. The Insomnia Severity Index (ISI) will be administered to determine whether clinical insomnia is present (i.e., score over 14), indicating that an additional treatment referral is needed.

## Session 10 Agenda

✓	Administer SUDS and ISI.
✓	Establish agenda.
✓	Review Session 9.
✓	Present Session 10 content: Chronic pain and sleep education and approaches.
✓	Discuss home practice.

## Session 10 Materials

- Insomnia Severity Index
- Sleep Hygiene Checklist
- Sleep Behavior Change Log

## Pain-Sleep Interaction

Sleep provides an opportunity for the body to repair itself physically and mentally. Sleeplessness can increase pain sensitivity within the body (Affleck, Urrows, Tennen, Higgins, & Abeles, 1996) and reduce the effectiveness of the body's normal reparative processes. Restorative sleep, on the other hand, can reduce pain sensitivity and assist in tissue replenishment and growth (Onen, Alloui, Gross, Eschallier, & Dubray, 2001). Unfortunately, those with chronic pain frequently struggle with obtaining quality sleep for several reasons. First, pain flare-ups that occur during the day and extend into the night may contribute to difficulties falling asleep while the sharp burst of pain associated with muscle spasms during the night may wake a sleeper. Moderate chronic pain, however, does not typically cause awakenings (Kelly, Blake, Power, O'Keeffe, & Fullen, 2012). Poor sleep can cause effects such as:

Low energy/increased fatigue

Muscle tenderness

Irritability

Decreased daytime activity and performance

Difficulty with concentration

Sleep interfering behaviors associated with chronic pain are less well known to Veterans. The next section identifies a number of factors and behaviors that are common to individuals with chronic pain and that impact sleep. Behaviors that may improve sleep are also reviewed. Helping patients to minimize the impact of sleep interfering behaviors may increase their understanding of these problems and may be helpful in improving sleep. In addition, a few important behaviors less related to pain that could improve sleep, including the use of stimulus control, are discussed.

## Factors for Consideration

There are many things that may impact the quality of sleep Veterans get each night. While some of those are more easily changed than others, it is important to be aware of the factors that might be relevant when evaluating sleep issues. Discuss these factors, particularly the behavioral areas that Veterans recognize as impacting their sleep. The Sleep Hygiene Checklist highlights things that are helpful and harmful to sleep, while the Sleep Behavior Change Log will be used to target behaviors to modify following this session.

## Directly Impact Sleep

**Obstructive Sleep Apnea (OSA).** OSA is slightly more prevalent in patients with chronic pain (Menefee et al., 1998), which likely occurs for two reasons. First, the longer Veterans have chronic pain, the more likely they are to become sedentary and obese, increasing the risk for OSA. Second, some pain medications, such as muscle relaxants, can exacerbate OSA. Increasing evidence also points to an association with long-term opioid use and increased risk of sleep apnea (Yue & Guilleminault, 2010).

**Medications.** Patients with chronic pain often take medications that impact sleep. These include, pain medications, antidepressants, hypnotics, and anticonvulsants. Some of these medications may disrupt sleep by increasing arousal or by potentially contributing to OSA (Lu, Budhiraja, & Parthasarathy, 2005). The possibility of medication effects need to be considered carefully when assessing the treatment plan for Veterans with chronic pain.

**Bed and Pillows.** Musculoskeletal pain may worsen in certain sleeping positions, so it is particularly important for those with pain to use a comfortable mattress, the right pillow for the head, and extra pillows for correct propping. While this alone is not likely to correct sleep problems, it may reduce them.

**Traumatic Brain Injury (TBI).** Chronic pain associated with TBI is often accompanied with higher than normal comorbid sleep disorders such as OSA and narcolepsy (Verma, Anand, & Verma, 2007). Because of the inherent complexities, a full evaluation by a sleep specialist is often indicated.

## Indirectly Impact Sleep

**Daytime Bed Use.** Use of the bed during the day is common for patients with chronic pain and can negatively influence sleep in several ways. Using the bed as a place to rest when experiencing a painful episode can create an association between the bed and suffering. Spending time resting in bed during the day increases the chances of falling asleep. Napping weakens the drive to sleep, making it more difficult to fall asleep at a normal bedtime.

**Daytime Activity.** Increasing activity during the day can help sleep by increasing nighttime tiredness. It is recommended, however, that intense exercise not occur within four hours of bedtime as that can negatively impact sleep due to increased body temperature. In addition, it is very important for sleep that pacing techniques be used. Pacing activities can help avoid pain flare-ups, one of the most frequent impediments to sleep for those with chronic pain.

**Opioid Medications.** Opioid medications can cause drowsiness making falling asleep easier but they may also exert a negative impact on sleep cycles (Shaw, Lavigne, Mayer, & Choiniere, 2005) making it difficult to achieve deep, restorative sleep.

**Alcoholic Beverages.** Alcoholic beverages ingested near bedtime may induce drowsiness and a sense of relaxation but later in the night, the metabolism of alcohol leads to physiological restlessness and disturbed sleep.

**Caffeine.** Caffeine is a long-acting stimulant that remains in the body for up to 10 hours after ingestion. It is recommended that individuals with difficulty sleeping avoid any caffeine (e.g., coffee, energy drinks, soft drinks) after lunch.

**Nicotine.** Nicotine remains in the body for about 2 hours, at which point individuals will experience withdrawal effects and potential agitation. While smoking may feel relaxing, nicotine only relieves symptoms of withdrawal. It is recommended that nicotine be avoided within 2 hours of bedtime and that Veterans do not get up and have a cigarette when they are having difficulty sleeping or awaken during the night.

**Eating and Drinking.** Heavy meals before bedtime can induce indigestion or acid reflux, which increase alertness and impair sleep. In addition, the process of falling asleep slows down digestion so nothing more than a light snack is recommended in the hours prior to sleep initiation. Furthermore, if Veterans frequently awaken during the night for urination, reducing liquid intake in the evening is also recommended.



**Schedule.** Setting a consistent bedtime and wake-time can be helpful for providing cues to the body for sleep. Waking at a consistent time, regardless of sleep quality or pain intensity, is among the most important behavioral recommendations to improve sleep (Krystal & Edinger, 2010).

**Environment.** Environmental factors, such as room temperature, noise, light, and smells, can impact an individual’s ability to fall or stay asleep. It is recommended that the bedroom be a cool, dark, quiet place free from sensory distractions, such as blinking lights from computers and ticking clocks. For those who cannot avoid noise in their sleep environment or feel warm at night, it is recommended to turn on a fan for ambient noise and to circulate air.

**Emotional Issues.** Some pain patients may believe that sleep will not improve unless pain improves first, leading to resignation and hopelessness. Address these concerns with an action plan and emphasize that optimal sleep management is similar to pain management. Increase hope by encouraging Veterans to use skills and make helpful changes.

## Stimulus Control

Stimulus Control is an important component of CBT for insomnia (CBT-I) interventions. It is based upon the finding that individuals who spend excessive time in bed without sleep create negative associations around pre-sleep rituals or the bed environment, which results in bed-related distress. For example, Veterans may report being able to sleep easily in a recliner in front of the television, but “tossing and turning” once they are in bed. Some may even report sleeping better in a hotel bed. The goal of Stimulus Control is to establish a new, more positive association where the bed equates with sleepiness.

The stimulus control instructions below are designed to re-associate bedtime with the rapid onset of sleep and to establish a regular sleep-wake schedule that is consistent with the circadian sleep/wake cycle:

**Only go to bed when sleepy (not just fatigued or tired).**

**Use bed only for sleep and sex.**

**If unable to sleep after 20 minutes, get out of bed and return only when sleepy.**

**Wake at the same time every day.**

**Do not nap.**

Below is an example of Sheila and her therapist discussing stimulus control:

Therapist: Does my description of Stimulus Control sound at all familiar to you?

Sheila: Yeah, it does. It is really helpful to me, actually, because I can use it to talk with my boyfriend about why I get up at night and why I sleep easier on the couch than in our bed. He always thinks I get up because I am mad at him or something. Even if I am mad at him, it has nothing to do with why I get up.

Therapist: What do you think about the idea of getting up if you are unable to fall asleep for 20 minutes or so? Do you think it might be a challenge?

Sheila: Like I said, I do get up sometimes but mostly I just stay there tossing, turning, and getting upset about not sleeping. It just seems easier to stay in bed, even after I hear you say that may make my problems worse.

Therapist: I understand. The thought of getting out of a warm bed is not nice for any of us. But think of the costs of not getting up. You have been engaging in the same sleep behaviors for many years – how are they working?

Sheila: My sleep is horrible and I’m very frustrated. And I feel like I am more irritable because I’m not sleeping so it’s a cycle! I get what you are saying.

Therapist: Why don’t we make a plan – if you get up in the night because you can’t sleep, what will you do?

Sheila: I would go to the couch and pick up a book. Reading at night usually makes me feel sleepy. It's hard to keep my eyes open.

Therapist: That sounds great. I like how you mentioned your eyes getting tired. Sometimes it can be hard to figure out when we are ready to go to sleep, but your eyes being droopy is a good concrete sign. So that sounds like a plan – do you want to share it with anyone else?

Sheila: Yes, I need to talk to Tim and prepare him that I will be getting up more often. Explaining why I like to sleep on the couch instead of our bed might help him feel better too.

## Sleep Hygiene

Basic sleep hygiene principles should also be reviewed with Veterans using the Sleep Hygiene Checklist. Combining these tips with the principles of Stimulus Control is ideal.

### TALKING TIPS: *Sleep Hygiene*

Many Veterans with chronic pain also have problems with sleep. Some of the basic things associated with increasing your chances of having the best night of sleep possible are on this Sleep Hygiene Handout. I am going to highlight a few of these areas:

- Environment
  - Minimal noise, and appropriate light (dark at night, bright in the morning) and temperature (not too hot) are typically controllable factors that should be adjusted.
- Clock-Watching
  - Avoid watching the clock or counting down time.
  - Remember to get out of bed if you are unable to sleep.
- Stress
  - Worries may surface once the house is quiet and dark but this is not a good time to problem-solve.
  - Set aside time earlier in the day to focus on troubleshooting issues.
- Relaxation
  - Use relaxation techniques you have acquired to help reduce tension and initiate sleep – it is an ideal use of one of your new skills!

## Practice

Make sure that Veterans understand the concepts reviewed in Stimulus Control and the recommendations described on the Sleep Hygiene Checklist. Encourage them to review and reference the information regularly as a reminder of good sleep habits. Provide the Sleep Behavior Change Log, which can be used to identify specific elements of sleep behavior that they would like to change. On the log, Veterans identify behaviors to improve sleep and record use of these behaviors. Finally, if Veteran's score on the ISI is above 14, discuss a referral to a local CBT-I provider if available.

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## Session 11: Discharge Planning

This is the final regular session with Veterans. While many skills have been learned and implemented, completing a successful transition to self-management following the treatment is critical. 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 session focuses on developing a discharge plan, which includes anticipating obstacles that may arise including increases in pain. Finally, since all clinical measures must be completed again, it is recommended that Veterans arrive early to complete them before session or make plans to stay late to complete them after the session.

## Session 11 Agenda

✓	Veteran completes assessment measures.
✓	Establish agenda.
✓	Review Session 10.
✓	Present Session 11 content: Anticipating obstacles and discharge planning.
✓	Review overall goals.

## Session 11 Materials

- All assessment measures except WAI-SR
- Anticipating Obstacles Worksheet
- Weekly Activities Schedule

## Review of Progress

Begin the session by reminding Veterans 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 over the course of the last few months. For example, highlighting that a Veteran is hardly using an assistive device anymore or that someone who barely left the house is socializing weekly can be helpful. Since change happened gradually, it may be easy for patients to lose sight of or minimize the benefits that engagement in CBT-CP has had. Obtain feedback from Veterans about areas where they feel they have made the most progress, and what has worked best for them. Inquiring about reactions from friends and family can also be reinforcing: “When I talk to my mom on the phone lately she says that I sound much more upbeat.”

Asking questions such as the following may facilitate discussion and help Veterans 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?*
- *Are you accomplishing more?*
- *Have you noticed a difference in your pain intensity? What about how you react to your pain?*

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

## Coping with Flare-Ups

Flare-ups are relatively short increases in usually stable pain intensity that may last from minutes to weeks. Continuing to institute CBT-CP by staying active, engaging in enjoyable activities, and getting restful sleep are the best way to minimize flare-ups; however, these spikes are expected for those with chronic pain. While they may be managed in part by medication, Veterans should be encouraged to prepare for these times and identify newly acquired skills that can be used to address flare-ups most effectively. Acknowledge that it is often difficult to use these tools when pain has increased, but stress that it is also the most important time to implement CBT-CP skills.

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.

## TALKING TIPS: *Anticipating Obstacles*

You have done a great job in learning and implementing CBT-CP skills. Since this is our last regular session and we will no longer be meeting weekly, it is helpful to anticipate any obstacles you believe may interfere with continuing to keep up with the skills you've learned.

- What do you think might get in the way of engaging in your skills as planned?
- What things have already sidetracked you through the course of treatment?
- How have you coped with difficult issues in the past, and how might you cope with them in the future?

It's important for us to openly discuss your fears so that you are prepared – remember the best offense is a good defense!

Use the Anticipating Obstacles Worksheet, to identify Veterans' triggers for pain increases.

Common triggers are:

- Emotional stress
- Weather changes
- Lack of sleep

When completing the handout, encourage Veterans 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.” 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 over the last 10 sessions. 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 managing each specific stressor can help make the exercise more realistic and implementation easier.

## Discharge Planning

Now Veterans 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 Veterans 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, to formulate an example of a typical week for Veterans. Add items such as walks, relaxation, hobbies, and other standard activities. Encourage them to think of each piece of the plan as an “appointment” that is not optional. Without this commitment to an identified and distinct structure, Veterans are more likely to fall back into a sedentary lifestyle where one day is difficult to discern from the next. In addition, a concrete schedule may help in ensuring follow-through and increasing feelings of accomplishment. It may be beneficial for Veterans to get a large whiteboard for home where the weekly calendar can be posted, and where each activity can be checked off as “completed” as the day progresses. Rewarding oneself for engaging in all scheduled activities for one week may be another incentive to stay the course.

Collaborate with Veterans to develop a plan for 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 negative habits. For example, if someone wants to avoid isolating from others, perhaps “Meeting my friend John at Java Hut for coffee” can be scheduled for every Tuesday morning. Noting specific distractions to help keep the Veterans' minds occupied such as “garden (if nice weather)/puzzles (if bad weather)” or “play with my dog” will help create a concrete plan for the future. It is important that the schedule is realistic, since making unreasonable plans will only make self-disappointment more likely if goals are not achieved.

## Goals

Following completion of the schedule, revisit objectives for the future. Explore goals that have been achieved throughout the course of treatment and how they may be expanded. For example, if the Veteran has begun meeting with friends once a week as a way to increase socialization, ask how that goal might change over the next 6 to 12 months. Veterans may want to increase the frequency of outings to twice per week, or join an organization like their local Elks Lodge. This is also the opportunity to develop new objectives. Perhaps now that the Veteran has largely overcome a fear of movement, finding and using a bicycle regularly is desired. If negative cognitions have kept Veterans from considering dating, they may now feel confident enough to begin exploring ways to meet others. Discuss what the individual Veteran is motivated to accomplish in the future, and tailor goals to meet specific interests and needs.

Here is an example of Juan discussing discharge planning with his therapist:

- Therapist: Early in treatment, you developed three individual goals:
1. increasing your ability to sit for periods of 30 minutes or more so that you can work,
  2. going out with friends at least once per week, and
  3. losing 20 lbs. by the end of the year. I'd like to discuss the progress you've made toward each of those. Let's start with the first one.
- Juan: The TENS unit has been helpful with prolonged sitting. I also plan to keep an eye on the clock and get up once an hour, walk around, and do some stretches to better pace myself. The next thing is to get an interview so I am going to speak with someone from Vocational Rehab about my job options.
- Therapist: Great. So do you feel like you've made progress toward that goal?
- Juan: Yes, it's still hard to sit for long periods of time, but I do feel I'm working "smarter not harder," as you've said.
- Therapist: How about your goal of going out with friends at least once per week?
- Juan: I've been doing better with that. I just tell myself that even if I don't want to go, I know I'll feel better afterwards if I do. Most of them work during the week, so I've found that hanging out on Saturday afternoons works well. I have it on my calendar!
- Therapist: And your goal of losing 20 lbs. by the end of the year?
- Juan: Well, I'm not quite there, but I've been doing the walking and the stretches and have actually lost about 6 lbs. so far. I plan to keep that up.
- Therapist: I'm really proud of you, Juan. You just mentioned that hanging out with friends is on your calendar. Can you tell me more about your plans for continuing with these skills? What else is on your calendar?
- Juan: Well, I have the times I get up and go to bed, take my medication, do walks and exercises, even look for a job on the computer.
- Therapist: That's excellent. Having a concrete plan is important for your continued ability to manage your pain and your mood.
- I noticed that, when discussing your calendar, you didn't mention sessions with your Clinical Social Worker. What are your thoughts about continuing with therapy for depression?
- Juan: I plan to see her.
- Therapist: I think that is important. Now that your pain is better managed, you may find that you are better able to focus on managing your depression.

## Practice

Provide positive feedback about all that has been accomplished so that Veterans leave feeling supported and confident. Assure them that even if obstacles or setbacks are encountered, they now have all of the tools necessary to manage their chronic pain. Remind them that they have the Anticipating Obstacles Worksheet as well as the Weekly Activities Schedule and should finish them if that was not completed in session. Stress the importance of scheduling activities each week to help ensure continuing benefit from what they have learned. Finally, discuss scheduling a booster session in four to six weeks to follow up with progress and challenges that occur following this session. It is important to make sure that the Veteran also knows what to do in the event of any significant crises that might arise prior to the booster session.

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## Session 12: Booster Session

In this session, the focus will be on Veterans' implementation of the CBT-CP skills since the final regular CBT-CP session. Overall mood, significant life events since the last contact, and current pain-related functioning should be assessed. The information gathered will aid in adapting the focus of the session to meet each Veteran's individual needs. Because of this, while each booster session will have certain underlying similarities, the specifics depend on the Veterans' presenting issues. Because of this, it is recommended that the therapist review all of the sessions prior to this meeting so that accessing the most relevant topics based on the Veteran's feedback is easy.

### Session 12 Agenda

✓	Administer SUDS.
✓	Discuss current functioning and progress.
✓	Review CBT-CP model.
✓	Troubleshooting: Present appropriate content.
✓	Discuss future plans.

### Session 12 Materials

- CBT-CP Model Handout
- Determine others during session

### Progress Update and Implementation

Begin by asking Veterans about their mood since the last therapy session four to six weeks ago. Attempt to gain an overall sense of mood and emotional state in the absence of weekly contact. If mood has been poor, additional time should be spent determining the root of issues with negative effect. If additional follow-up from a mental health provider is indicated but not established, take appropriate steps for follow-up (e.g., ensure that appointment is scheduled, enter new consult). If significant negative life events are reported, appropriate time and attention should be spent addressing the issues revealed.

While it is important to gain an understanding of the Veteran's overall wellbeing, the focus of the session should be how the CBT-CP tools have been implemented thus far. The following questions may be helpful in facilitating this discussion:

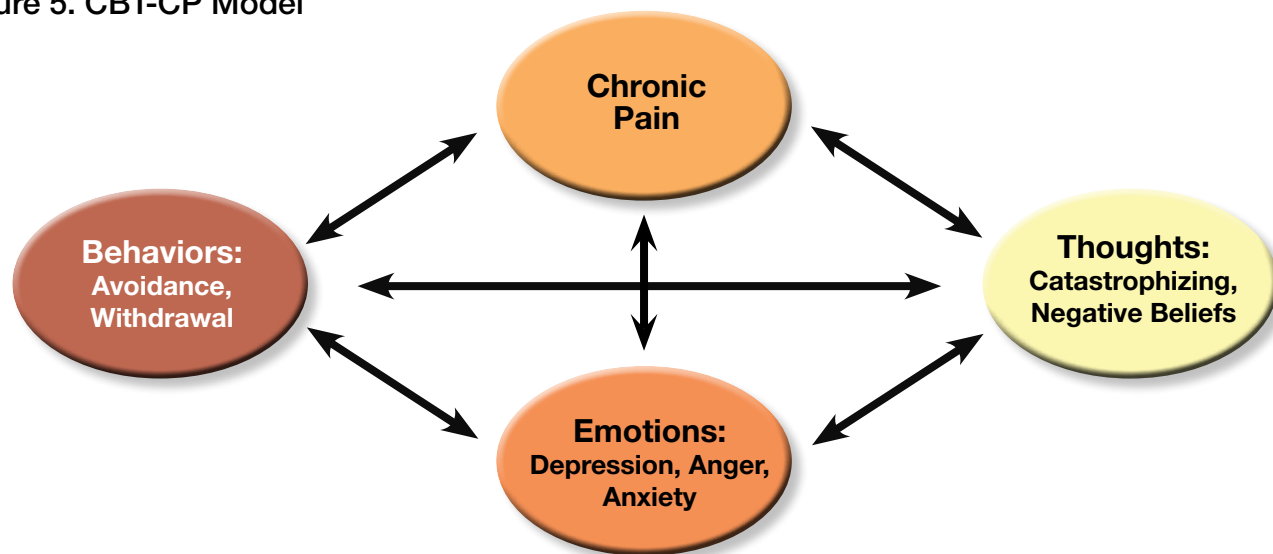
- *What has gone well?*
  - *Why have those things worked?*
- *What has not gone well?*
  - *What are the specific problems?*
- *What have been the biggest barriers in the implementation of the skills that you have learned?*
- *In the areas where you have been successful, why have you been successful?*

Based on the information provided, explore CBT-CP skills that can be applied and troubleshoot barriers to effective implementation. Urge Veterans to be honest regarding the obstacles that they have encountered so that an alternate plan can be developed.

### CBT-CP Model Refresher

Reviewing the CBT-CP model and the relationship between thoughts, feelings, and behaviors can provide an opportunity to identify issues that Veterans are having and reinforce any positive changes. Use the CBT-CP Model Handout (below) and other resources from Session 2 (Chronic Pain Cycle and Factors That Impact Pain) to review important variables and patterns. Focus on areas that are more salient based on the data gathered during the session. Use Veterans' own examples to illustrate what has gone well or not up to this point. For example, if the Veteran has reported several occasions of not attending family activities because of pain, discussing the dangers of avoidance and potential benefits of approach would be appropriate.

Figure 5. CBT-CP Model



In addition, review behavioral coping and positive coping strategies such as exercise, pacing, and relaxation versus options such as guarding, resting, and over-activity. When possible, use Veterans' personal examples of both adaptive and maladaptive responses to pain. If patients have reverted back to a low level of activity and have resumed resting and guarding for much of the day, discuss the dangers of avoidance as well as the benefits of using time-based pacing and engaging in regular, moderate activity. If one of the relaxation strategies has been implemented regularly, inquire about the specific times used and benefits obtained. Naturally, all adaptive techniques adopted should be commended and encouraged.

A common issue that arises at follow-up is the return to using automatic negative thoughts on a routine basis. The following dialogue with Sheila is an example:

Therapist: How have things been going with implementing the CBT-CP skills since I last saw you?  
Sheila: Things were going great when I was coming to see you and I thought I had a handle on it, but now everything is bad again.  
Therapist: In what ways?  
Sheila: I have been arguing more with my partner and he's putting pressure on me. My pain has gotten worse and now it's almost unbearable.  
Therapist: Have you continued to do any of the things to manage your pain that you learned in our sessions?  
Sheila: Well I was walking and swimming regularly but now I am back to spending most of my time on the couch. I do still use the relaxation breathing to help me deal with some of the emotional stress and that seems to help my pain. But I spend a lot of time thinking about how bad my life is and that I don't see it getting better.  
Therapist: It sounds like those automatic negative thoughts are a big factor in your low mood and avoidance of effective pain management tools. Let's review how we can stay aware of those ANTs and challenge them so they have less power.

If the Veteran presents an example of how ANTs have interfered in implementation of the program, use the Catching ANTs Worksheet to examine and evaluate cognitions, and develop more balanced and accurate thoughts.

## Future Plans

Since each person will have a different presentation at the time of the booster session, the therapist must skillfully choose the materials and feedback that will be most beneficial. Assessing Veterans' status during the meeting and determining the materials that are most appropriate can be challenging, particularly since there may be numerous issues that must be prioritized.

At the conclusion of the session, determine if another booster session is needed. Some individuals may be doing well and not need a second follow-up. Others may present with greater difficulties and benefit from another session. Decide what is most therapeutic based on the needs of the Veteran. If this is the last session, then the relationship is terminated. If there is a plan for one more session, then provide home practice. In either case, the treatment goal is for Veterans to be discharged with a sense that they have acquired the CBT-CP tools and must now continue on the journey of self-management.

## Conclusion

This is the first therapist manual focusing on the use of CBT-CP among the specific population of military Veterans. It is designed to serve as a training resource for therapists engaged in the VHA's CBT-CP Training Program as well as for others inside and outside of VHA who are interested in further developing their CBT skills for the treatment of those with chronic pain. This protocol is developed around a structured session format that facilitates the delivery of CBT-CP while using a collaborative approach to achieve individual treatment objectives.

It is hoped that this manual will be helpful for clinicians new to treating Veterans with chronic pain, and will also be a useful resource to those more experienced pain psychologists seeking to enhance their skills or access additional session materials. Use of CBT-CP allows for efficient and effective treatment of Veterans with chronic pain—this manual is dedicated to them.



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## CBT-CP CLINICAL INTERVIEW

Review Veteran's medical chart prior to first session to become familiar with all relevant information included in this form. Verify any information collected with the Veteran.

### PSYCHOSOCIAL INFORMATION

#### Marital Status (circle):

Single                      Widowed  
Married                    Divorced  
#yrs: \_\_\_\_\_        #times: \_\_\_\_\_  
Partnered:                Separated  
#mths/yrs: \_\_\_\_\_   #mths/yrs: \_\_\_\_\_

#### Children

Y   N  
#: \_\_\_\_\_ Age(s): \_\_\_\_\_

#### Resides

Alone                      Parents  
Spouse/Partner        Roommate  
Children                    Other: \_\_\_\_\_

#### Military Background (circle):

Branch: \_\_\_\_\_  
Years served: \_\_\_\_\_  
Specialty/Rank: \_\_\_\_\_  
Combat: Y   N  
Where/When: \_\_\_\_\_

#### Vocational Background

Employed Currently: Y   N  
If no, last worked: \_\_\_\_\_  
Occupation (past/present):  
\_\_\_\_\_  
Desire to return to work: Y   N

### PAIN INFORMATION

Measure pain using the 0-10 scale with '0' being no pain and '10' being the worst pain imaginable.

Current Pain Intensity: \_\_\_\_\_

Usual Pain Intensity (average in last week): \_\_\_\_\_

Worst Pain Intensity (in last week): \_\_\_\_\_

Least Pain Intensity (in last week): \_\_\_\_\_

#### Primary Pain Location (circle one only):

Abdomen	Elbow	Head/Headache
Ankle (R/L/BL)	Face	Hip (R/L/BL)
Arm (R/L/BL)	Foot (R/L/BL)	Knee (R/L/BL)
Back – Low	Generalized Joint	Leg (R/L/BL)
Mid	Generalized muscle	Neck
Upper	Groin	Shoulder (R/L/BL)
Buttocks	Hand (R/L/BL)	Wrist (R/L/BL)

Other(s): \_\_\_\_\_

Primary Pain Duration: date/year (if known) \_\_\_\_\_ years \_\_\_\_\_ months

Precipitating Event: \_\_\_\_\_



**Primary Pain Qualities** (circle all that apply):

- |             |          |           |
|-------------|----------|-----------|
| Aching      | Heavy    | Sore      |
| Burning/Hot | Numb     | Stabbing  |
| Cold        | Pressure | Tender    |
| Cramping    | Pinching | Throbbing |
| Dull        | Sharp    | Tight     |
| Electrical  | Shooting | Tingling  |

Other(s): \_\_\_\_\_

**Other Pain Locations** (circle all others):

- |                |                    |                   |
|----------------|--------------------|-------------------|
| Abdomen        | Elbow              | Head/Headache     |
| Ankle (R/L/BL) | Face               | Hip (R/L/BL)      |
| Arm (R/L/BL)   | Foot (R/L/BL)      | Knee (R/L/BL)     |
| Back – Low     | Generalized Joint  | Leg (R/L/BL)      |
| Mid            | Generalized muscle | Neck              |
| Upper          | Groin              | Shoulder (R/L/BL) |
| Buttocks       | Hand (R/L/BL)      | Wrist (R/L/BL)    |

Other(s): \_\_\_\_\_

**What makes your pain worse?** \_\_\_\_\_

**What provides some relief for your pain?** \_\_\_\_\_

**How do you cope with your pain?** \_\_\_\_\_

**How does pain impact your life?** (circle all that apply; provide details/examples):

- |                     |                    |             |
|---------------------|--------------------|-------------|
| Mobility            | Recreation         | Sleep       |
| -How? _____         | -How? _____        | -How? _____ |
| Mood                | Relationships      | Social      |
| -How? _____         | -How? _____        | -How? _____ |
| Physical Activities | Sexual Functioning | Work/School |
| -How? _____         | -How? _____        | -How? _____ |

Other(s): \_\_\_\_\_

**Provide information about current pain medications**

Pain Meds	Dosage	Pain Meds	Dosage

Provide information about treatments used currently or in the past

Previous pain treatments	Yes	No	Relief	Still using
Surgery				NA
Injections (e.g., ESI, blocks)				
Implanted Device (e.g., SCS)				
Physical Therapy				
TENS Unit				
Aquatic/Pool Therapy				
Headache Treatment (e.g., Botox)				
Biofeedback				
Pain-focused Psychotherapy				
Relaxation Techniques				
Chiropractic				
Acupuncture				
Other:				

Do you use ambulation aids (e.g., cane, rolling walker, wheelchair, powered chair/scooter): \_\_\_\_\_  
 \_\_\_\_\_

Describe a typical day: \_\_\_\_\_  
 \_\_\_\_\_

### MEDICAL INFORMATION

Acute medical concerns (e.g., chest pain, falls): \_\_\_\_\_

Medical history (e.g., COPD, DM, HTN, TBI, obesity, apnea?): \_\_\_\_\_  
 \_\_\_\_\_

### PSYCHIATRIC INFORMATION

Current Mood: \_\_\_\_\_

Psychiatric Symptoms: \_\_\_\_\_

Diagnoses: \_\_\_\_\_

Treatment: \_\_\_\_\_

Psychiatric Hospitalizations: \_\_\_\_\_

Suicidal/Homicidal History? Current Ideation/Plan/Intent? \_\_\_\_\_  
 \_\_\_\_\_

Psych Meds	Dosage	Psych Meds	Dosage

## SUBSTANCE USE INFORMATION

	Current		Past		Type/Quantity
	Yes	No	Yes	No	
Tobacco					
Alcohol					
Illicit Drugs					

Treatment history for substance abuse/dependence:

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## MENTAL STATUS

Appearance: \_\_\_\_\_

Mood: \_\_\_\_\_

Affect: \_\_\_\_\_

Pain Behaviors: \_\_\_\_\_

Eye contact: \_\_\_\_\_

Speech: \_\_\_\_\_

Thought Content/Process: \_\_\_\_\_

Perceptions: \_\_\_\_\_

Orientation/Cognition: \_\_\_\_\_

Insight/Judgment: \_\_\_\_\_

## CLINICAL IMPRESSIONS/COMMENTS:

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## PRIMARY CARE PROVIDER COMMUNICATION

Your patient has requested to be enrolled in Cognitive Behavioral Therapy for Chronic Pain (CBT-CP). This intervention involves helping Veterans better manage their chronic pain by learning more effective strategies for coping with pain and related issues.

CBT-CP is an evidence-based, time-limited intervention that teaches patients how to better manage chronic pain and improve overall quality of life. CBT-CP encourages patients to adopt an active, problem-solving approach to cope with the many challenges associated with chronic pain. Central components of the treatment include increasing and improving physical functioning, implementing routine use of relaxation techniques, and teaching methods to cope with negative thoughts that increase pain and dysfunction. Our intervention includes 12 sessions with the following structure:

1. Interview and Assessment
2. CBT-CP Orientation and Education
3. Goal Planning
4. Increasing Physical Activity and Time-based Pacing
5. Relaxation Training
6. Pleasant Activity Scheduling 1
7. Pleasant Activity Scheduling 2
8. Cognitive Coping 1
9. Cognitive Coping 2
10. Pain and Sleep
11. Discharge Planning and Coping with Flare-ups
12. Booster Session

One component of our intervention involves increasing physical activity. As the Veteran's primary care provider, we request your assistance in determining the physical activity that is appropriate for this Veteran. The standard activity in this protocol is a low intensity, graduated walking program. Based on your knowledge of the patient, please indicate your recommendation:

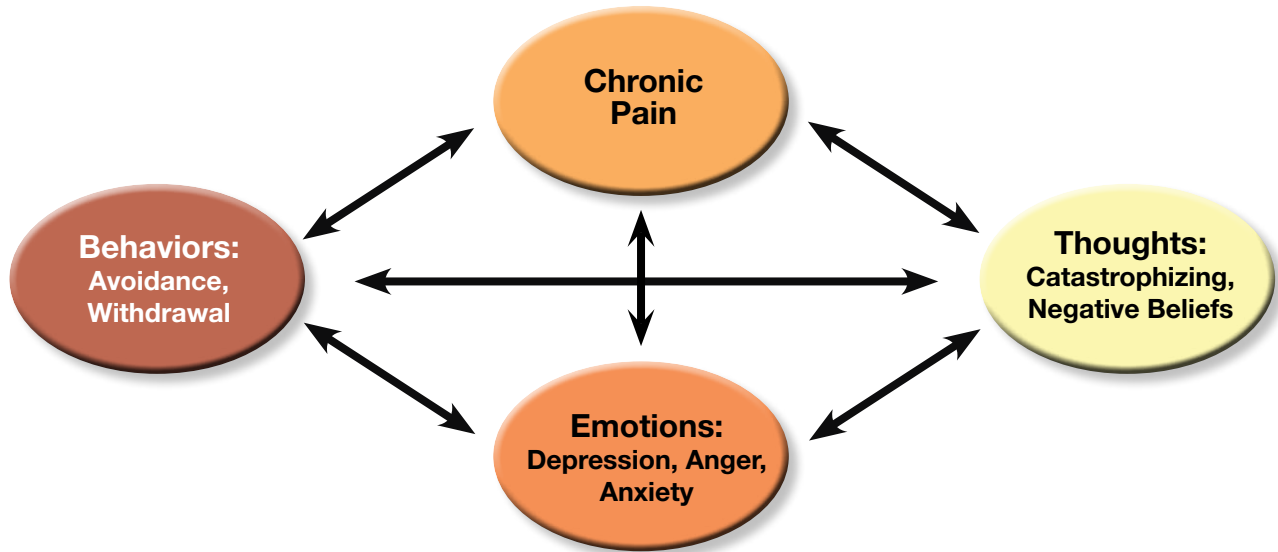
1. Walking Program: The walking program is very low intensity with the Veteran setting a reasonable walking goal with gradual increases.
  - a. *If a walking program is indicated, please note any restrictions.*
2. If you do not believe that a graduated walking program is safe or appropriate for this Veteran, please recommend an alternative activity such as use of pedicycle, pool therapy (if available), physical therapy, etc.
  - a. *If the recommended activity requires a consult, please place it as needed.*

We greatly appreciate your cooperation in helping this Veteran better self-manage chronic pain. At the conclusion of treatment I will provide you with an update on your patient's progress in this program.

## COGNITIVE BEHAVIORAL THERAPY for CHRONIC PAIN (CBT-CP)

Chronic pain may result in patterns of negative thoughts, feelings, and behaviors, which can, in turn, worsen the pain condition! The goal of CBT-CP is to target these maladaptive patterns in thinking and behaving so that alternative, more adaptive, pain coping skills can be learned. CBT-CP empowers individuals struggling with chronic pain to take an active approach to improving their functioning and addressing the negative impact of chronic pain on their lives.

### THE CBT-CP MODEL



#### Remember:

- Chronic pain can impact every part of your life
- CBT-CP allows you to make the necessary changes to get your life back

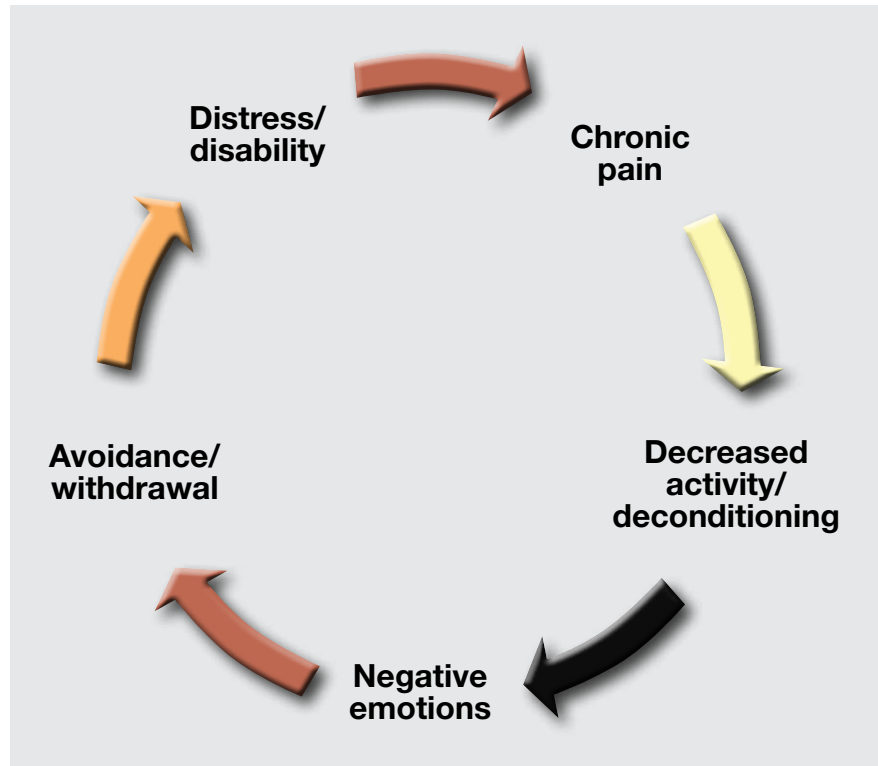
## THE CHRONIC PAIN CYCLE

Many 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 and friends
- Depressed mood or increased irritability
- Lower self-esteem
- Increased strain on relationships
- Decreased quality of life



### Remember: There's **HOPE**

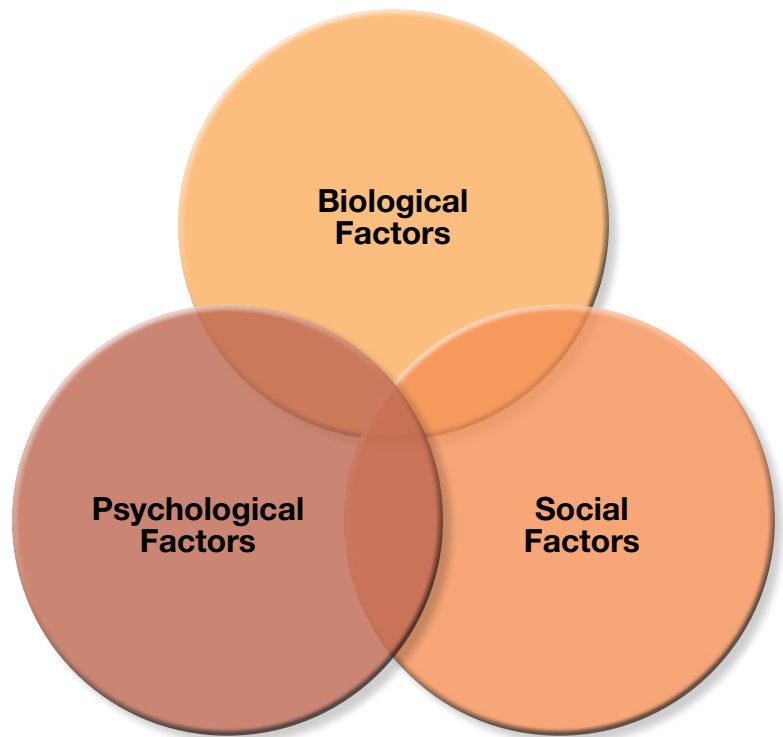
If we understand the cycle, that gives us the power to break it!

## 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:

- Biological
  - Pain, medical issues
- Psychological
  - Emotions, attention, thoughts
- 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
<i>Physical Factors</i>	
Degenerative changes	Physical therapy
Muscle tension	Relaxation techniques
<i>Thoughts</i>	
Catastrophizing	Having balanced thoughts
Focusing on pain	Using distraction to focus on other things
<i>Emotions</i>	
Depression or anger	Challenging negative thoughts
Stress/worry/anxiety	Exercise and relaxation techniques
<i>Behaviors</i>	
Under- or over-activity	Using pacing regularly
Lack of involvement in hobbies	Increasing pleasant activities
<i>Social Interactions</i>	
Social isolation	Positive time with family and/or friends
Lack of or too much support from others	Volunteering/community involvement

## SMART GOAL SETTING

A SMART goal is set using the following guidelines:

<b>Specific</b>	Identifies a specific action or event that will take place.
<b>Measurable</b>	Should be quantifiable (countable) so progress can be tracked.
<b>Achievable</b>	Should be attainable and realistic given resources.
<b>Relevant</b>	Should be personally meaningful.
<b>Time-Bound</b>	State the time period for accomplishing the goal.

*Adapted from Doran, 1981*

Short-term goals can be accomplished over the course of the CBT-CP sessions. 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 complete the CBT-CP program and improve your pain management skills.

### Short-Term Goals

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Long-term goals are those for the next 6-12 months, or perhaps even longer. Although they will not be accomplished fully during the CBT-CP course, they can be worked towards and are often our most important goals for the future so they can be an important motivator.

### Long-Term Goals

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_



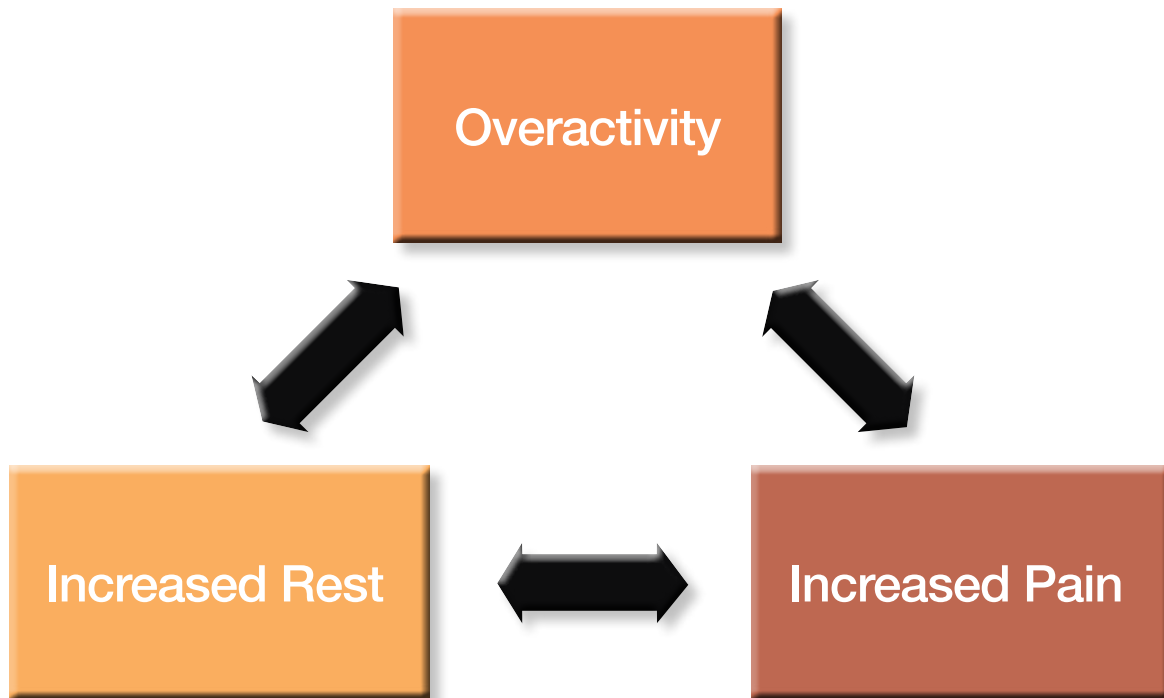
# WALKING LOG

With the help of your therapist, use the schedule to set realistic walking goals for the week, and record your actual time walked. Gradually increase the minutes and use proper body mechanics. Walking is a critical part of everyday life and the goal is to improve the ease and frequency of physical activity. **Remember:** Motion is lotion for your joints!

DAY	SAMPLE	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
MONDAY	Goal: 6 mins Actual: 6 mins	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
TUESDAY	Goal: 6 mins Actual: 7 mins	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
WEDNESDAY	Goal: 7 mins Actual: 7 mins	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
THURSDAY	Goal: OFF Actual: OFF	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
FRIDAY	Goal: 7 mins Actual: 7 mins	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
SATURDAY	Goal: 8 mins Actual: 9 mins	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:
SUNDAY	Goal: OFF Actual: OFF	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:	Goal: Actual:

## 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 and 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 and resting for 15 minutes for one cycle* of pacing.

	Sample	Activity 1	Activity 2	Activity 3
Activity	<i>Rake leaves</i>			
Active Goal	<i>10 minutes</i>			
Rest Goal	<i>15 minutes</i>			
Day 1	<i>10 / 15 (1)</i>			
Day 2	<i>10 / 15 (2)</i>			
Day 3	<i>10 / 15 (3)</i>			
Day 4	<i>15 / 15 (1)</i>			
Day 5	<i>15 / 15 (2)</i>			
Day 6	<i>15 / 15 (3)</i>			
Day 7	<i>20 / 15 (2)</i>			

## 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 normal, and your breathing is slow and deep. Learning how to relax can help especially when you feel pain. Relaxation prompts your body to release chemicals that reduce pain and produce a sense of well-being.

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*

- 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 10 relaxed breaths before bed or whenever you sit down to eat).
- 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*

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

##### *Concentrate*

- Eliminate disruptions. Turn off the TV, radio, or telephone. Practice in a quiet, calm, environment.
- Close your eyes to reduce distractions and improve concentration. If you prefer, keep your eyes open and focus on one spot.

- 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***

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

### ***Be patient***

- Give yourself time to learn relaxation skills. Practice is required for these techniques to become automatic.
- 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.
- Don't worry about how well you are practicing.
- 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***

- 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.
- 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

First, start by becoming aware of your breathing... Place one hand on your abdomen at the waistline 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)

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

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... 2, 3, 4... and slowly exhale... 2, 3, 4. Let any tension melt away as you relax more deeply with each breath... (PAUSE)

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.

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)

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

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.

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

Again, slowly take a breath in... 2, 3, 4... and slowly exhale... 2, 3, 4. Feel yourself become more and more relaxed with each exhale... (PAUSE 15 sec)

*(Skip if going on to other relaxation exercises)*

Now, as I count from 5 to 1, feel yourself become more alert... 5 bringing your attention to this room... 4 feeling calm and relaxed... 3 start to wiggle your fingers and toes... 2 slowly start to move and stretch your muscles... 1 open your eyes, feeling refreshed and rejuvenated.

## PROGRESSIVE MUSCLE RELAXATION

First, build up the tension in the **lower arms**, by making fists with your hands and pulling your fists up by bending the wrists. Feel the tension through the lower arms, wrists, fingers, knuckles, and hands. Focus on the tension... (PAUSE 5 sec)

Now release the tension. Let your hands and lower arms relax onto the chair or bed beside you. Focus your attention on the relaxing sensations in your hands and arms. Feel the release from tension as you relax the muscles fully, feel it get warm... (PAUSE 10 sec)

Now build up the tension in the **upper arms** by pulling the arms back and in toward your sides. Feel the tension in the back of the arms and radiating towards the shoulders and into the back. Focus on the tension. Hold this tension... (PAUSE 5 sec)

Now, release the arms and let them relax – almost feeling heavy at your sides. Notice the difference between the prior feelings of tension and the new feelings of relaxation. Your arms might feel heavy, warm, and relaxed... (PAUSE 10 sec)

Now bring your attention to your **lower legs**. Build up the tension by flexing your feet and pulling your toes toward your upper body. Feel the tension as it spreads through your feet, ankles, shins, and calves. Hold this tension... (PAUSE 5 sec)

And release all of the tension in your lower legs. Let your legs relax onto the chair or bed. Feel the difference in these muscles as they relax. Feel the release from tension, the sense of comfort, the heaviness of relaxation... (PAUSE 10 sec)

Build up the tension in your **upper legs and buttocks** by pressing your knees together and lifting the legs slightly off of the bed or chair. Focus on the tightness through the front of your thighs and buttocks. Hold this tension... (PAUSE 5 sec)

Now release all of the tension in your upper legs. Let your legs sink heavily into the chair or bed. Let all of the tension disappear as your legs sink heavier into the chair or bed. Focus on the feeling of relaxation and comfort... (PAUSE 10 sec)

Build up the tension in your abdomen by pulling your **abdomen** in toward your spine, very tightly. Feel the tightness and focus on this tension... (PAUSE 5 sec)

Now let the tension in the abdomen relax... Notice how smooth and calm your breathing has become. Feel the comfort of relaxation... (PAUSE 10 sec)

Build up the tension in your **chest** by taking in a deep breath and holding it. Your chest is expanded and the muscles are stretched around your chest. Feel the tension in your front and your back... (PAUSE 3-5 sec)

Now, slowly let the air escape and resume normal breathing, letting air flow in and out smoothly and easily. Feel the difference in sensations as the muscles relax, compared to those of tension... (PAUSE 10 sec)

Build up the tension in your **neck and shoulders** by pulling your shoulder blades back and up towards your ears. Feel the tension around your shoulders, radiating into your neck and back. Hold this tension... (PAUSE 5 sec)

Now release the tension. Let your shoulders drop down, sinking further and further until they are completely relaxed. Notice the difference in the previous feelings of tension and the new feelings of relaxation. Enjoy these feelings... (PAUSE 10 sec)

Build up the tension in your **mouth, jaw and throat** by clenching your teeth and turning the corners of your mouth back into a forced smile. Hold. Feel the tightness... (PAUSE 5 sec)

Now, release the tension. Let your jaw drop down and the muscles around your throat and jaw relax. Notice the difference between the feelings of tension and the feelings of relaxation... (PAUSE 10 sec)

Now, build up the tension around your **eyes and lower forehead**, by squeezing your eyes tightly shut and pulling your eyebrows down... hold this tension (PAUSE 5 sec)

Now release all the tension in your eyes and lower forehead. Let the tension disappear from around your eyes. Feel your forehead and eyes smooth. Feel the difference as the muscles relax... (PAUSE 10 sec)

Build up the tension in your **upper forehead and scalp** by raising your eyebrows as high as possible. Feel the wrinkling and pulling across the forehead and top of the head. Hold this tension... (PAUSE 5 sec)

Now release all the tension in your forehead, letting the eyebrows gently rest down. Focus on the sensations of relaxation... (PAUSE 10 sec)

Your whole body is feeling relaxed and calm. Scan your body for any last bits of tension and if you notice any, let that tension go. Enjoy the feelings of relaxation...

As I count from 1 to 5, feel yourself become more and more relaxed... 1 ... let all tension leave your body... 2 ... sinking further and further into relaxation... 3 ... feel more and more relaxed... 4 ... feel very relaxed... 5 ...deeply relaxed... (PAUSE 30 sec)

As you spend a few minutes in this relaxed state, think about your breathing. Feel the cool air as you breathe in and the warm air as you breathe out. Your breathing is smooth and regular. Every time you breathe out, think to yourself “relax... relax ... relax”... you are feeling comfortable and relaxed... (PAUSE 1-3 min)

*(Skip if going on to other relaxation exercises)*

Now, as I count from 5 to 1, feel yourself become more alert... 5, bringing your attention to this room... 4, feeling calm and relaxed... 3, start to wiggle your fingers and toes... 2, slowly start to move and stretch your muscles... 1, open your eyes, feeling refreshed and rejuvenated.



## GUIDED IMAGERY

Imagine yourself walking slowly down a path toward your special place. This path can be inside or outside. The path is comforting and peaceful. As you walk down this path, imagine all of your stresses, worries, and tension are leaving you. Enjoy this journey to your special place.

As you walk down this path, notice the ground beneath you...how it feels as you walk. Notice the sounds...the comfortable temperature of the air. Take a breath in, feeling all your tension leave you as you exhale. Notice any fragrance that may be here. Notice the view around you. Reach out and touch something around you. Feel its textures...

You feel calm and safe. All your worries and anxieties being left behind as you move toward your special place...  
(PAUSE 30 sec)

Walk down this path until you arrive at your own special place...and when you have reached this special place, go ahead and enter... (PAUSE 10 sec)

You have arrived at this relaxing and peaceful place. Notice the ground underneath you... whether it is hard or soft. Notice how the ground feels below your feet. Listen to the sounds in this place, both close and distant. Smell the air, the fragrances. Notice the temperature of the air around you.

Look above you... Notice the colors and sights above you. Look out into the distance... as far as you can see... Take in all of the sights, fragrances, and sounds around you.

Reach out and touch something in this place... Notice it's texture and how it feels against your skin. Notice the different objects around you... their shapes, textures, and colors. Notice the light and shade of this place and how it reflects off of these objects.

There is a comfortable place for you to sit or lie here as you take in all the smells, sounds, sights, and textures... As you sit or lie in this place, away from it all, you feel calm and secure, refreshed and renewed, strong and at peace. As you enjoy this place for a few minutes, you know that you can come here whenever you please, and that this place will always be waiting for you...  
(PAUSE 3-5 min)

Now it's time to come back... leave by the same way you came, enjoying the path... and as you return on this path, you start to also notice the room in which you are sitting... start to wiggle your fingers and toes... and when you are ready, slowly open your eyes and stretch your muscles.

## 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 sessions before you notice improvement.

0            1            2            3            4            5            6            7            8            9            10

Totally            Very            Slightly            Slightly            Moderately            Extremely

Relaxed            Relaxed            Relaxed            Tense            Tense            Tense

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

## 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
- Video chat with friends
- 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 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
- Go outside and feel the sun
- 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?

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

## PLEASANT ACTIVITIES SCHEDULE

**Instructions:**

1. Choose at least two pleasant activities that can be scheduled over the course of the week.
2. Place an "X" on each day that the activity was accomplished.
3. Remember to use proper pacing when engaging in activities.

Activity	Sun	Mon	Tues	Wed	Thu	Fri	Sat
<i>Gardening</i>		X		X		X	

## 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 worsen 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, more 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 Harmful	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 Harmful	
		Helpful or Harmful	
		Helpful or Harmful	
		Helpful or Harmful	
		Helpful or Harmful	
		Helpful or Harmful	

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

## 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 when you have them. Then you can replace unhelpful thoughts with ones that are more helpful.

Here are some examples of unhelpful pain thoughts and some coping statements that you can use to replace them:

### Common Pain Thoughts

Types of Unhelpful Thoughts	Examples of Unhelpful Thoughts	Examples of Helpful Thoughts
<b>Catastrophizing:</b> 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.
<b>Should Statements:</b> 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.
<b>All or None Thinking:</b> 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.
<b>Overgeneralization:</b> 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.
<b>Jumping to Conclusions:</b> 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.
<b>Emotional Reasoning:</b> 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.
<b>Disqualifying the Positive:</b> 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*

## COPING STATEMENTS

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 just have to stay focused on the positives.
	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 <i>can</i> do, not what I can’t do.

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

### Remember:

It’s easy to think of positive 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).

## SLEEP HYGIENE:

### How to Sleep Better

Good sleep is influenced by many factors. Below is a review of things that are known to make sleep worse and better. Consider changes that you can make to improve your sleep.

#### Things That Make Sleep Worse

- Napping during the day
- Consuming caffeine such as coffee, tea, soda, energy drinks, and even chocolate
  - How many drinks with caffeine do you have each day and what size are they?
  - When do you drink caffeine? It is best to not consume after 2 p.m.
  - Remember that some headache medications contain caffeine
- Consuming alcohol or nicotine within 2 hours of bedtime
- Watching television or using a laptop/tablet in bed/before bedtime
- Eating a heavy meal within 3 hours of sleep
  - Light snack is acceptable, do not want to go to sleep hungry
- Staying in bed even when you can't fall asleep
  - If you are not asleep after 20-30 minutes, get out of bed and do something relaxing until you are ready to sleep (e.g., reading, calming music)

#### Things That Make Sleep Better

- Exercising and engaging in physical activities regularly
  - It is best not to exercise within 3 hours of bedtime
- Having a regular routine
  - Go to sleep and wake up around the same time each night
  - Using relaxation techniques (e.g., deep breathing, guided imagery)
  - Take a warm bath or shower 2-3 hours before bedtime
- Setting aside a scheduled time for 'worry' each day
  - Write down any issues that are bothering or concerning you at least 2 hours before bedtime
  - If you begin to think of these things in bed, remember that you have spent time on them already and that you will leave them behind until tomorrow
- Making your bedroom comfortable
  - Keep room dark and cool
  - Have extra pillows and/or soothing smells
- Using the bed only for sleep and sex

Breaking bad sleep habits and adopting better ones can have a positive impact on the quality of your sleep.

#### **Remember:**

Making even small changes can make a big difference!



# SLEEP BEHAVIOR CHANGE LOG

**Instructions:**

1. Choose 1 to 4 Sleep Behaviors you want to modify and indicate in column labeled “Sleep Behaviors.”
2. Each night you successfully engage in the sleep behavior mark an “X” in the square.
3. Note the impact that the change(s) had on your sleep.

Sleep Behavior	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sample: <i>Go to bed at 10p.m.</i>	X		X		X	X	
#1							
#2							
#3							
#4							
<b>Impact on Sleep:</b> “I” = Improved “NC” = No Change “W” = Worse	<i>W</i>		<i>NC</i>		<i>I</i>	<i>I</i>	

## 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 VA 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 a.m.							
8:00							
9:00							
10:00							
11:00							
12:00 p.m.							
1:00							
2:00							
3:00							
4:00							
5:00							
Evening							

