Multimodal Pain Management: Considerations for Clinicians Treating Pain

Chronic pain is a common health concern in the United States, and is expected to further increase in prevalence due to higher incidence of associated conditions within a larger aging population.¹ To treat chronic pain, clinicians often prescribe opioids, which, while shown to be effective, are also associated with significant side effects. Long-term use of opioids can also result in physical dependence, addiction, overdose, and death. The increase in opioid prescriptions in the United States has contributed to the current opioid crisis, where an average of 128 people a day die as a result of an opioid overdose.²⁻⁵

Chronic pain is similarly a common problem among the population dually eligible for Medicare and Medicaid, but there is a greater incidence of chronic pain than the general population.⁷ Dually eligible older adults have higher levels of chronic pain compared to older adults covered by Medicare or Medicaid only, private insurance, or the Veterans Health Administration.⁸ The dually eligible population uses prescription opioids at a higher rate compared to Medicare-only beneficiaries, and thus, are at a higher risk for opioid misuse or addiction.⁹,¹⁰

Individuals with intellectual and developmental disability (I/DD) are at increased risk for chronic pain due to factors such as higher risk of accidental injury, more physical comorbidities (e.g., musculoskeletal disorders in conditions associated with intellectual disability), and less access to pain management services.¹¹ Similarly, individuals with physical disability commonly report having chronic pain, and may experience more pain with greater severity.¹²,¹³ Older adults are more likely to experience adverse effects of opioid use such as increased likelihood of falls and fractures, chronic medical conditions (e.g., liver or renal malfunction, or respiratory insufficiency), and cognitive impairment.¹⁴

The Centers for Disease Control and Prevention (CDC) suggests providers use a multimodal pain management approach that offers individuals access to a range of therapy options, which will help determine the most effective combination of services that improves their pain-related function and quality of life.¹⁵ For some people, opioids may be part of an effective multimodal pain care plan. However, they are not recommended as first-line agents for chronic pain.¹⁶,¹⁷ Providers should first screen individuals for substance use disorder before considering opioid treatment.¹⁸,¹⁹ In an effort to combat the current opioid crisis, the CDC recommends using non-opioid treatments for pain to the extent possible.²⁰ However, many providers may need additional pain management training and information on safe and effective treatments, particularly for individuals with disability, who are often
undertreated for their pain.\textsuperscript{21,22} This brief presents pain management options for clinicians treating pain among dually eligible individuals.

The table starting below on the next page describes examples of treatment options that clinicians can consider to treat pain, as well as key evidence and considerations for prescribing each modality. It is not an exhaustive list of all possible pain management modalities.
Table 1. Examples of Pain Management Treatment Modalities\textsuperscript{a,b}

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| Non-opioid Medications  | Non-opioid medications include common over-the-counter medications such as acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs), as well as prescribed antidepressants, anticonvulsants, musculoskeletal agents, biologics, topical analgesics, and anxiolytics.\textsuperscript{23} | • Acetaminophen is widely considered the safest analgesic;\textsuperscript{24} however use of acetaminophen can lead to liver damage, especially when used in high doses.\textsuperscript{25}  
• Prolonged use of NSAIDs carries safety risks, including upper gastrointestinal bleeding, nephrotoxicity, and increased risk of cardiovascular morbidity and mortality.\textsuperscript{26}  
• Antidepressants are commonly used for chronic pain management and work by increasing the neurotransmitters in the spinal cord that reduce pain signals.\textsuperscript{27,28} Common side effects of antidepressants include dry mouth, blurred vision, constipation, difficulty in passing urine, weight gain, and drowsiness. Selective serotonin reuptake inhibitors (SSRIs) are generally better tolerated than other antidepressants, but side effects can include nausea, tremor, hyperarousal, and drowsiness.\textsuperscript{29} | • Older adults in particular may be at higher risk for side effects as a result of prolonged NSAID use.\textsuperscript{30}  
• Individuals with disability, due to higher rates of comorbidities and polypharmacy, may be at higher risk for serious drug-to-drug reactions, or adverse effects from non-opioid pain medications. Additionally, the effects of analgesics may vary in individuals with I/DD because of different mechanism of action.\textsuperscript{31}  
• Individuals should be informed that the clinical effect of antidepressants is usually noted only after days or weeks of treatment. Side effects may occur early but may be less likely with gradual dose escalation.\textsuperscript{32,33} |

\textsuperscript{a} Coverage of each modality varies by payor.  
\textsuperscript{b} Limited evidence exists about the efficacy of various treatment modalities for individuals with disability.
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<td>Rehabilitation Therapies (Physical Therapy and Occupational Therapy)</td>
<td>• Physical therapists treat pain by restoring, enhancing, and maintaining individuals’ physical and functional abilities through activities such as assisting an individual in core strengthening, stretching, and range of motion exercises.</td>
<td>• Individuals who receive physical therapy earlier are less likely to subsequently use opioids for pain relief.</td>
<td>Barriers to rehabilitation therapy may include requiring the support of a caregiver, particularly for individuals with disability. Including caregivers in rehabilitation therapy visits may help individuals (in particular, individuals with disability), maintain exercise programs at home.</td>
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<td>• Occupational therapists treat pain through the therapeutic use of everyday activities that increase coordination, balance, flexibility and range of motion.</td>
<td>• Older adults with lower back pain who use physical therapy techniques have less pain intensity and more improvement in functional activities.</td>
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<td>Self-Management Support</td>
<td>Self-management support programs promote active support approaches (e.g., cognitive and behavioral strategies) to develop skills to manage pain, including self-reflection; active goal setting and problem solving; and the fostering of a collaborative relationship between the individual and the clinician. Techniques may include relaxation, pacing, cognitive restructuring, maintenance planning, and relapse prevention.</td>
<td>• Self-management support can be effective in helping older adults manage multiple chronic conditions, including chronic pain.</td>
<td>• Adapting self-management materials, such as workbooks and other tools, for people with low literacy can help them achieve better pain outcomes.</td>
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<td>• Clinicians or care teams can deliver self-management support through various telehealth methods, such as phone calls, text messages, and other web-based applications, as well as other innovations such as wearable devices and interactive voice response systems.</td>
<td>• Barriers to effective self-management may include lack of social support, limited resources, and depression.</td>
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<td>• Studies indicate that education and skills training of providers may positively affect individuals’ performance of self-management pain-reduction activities, underscoring the importance of further training providers in patient self-management support as part of person-centered care.</td>
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<td>Cognitive Behavioral Therapy (CBT)</td>
<td>CBT is a psychological treatment delivered by mental health providers that helps people experiencing pain to replace negative thought patterns to improve pain coping skills. CBT includes psychoeducation about the relationship between psychological factors (e.g., thoughts, feelings) and pain.</td>
<td>• Individuals who received CBT experienced less distress from the pain and disability, and improved self-efficacy, compared to a control group. Additionally, CBT can lead to long-term improvements in individuals with low-back pain and fibromyalgia. Although research about the effects of CBT in individuals with I/DD is limited, some studies show its potential to treat pain.</td>
<td>• Adapting CBT materials, such as workbooks and other tools, for people with low literacy can help them achieve better pain outcomes. Telehealth can increase access to providers trained in CBT for individuals; however, this is limited to individuals who have access to the necessary technology. Barriers to providing CBT can include limited access to providers, inadequate insurance coverage, lack of knowledge about CBT among providers, and patients’ perception of stigma associated with receiving CBT.</td>
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| Complementary and Integrative Health Approaches [e.g., Acupuncture, Massage Therapy, Movement Therapies (Yoga and Tai Chi)] | • Acupuncture, which originates from ancient Chinese medicine, involves the insertion of thin needles into specific acupuncture points of the body to relieve pain and promote healing.  
  • Massage therapy techniques for pain management include Swedish, shiatsu, and deep tissue (myofascial release). In Swedish massage, the therapist uses long strokes, kneading, and deep circular movements. Shiatsu massage uses the fingers, thumbs, and palm to apply pressure. Deep tissue massage focuses on myofascial trigger points, with attention on the deeper layers of tissues.  
  • Yoga, an ancient Indian practice, incorporates a mind, body, and spiritual approach in movement that often incorporates meditation and chants. Yoga’s use of stretching, breathing, and meditation has been therapeutic in the treatment of various chronic pain conditions, especially low-back pain.  
  • Tai chi, an ancient Chinese martial art, focuses on core physical strengthening through its use of slow movements and meditation. |
|                                                  | Acupuncture                                                                                                                                                                                                 | Randomized controlled studies demonstrate that acupuncture can be clinically effective on chronic pain, particularly musculoskeletal, headache, and osteoarthritis pain.  
  • Acupuncture results in minimal adverse events and is recommended in older adults as an adjunctive therapy to other types of pain therapy. |
|                                                  | Massage Therapy                                                                                                                                                                                              | Massage therapy has demonstrated effectiveness in treating pain, as well associated physical and psychological aspects of pain.  
  • Massage therapy is generally considered a safe pain modality with few adverse events. |
|                                                  | Movement Therapies                                                                                                                                                                                           | Practicing yoga has shown particular effectiveness in reducing lower back pain.  
  • Tai chi has demonstrated long-term benefit in people with chronic pain caused by osteoarthritis and other musculoskeletal pain conditions. |
|                                                  |                                                                                                                                                                                                              | Most states’ regulations allow providers to perform acupuncture within the scope of their practice; however, some states may require additional training or licensure.  
  • Older adults who used acupuncture perceived it as valuable in reducing medication use, as well as maintaining physical and mental health.  
  • Both yoga and tai chi can use modified approaches appropriate for individuals with chronic pain, at risk of falls, or have limited mobility.  
  • Yoga and tai chi can be taught remotely via telehealth, and do not require access to a gym or specialized equipment.  
  • Barriers to use of movement therapy for pain management among dually eligible individuals may include access, lack of knowledge about yoga and tai chi, and fears of worsening pain. |
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<td>Interventional Procedures</td>
<td>Interventional therapy diagnoses and treats pain with minimally invasive</td>
<td>Interventional procedures are recommended for use in a multimodal treatment</td>
<td>Many interventional pain procedures can be performed in an outpatient primary care</td>
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<td>interventions that can alleviate pain and minimize the use of oral</td>
<td>regimen, and are often used to treat low back pain, migraines, and other types</td>
<td>setting, which ensures cost-effective access to treatment.</td>
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<td>medications, including joint injections, nerve blocks, and spinal cord</td>
<td>of severe headaches.</td>
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### Additional Resources

#### Websites and Articles

**Harvard Health Publishing**

Harvard Medical School published numerous articles on different approaches to pain management, including mindfulness exercises to treat chronic pain, information about acupuncture and yoga to treat chronic pain, and other non-pharmacological approaches.

**American Chronic Pain Association (ACPA)**

The ACPA is dedicated to peer support and education for individuals with chronic pain and their families so that these individuals may live more fully in spite of their pain. Their website includes free pain management tools (print and electronic), local support group information, and a resource guide for chronic pain treatments. They created the Four Flat Tires video, which is easily accessible on YouTube and can be watched in clinic with beneficiaries.

**The Pain Toolkit**

The Pain Toolkit website offers a wealth of free and low-cost pain self-management resources. The website includes resources for both beneficiaries and clinicians, including over 50 pain self-management videos, with separate categories for medical providers and beneficiaries.

**Psychology Today**

The website includes multiple columns that provide public education on how to use the mind-body connection for pain relief, including the Empowered Relief column by Beth Darnall, PhD.

**Retrain Pain**

Three physical therapists founded Retrain Pain to provide free online pain education to the public. They offer a short, eight-part online module in several languages to teach people how to understand and manage their pain.

**Restorative Yoga for Chronic Pain**

In this article adapted by International Yoga, a yoga therapist and psychologist explains how individuals can identify the source of their chronic pain and how restorative yoga can bring relief. The article also includes a few poses individuals can adopt into their practice.
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Healthcare Clinician Books and Guides


This report describes gaps and recommendations for pain management, including considerations for special populations confronting unique challenges in pain management. This report also addresses critical topics broadly relevant across treatment modalities, such as stigma, risk assessment, education, and access to care.

Overview of Evidence-Based Behavioral Treatments for Chronic Pain

Darnall, BD. Psychological Treatment for Patients with Chronic Pain ©2018 (American Psychological Association). This book also includes free resources for clinicians and patients.

Free CBT Treatment Manual and Treatment Guide

Murphy JL et al. Cognitive Behavioral Therapy for Chronic Pain. This guide, while intended for therapists, offers all readers an overview of the different types of pain, treatment options and details about cognitive behavioral therapy (CBT). Note: this resource does not substitute becoming a CBT-certified therapist.

Workshop

Empowered Relief

A single-session two-hour class that provides psychosocial pain education and equips participants with key evidence-based pain management skills. The class can be offered free of charge within the healthcare system or in community settings. The didactic setting allows family members to attend and may be de-stigmatizing. Evidence suggests the class may be an acceptable and effective treatment for pain control.

The Medicare-Medicaid Coordination Office (MMCO) in the Centers for Medicare & Medicaid Services (CMS) seeks to help beneficiaries dually eligible for Medicare and Medicaid have access to seamless, high-quality health care that includes the full range of covered services in both programs. This brief is intended to support health plans and providers in integrating and coordinating care for dually eligible beneficiaries. It does not convey current or anticipated health plan or provider requirements. This report should not be construed as clinical guidance and should not be used in place of professional clinical judgment. For additional information, please go to www.resourcesforintegratedcare.com. The list of resources in this guide is not exhaustive. Please submit feedback to RIC@lewin.com.

2 Ibid.


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42 Ibid.
51 Mcguire, Brian & Kennedy, Susan. (2013).
56 Ibid.
57 Ibid.
58 Ibid.
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