

**OREGON STATE HOSPITAL
Group Therapy Program Plan**

Group Name: Skills for living with pain
Department: Tx Services/OT
Clinical Group Type: Occupational Therapy
Treatment Category: Health and Wellness; mental wellness; emotional wellness
Seat Limit: 6

Composer Angie Williamson, OTS (Fall 2021 Intern)
Date Last Updated & Approved by Discipline Director: [Click or tap here to enter text.](#)

Purpose and Overview of Group: The purpose of this group is to promote nonpharmacological ways of addressing pain while exploring and building coping skills for living with chronic pain, pain-related stress, mental/emotional pain, and a psychiatric diagnosis. This group explores distraction and relaxation techniques including self-soothing sensory strategies, mindfulness/meditation, and self-massage as possible coping methods for managing pain. Due to a range of learning abilities, attention, and memory among Springs clients a modular approach is best suited to support client involvement. Each session focuses on active activities over verbal/written education. The program is designed for use on Springs unit during COVID-19 pandemic and may be started at any point, based on the preferences/needs of clientele. This group protocol draws from previous Pain Management group protocols at OSH and combines aspects of these groups to provide engaging and meaningful content for Springs clients.

Goals, Fidelity and Outcome Measures:

Does this treatment intervention have a fidelity scale?

YES (Please attach) NO

Does this treatment intervention have an outcome measurement (e.g. pre/post-test)?

YES (Wong-Baker Faces Pain Scale) NO

Goals and Outcome Measures written in **SMART** format
(Specific, Measurable, Attainable, Realistic, Timely)

Goals/Objectives:

1. By the end of each session, clients will trial at least one method for managing pain and report/discuss its effectiveness with the group.
2. During each session, clients will describe their current level of pain using various pain scales before and after group activity.
3. By the end of six weeks, clients will identify 2-3 non-pharmacological pain management techniques that they can use independently or with assistance.

4. By the end of each session clients will report a reduction in pain on a scale of 1 to 10 by rating pain before and after activity.
5. By the end of each session clients will share at least once during discussions.
6. By the end of each session clients will identify an aspect of the pain cycle that the activity of the day addresses.
7. For clients using the pain log, by the end of the month clients will identify 2-3 new or novel pain management techniques to use independently.
8. For clients using the pain log, by the end of the month clients will document a reduction in overall experiences of pain, either by intensity or frequency.

Essential Elements of Treatment Intervention:

Does this treatment follow a workbook/manual?

YES (Please attach/link) NO

- **Structure:** – requirements for this intervention:

1. Leader qualifications: **Occupational therapy background (OTR or OTS)**
2. Co-leader qualifications/requirements: **n/a**
3. Group frequency: **1-2x/week**
4. Group duration: **6 weeks**
5. Group rules/guidelines: **(1) Respect one another (2) Respect each other’s ideas and experiences (3) Use “I” statements (4) Make sure everyone has a chance to speak** (list any required rules that will be shared with group participants at each group)
6. Participant referral criteria: **Voluntary participation, group provided on unit. Treatment team may refer, client can self-initiative participation based on desiring/needing coping skills regarding pain management techniques. Client must be willing to demonstrate safe behavior during group, follow verbal directions, and attend group for 45 minutes. Recommended ALS-5 score of 4.0 or higher. Clients who express pain with functional and daily activity, as well as those with a history of opioid addiction, may benefit from this group. Participants may experience chronic or acute pain, or emotional/psychological pain. The nature of this particular pain management program focuses on the interconnected client factors that influence the experience of pain, therefore all individuals who experience quantifiable pain (using the Wong-Barker FACES pain scale) may participate.**
7. Supplies/specific treatment room space needed for group (list hospital approved supplies and attach links of where to find/order them): **squeeze/resistance balls, exercise bands, rocking chair, weighted bean-bags and lap covers, sour and sweet candies, Jelly-Belly jellybeans, aromatherapy supplies (cannisters, cotton balls, oils), laptop and HDMI cable for video viewing, printer and paper for handouts, common room with a TV, audio splitter for headphones, extra headphones for clients without their own, beanbags or soft 1 lb. hand weights.**

- **Process/Sequence of Program:**

Sequential Groups

Treatment is provided in a series of groups designed to be delivered one after another; and for people to attend each group in this sequence to best reach stated goals/outcomes. Sequential attendance is recommended as it provides opportunity for better outcomes. Optimal skill acquisition in any one group session is dependent upon first completing the previous group session(s).

Modular Groups

Treatment is provided in self-contained functional units [modules] that connect with other units, but do not rely on those other units for successful achievement of stated goals/outcomes. May start attending groups at any stage and still reach stated goals/outcomes. Skills taught in each group session are attainable WITHOUT first attending the previous group session(s).

Itinerary of groups:

(Full curriculum found in I-Drive)

Session Layout:

Opening Discussion (5-10 minutes)

- Introduce quote of the day
- Wong-Baker FACES Pain Rating Scale
- Review Pain cycle

Introduction to activity (5-10 minutes)

- Group leader introduces topic and includes evidence base
- Identify the purpose of the activity
- Introductory YouTube video (if on session plan outline)
- Group discussion: Typical prompt, “So how do you envision this affecting pain?” or “What type of pain might his help?”

Activity (10-20 minutes)

- Lead clients through activity

Discussion/De-brief (10-15 minutes)

- Rate pain using Wong-Baker FACES Pain Rating Scale
- Discuss experience with activity.
 - o What did you feel?
 - o How is your pain improved, or not improved?
 - o What was challenging?
 - o What was surprising?
 - o How (or can) you use this in your daily life?

Introduction

Session 1: Sensory Exploration (tactile, vestibular, proprioceptive)

Session 2: Aromatherapy

Session 3: Mindful eating/gustatory sensory exploration

Session 4: Intro to Mindfulness “Being in the Moment”

Session 5: Intro to Meditation

Session 6: Visualization for pain relief

Session 7: Binaural Beats for anxiety and pain

Session 8: Movement: Chair Yoga

Session 9: Bean bag tapping & Acupressure

Session 10: Humor

Session 11: Revisiting Sensory Input (tactile and gustatory)

Identified Risks and Risk Management Plan:

Behavior Escalation:

- Follow treatment mall security protocol for facilitating groups on and off the treatment mall area

Contraband:

- Ensure that all ligature risks are accounted for when group concludes (ex: HDMI cable and exercise bands)
- Food items, if distributed, must be consumed during group and not taken back to client rooms.
- Supplies will be systematically set-up, tracked, and counted to decrease risk of contraband leaving the group room

Literature Review and Evidence Based Practice:

This literature review is a synthesis of previously conducted literature reviews by members of the OSH team with additions in specific areas of mindfulness, meditation, and binaural beats. This literature considers psychological and emotional factors that impact perception of the pain experience and use the pain cycle as envisioned by Whitten et al. (2005) to guide program planning (see *Figure 1*). The program plan itself draws on OSH resources developed by staff and interns and modifies the activities to fit the needs and abilities of Springs clients, particularly those receiving treatment in Butterfly 1. The content of the below literature review reflects this.

Pain is a significant priority for therapeutic intervention due to its prevalence and impacts on health at a population level. Chronic pain is a public health problem estimated to affect approximately one in three American adults (Institute of Medicine, 2011). According to the National Institute for Health (2013), "Pain is cited as the most common reason Americans access the health care system." As a result, the direct and indirect costs associated with pain management are significant. Pain is estimated to cost society \$560-\$635 billion annually, an amount equal to approximately \$2000 for every person in the United States (Institute of Medicine, 2011).

Maladaptive attempts to manage pain may be associated with the rise of the opioid epidemic, which was declared a national public health emergency in late 2017 and is estimated to be killing more than 100 Americans every day (Johnson & Wagner, 2017). According to a report the US Center for Disease Control (CDC, 2018b), based on data available between July 2016 and September 2017, opioid overdoses are increasing across all regions and in most states, for most men and women, and for most age groups. Although traditionally thought to be a public health concern primarily affecting rural areas, opioid overdoses in large cities have increased by 54% in 16 states (CDC, 2018b).

Given the national importance of this crisis, there is a pressing need for healthcare professionals to provide non-pharmacological interventions for pain management. The CDC (2018a) recommends the use of non-opioid treatments for chronic pain, including lifestyle modifications and interdisciplinary rehabilitation. This recommendation, in the context of the worsening epidemic, indicates the importance of addressing pain management techniques early, to offset some of the costs of long-term pain management on society and provide adaptive coping strategies to vulnerable populations for use in the face of physical and psychological stressors.

This program empowers clients to actively participate in their recovery process and perceive greater control over pain. The American Occupational Therapy Association specifically draws attention to the importance of client-centered education to promote active participation in pain management (Rochman, 2014). Research on the mediating factors of therapeutic change demonstrates that clinicians should emphasize treatments that increase participants' perceived control over their pain and self-efficacy for pain management (Turner et al., 2007).

One of the cornerstone components of the Skills for Living with Pain involves providing understandable explanations of the gateway theory of pain highlighting how pain originates in the brain, and that emotional and psychological experiences influence the "total pain experience" (Melzack & Casey, 1968, p.425). Assisting clients in better understanding the nature of pain shifts their locus of control from external to internal. Instead of perceiving pain as solely a bodily tissue damage they cannot control, pain becomes in part a cognitive process that can be influenced by external stimuli and internal dialogues. A key component of the daily program plan is a visual diagram by Cooper (2013) that frames the pain experience by physical and psychosocial factors that influence pain (see *Figure 2*). This diagram highlights avenues clients can envision themselves targeting during a given session, ideally increasing self-efficacy in managing pain. This is supported by recent research by Ashar et al. (2021) that provides evidence that changing beliefs about the cause of chronic back pain may provide substantial and extended pain relief.

Without intervention, chronic pain has the potential to interfere with patient recovery, as well the efficacy and efficiency of many other clinical interventions. Pain is an experience that can not only cause physical discomfort, but it can also result in decreased attention, memory, and executive functioning (Moriarty, McGuire, & Finn, 2011). These are client factors that are imperative to successful engagement in activities of daily living and are also factors that Springs clients may already be experiencing challenges with due to a myriad of health conditions. The primary interventions and methods employed in this program involve engagement in sensory-based activities, mindfulness, and meditation to provide effective strategies to distract from pain sensations, soothe stress and anxiety, and promote self-efficacy.

A review of the literature reveals that sensory-based interventions are an effective way to activate promote emotional regulation and healthy coping strategies (Moore, 2005). Dysfunctional sensory integrative functioning can decrease the availability of internal resources and ability to manage everyday stressors (Anzalone & Murray, 1991). Thus, providing interventions to increase coping skills will mitigate pain-related distress and, so far as distress is linked to an increase in psychosomatic symptoms, will improve psychological state and potential for engagement in the whole recovery process. This

program plan makes use of sensory interventions commonly used in occupational therapy to distract and soothe the nervous system and includes the addition of a less practiced therapeutic modality that targets specific brain-wave patterns, binaural beats.

Binaural beats (BB) use two simultaneous tones at specific frequencies through headphones that brain perceives and then synchronizes to produce a certain frequency. Binaural beats are frequently accompanied by relaxing sounds such as ocean waves or gentle music which are commonly used auditory stimuli for relaxation. The frequencies used in BB are ones that the brain produces naturally at different states, such Theta waves produced at rest (3.5-7.5 Hz), to assist the brain in returning to homeostasis (Zampi, 2016). Studies indicate BB are effective at alleviating acute and chronic pain, anxiety, and stress (Zampi, 2016; Gkolia et al., 2020). In a metaanalysis of binaural beats literature, Garcia et al. (2019) found consistent evidence for the effectiveness of binaural beats for pain and anxiety but wide variation in the range of additional benefits (such as attention and memory). The efficacy of BB is not diminished by accompanying sounds and occasionally the literature reflects additional benefit (Garcia-Argibay et al., 2019). Binaural beats are widely available, distributed by various services online and can be accessed without cost. However, since the tones must be administered through headphones to produce the desired response this presents a challenge in group delivery and requires additional resources.

Modalities that use the premise of relaxation as a means for pain management include meditation, progressive muscle relaxation, deep breathing, and guided imagery (Schaffer & Yucha, 2004; Carpenter et al., 2017). In addition to potential pain relief these methods can promote emotional wellness, relive stress, and improve sleep quality (Burrowes et al. , 2021). Mind-body strategies, which include meditation and guided imagery, show a moderate ability to improve pain and are associated with small reductions in opioid dosage, with mindfulness/meditation and guided imagery having statistically significant improvements in client reported pain intensity (Garland et al., 2020). Studies report varying lengths of time that these modalities relieve pain, but commonly report that pain relief is immediate and regularly substantial. Mindfulness decreases the severity and duration of pain, reducing pain's impact on function and increasing individual's ability to participate in activities of daily living (Jackson, 2020). Practicing mindfulness and various styles of meditation requires little to no equipment, making it an effective and accessible pain management strategy for OSH clients both at the hospital and in the community.

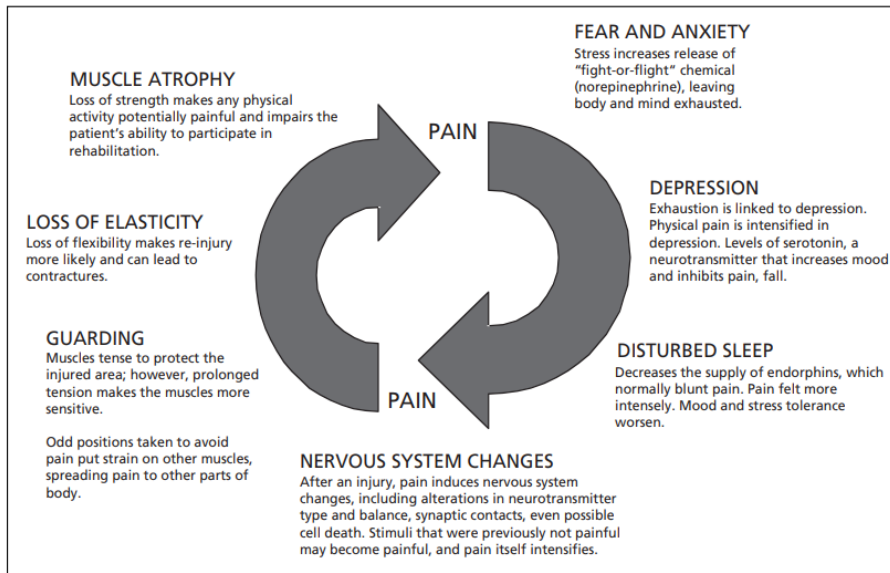


Figure 1



Figure 2

References:

- Anzalone, M. E. & Murray, E. A. (1991). Integrating sensory integration with other approaches to intervention. In A. Bundy, S. Lane, & E. Murray (Eds), *Sensory integration: Theory and practice* (2nd ed.) (pp. 371-391). Philadelphia, PA: F.A. Davis Company.
- Ashar, Y. K., Gordon, A., Schubiner, H., Uipi, C., Knight, K., Anderson, Z., Carlisle, J., Polisky, L., Geuter, S., Flood, T. F., Kragel, P. A., Dimidjian, S., Lumley, M. A., & Wager, T. D. (2021). Effect of pain reprocessing therapy vs placebo and usual care for patients with chronic back pain: A randomized clinical trial. *JAMA psychiatry*, e212669. Advance online publication. <https://doi.org/10.1001/jamapsychiatry.2021.2669>
- Burrowes, S., Goloubeva, O., Stafford, K., McArdele, P. F., Goyal, M., Peterlin, B. L., Haythornthwaite, J. A., & Seminowicz, D. A. (2021). Enhanced mindfulness-based stress reduction in episodic migraine-effects on sleep quality, anxiety, stress, and depression: a secondary analysis of a randomized clinical trial. *Pain*, Advance online publication. <https://doi.org/10.1097/j.pain.0000000000002372>
- Carpenter, J. J., Hines, S. H., & Lan, V. M. (2017). Guided imagery for pain management in postoperative orthopedic patients: An integrative literature review. *Journal of Holistic Nursing: official journal of the American Holistic Nurses' Association*, 35(4), 342–351. <https://doi.org/10.1177/0898010116675462>
- Cooper, L. (2013) The person with pain perspective and participation – an essential component of successfully managing chronic neuropathic pain. In C. Toth & D. E. Moulin (Eds.), *Neuropathic Pain: Causes, Management and Understanding* (pp. 299-314). <https://doi.org/10.1017/CBO9781139152211>
- Garcia-Argibay, M., Santed, M. A., & Reales, J. M. (2019). Efficacy of binaural auditory beats in cognition, anxiety, and pain perception: A meta-analysis. *Psychological Research*, 83(2), 357–372. <http://doi.org/10.1007/s00426-018-1066-8>
- Garland, E. L., Brintz, C. E., Hanley, A. W., Roseen, E. J., Atchley, R. M., Gaylord, S. A., Faurot, K. R., Yaffe, J., Fiander, M., & Keefe, F. J. (2020). Mind-body therapies for opioid-treated pain: A systematic review and meta-analysis. *JAMA Internal Medicine*, 180(1), 91–105. <https://doi.org/10.1001/jamainternmed.2019.4917>

- Gkolias, V, Amaniti, A, Triantafyllou, A, Papakonstantinou, P., Kartsidis, P., Paraskevopoulos, E., Bamidis, P. D., Hadjileontiadis, L., & Kouvelas, D. (2020). Reduced pain and analgesic use after acoustic binaural beats therapy in chronic pain - A double-blind randomized control cross-over trial. *European Journal of Pain*, 24(9): 1716– 1729. <https://doi.org/10.1002/ejp.1615>
- Institute of Medicine. (2011). Relieving pain in America: A blueprint for transforming, prevention, care, education and research. <https://www.nap.edu/read/13172/chapter/2#1>
- Johnson, J. & Wagner, J. (2017, October 26). Trump declares the opioid crisis a public health emergency. *The Washington Post*. <https://www.washingtonpost.com/news/post-politics/wp/2017/10/26/trump-plans-to-declare-the-opioid-crisis-a-public-health-emergency/>
- Melzack, R. & Casey, K. I. (1968). Sensory, motivational, and central control determinants of pain: A new conceptual model. In D. R. Kenshalo (Ed.), *The Skin Senses* (pp.423-435). Thomas.
- Jackson, M., Bekmuratoya, S. (2020). The use of mindfulness to increase participation in meaningful occupations for individuals with chronic pain. *American Journal of Occupational Therapy*, 74(4), Supplement 1. <https://doi.org/10.5014/ajot.2020.74S1-PO5732>
- Moore, K. M. (2005). *The sensory connection program: Activities for mental health treatment*. Therapro, Inc.
- Moriarty, O., McGuire, B. E., & Finn, D. P. (2011). The effect of pain on cognitive function: a review of clinical and preclinical research. *Progress in Neurobiology*, 93(3), 385–404. <https://doi.org/10.1016/j.pneurobio.2011.01.002>
- National Institute for Health. (2013). Pain management. Retrieved from www.report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=57
- Rochman, D. L., (2014). *Occupational therapy and pain rehabilitation*. American Occupational Therapy Association. <https://www.aota.org/about-occupational-therapy/professionals/hw/pain%20rehabilitation.aspx>
- Schaffer, S. D., & Yucha, C. B. (2004). Relaxation & pain management: the relaxation response can play a role in managing chronic and acute pain. *The American Journal of Nursing*, 104(8), 75–82. <https://doi.org/10.1097/00000446-200408000-00044>

- Turner, J. A., Holzman, S., & Mancl, L. (2007). Mediators, moderators, and predictors of therapeutic change in cognitive-behavioral therapy for chronic pain, *Pain*, 127(3), 276–286. doi:10.1016/j.pain.2006.09.005Melzack,
- US Center for Disease Control. (2018, Mar 6). *Opioid overdoses treated in emergency departments*. Centers for Disease Control and Prevention: Vital signs. <https://www.cdc.gov/vitalsigns/opioid-overdoses/>
- Whitten, C. E., Evans, C. M., & Cristobal, K. (2005). Pain management doesn't have to be a pain: Working and communicating effectively with patients who have chronic pain. *The Permanente Journal*, 9(2), 41–48. <https://doi.org/10.7812/tpp/04-140>
- Zampi, D. D. (2016). Efficacy of theta binaural beats for the treatment of chronic pain. *Alternative Therapies in Health and Medicine*, 22(1), 32–38. <https://pubmed.ncbi.nlm.nih.gov/26773319/>