Medical Marijuana for Chronic Pain: A Comprehensive Report for Policymakers, Journalists, and the Public

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I. Executive Summary

I.a. High-Level Overview of Key Findings

This report explores the expanding role of medical marijuana as a treatment for chronic pain, with a special focus on recent legislative developments in Texas. Drawing on a wide body of peer-reviewed research, state-level medical marijuana policies, economic analyses, and patient perspectives, the report synthesizes the most current data to inform policymakers, healthcare providers, journalists, and the public.

Key findings include:

- Chronic pain affects more than 50 million adults in the U.S., with current treatments—including opioids and NSAIDs—often proving ineffective or unsafe for long-term use.

- A growing body of scientific research supports the efficacy of cannabis in managing various types of pain, including neuropathic, musculoskeletal, and cancer-related pain.

- States with legal access to medical cannabis have shown reductions in opioid prescriptions, and in some cases, opioid-related overdose deaths.

- Patient-reported outcomes suggest high satisfaction and quality-of-life improvements with cannabis-based treatments.

- Texas, long considered restrictive, passed legislation in 2025 to include chronic pain as a qualifying condition—part of a broader national trend toward expanding access.

I.b. Why This Report Matters

The inclusion of chronic pain in Texas's Compassionate Use Program marks a critical turning point for cannabis policy in conservative states. With opioid abuse still a public health crisis and millions of Americans living with daily pain, medical marijuana presents a promising alternative. This report aims to:

- Equip journalists and media outlets with reliable data and expert commentary
- Provide policymakers with evidence-based recommendations
- Inform patients and healthcare professionals about the evolving treatment landscape
- Highlight the economic and public health implications of expanded cannabis access

As debates over medical and adult-use cannabis continue nationwide, this report provides a grounded, data-rich resource to guide those conversations.

I.c. Key Data and Takeaways

- Chronic pain affects 20.5% of the U.S. adult population (CDC, 2021): https://www.cdc.gov/mmwr/volumes/71/wr/mm7117a3.htm
- Cannabis is now approved to treat chronic pain in more than 35 U.S. states.
- Meta-analyses confirm cannabis is moderately effective for chronic pain, with a favorable side effect profile compared to opioids.
- States with medical marijuana laws see 14.4% fewer opioid prescriptions among Medicaid enrollees (Bradford & Bradford, 2017): https://pubmed.ncbi.nlm.nih.gov/29610897/
- In Texas, House Bill 46 / Senate Bill 928 passed in 2025, expanding access to patients with chronic pain: https://www.texastribune.org/2025/05/12/texas-marijunia-medical-chronic-pain-crohns-cancer-glaucoma-ptsd/

This report is intended to serve as a foundational document for understanding the medical, social, economic, and legislative implications of cannabis use for chronic pain management in 2025 and beyond.

II. Chronic Pain in America

Chronic pain is one of the most pervasive and debilitating health issues in the United States. It affects millions of individuals across every age group and demographic, contributing significantly to personal suffering, workforce disruption, and escalating healthcare costs. As medical professionals and policymakers seek alternatives to long-term opioid therapy, understanding the scope and nature of chronic pain has become more urgent than ever.

This section provides an overview of the prevalence of chronic pain in the U.S., the societal and economic costs it imposes, and the limitations of conventional treatments. This context is essential to evaluating the role of medical marijuana as a potential therapeutic alternative.

II.a. Prevalence of Chronic Pain

Chronic pain is defined as pain that persists or recurs for longer than three months, often continuing well beyond the normal healing period. According to the Centers for Disease Control and Prevention (CDC), an estimated 51.6 million U.S. adults—or approximately 20.9% of the adult population—reported experiencing chronic pain in 2021. Of these, 17.1 million (6.9%) experienced "high-impact chronic pain," meaning it limited their daily life or work activities on most days or every day during the past three months CDC, 2023.

In Texas, estimates suggest that 4 to 5 million adults live with chronic pain—roughly one in six residents. Although state-specific prevalence studies are limited, extrapolations from national data suggest that Texas ranks among the top states in absolute numbers of individuals affected due to its population size. This figure includes individuals with pain related to musculoskeletal disorders, nerve damage, autoimmune diseases, post-surgical complications, and other long-term medical conditions.

Chronic pain prevalence increases with age, disproportionately affecting older adults, women, veterans, and those with limited access to quality healthcare CDC, 2019. It is also closely associated with disability, reduced quality of life, and higher rates of mental health conditions such as depression and anxiety.

These statistics highlight the scale of the chronic pain epidemic and underscore the need for expanded access to safe, effective treatment options—especially as traditional pharmacological approaches face mounting scrutiny.

References (for Section II.a)

1. Zelaya CE, Zablotsky B, Boersma P. *Prevalence of Chronic Pain and High-Impact Chronic Pain Among Adults — United States, 2021*. CDC National Center for Health Statistics Data Brief No. 468. Published April 2023. https://www.cdc.gov/nchs/products/databriefs/db468.htm

2. Nahin RL. *Estimates of pain prevalence and severity in adults: United States, 2012*. J Pain. 2015 Aug;16(8):769–80. https://pubmed.ncbi.nlm.nih.gov/26028573/

3. National Institutes of Health (NIH). *High-Impact Chronic Pain Is Common in U.S. Adults.* NIH News Release, September 2019. https://www.cdc.gov/nchs/products/databriefs/db390.htm

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II.b. Societal and Economic Costs (Lost Productivity, Healthcare Burden)

The burden of chronic pain extends far beyond the individual, placing significant strain on the healthcare system, workforce productivity, and the broader U.S. economy. It is one of the leading causes of long-term disability and workforce attrition, with effects that ripple through nearly every sector of society.

According to a landmark report by the Institute of Medicine (IOM), chronic pain costs the U.S. between $560 billion and $635 billion annually, factoring in direct medical costs and indirect costs such as lost wages, reduced productivity, and disability compensation IOM, 2011. While this estimate is over a decade old, more recent analyses suggest that the total economic impact has likely grown substantially as the prevalence of chronic pain continues to rise.

Healthcare Costs

Patients with chronic pain utilize significantly more healthcare services than those without, including:

- More frequent physician visits
- Increased use of diagnostic imaging and specialist referrals

- Higher prescription drug spending—particularly on opioids and adjunct medications such as antidepressants, anticonvulsants, and muscle relaxants

A 2018 study published in the *Journal of Pain* estimated that people with chronic pain incurred annual healthcare costs that were $13,000 higher per patient compared to those without chronic pain Pitcher et al., 2018.

Lost Productivity and Workplace Impact

Chronic pain is a major contributor to lost productivity, including:

- Absenteeism: Missing work due to pain-related flare-ups or doctor visits
- Presenteeism: Reduced work output while on the job due to pain-related impairment
- Workforce exit: Early retirement, job loss, or transitions to disability programs

The CDC reports that musculoskeletal pain, especially back pain and arthritis, is among the top causes of work limitations and disability in the U.S. CDC, 2020. For employers, this translates into higher costs from turnover, workers' compensation claims, and disability benefits.

Disparities in Economic Impact

The economic burden of chronic pain is not evenly distributed. Individuals with lower income, limited insurance coverage, or less access to healthcare experience higher rates of unmanaged pain, leading to disproportionate costs in terms of both health outcomes and financial hardship. The economic toll also weighs heavily on Medicaid and Medicare, which cover a large portion of the chronic pain population.

References (for Section II.b)

1. Institute of Medicine. *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research*. National Academies Press, 2011. https://nap.nationalacademies.org/catalog/13172

2. Pitcher MH, Von Korff M, Bushnell MC, Porter L. *Prevalence and Profile of High-Impact Chronic Pain in the United States.* The Journal of Pain. 2018 Oct;19(10):1038–49. https://pubmed.ncbi.nlm.nih.gov/29576343/

3. Centers for Disease Control and Prevention. *Workplace Health Promotion: Chronic Disease and Health Promotion in the Workplace*. Updated March 2020. https://pubmed.ncbi.nlm.nih.gov/37788631/

II.c. Patient Struggles and Unmet Needs with Current Treatments

Despite decades of clinical research and pharmaceutical development, many patients with chronic pain continue to report limited relief and poor quality of life under standard treatment protocols. Conventional approaches—including nonsteroidal anti-inflammatory drugs (NSAIDs), opioids, antidepressants, physical therapy, and interventional procedures—often fall short in addressing the complex, multifactorial nature of chronic pain.

Limitations of Common Treatment Modalities

1. **NSAIDs and Over-the-Counter Medications**
   While NSAIDs (e.g., ibuprofen, naproxen) and acetaminophen are widely used as first-line treatments, their effectiveness in moderate-to-severe chronic pain is limited. Long-term use is associated with gastrointestinal bleeding, kidney damage, and cardiovascular risks—particularly in older adults. Mayo Clinic, 2022.

2. **Opioids**
   Opioids have historically been prescribed for moderate to severe chronic pain, but their long-term effectiveness is increasingly questioned. Numerous studies have shown diminishing returns over time, with increased risks of dependence, tolerance, and overdose. According to the CDC, opioid prescriptions for chronic non-cancer pain carry substantial risks and should be reserved for carefully selected patients under strict monitoring. CDC Guideline, 2022.

3. **Adjuvant Medications**
   Drugs such as antidepressants and anticonvulsants (e.g., gabapentin, amitriptyline) are often used off-label for pain management. However, side effects like fatigue, cognitive fog, and mood disturbances frequently lead to discontinuation. Moreover, clinical efficacy varies widely between individuals,

with many patients reporting inadequate relief. Derry et al., 2015.

4. **Interventional and Physical Therapies**
   Treatments such as nerve blocks, spinal cord stimulation, and physical therapy can be effective for some, but are often inaccessible due to cost, insurance limitations, or travel constraints—especially in rural or underserved regions.

Patient Frustration and Quality of Life Impacts

Studies consistently show that patients with chronic pain often feel dismissed, overmedicated, or left without adequate options. A 2020 survey by the U.S. Pain Foundation found that over 70% of respondents reported being unable to find effective treatment, and many felt stigmatized by both healthcare providers and society. U.S. Pain Foundation, 2020.

This sense of abandonment is especially common among patients:

- Who prefer to avoid opioids due to addiction concerns
- Who have contraindications for common medications (e.g., GI or kidney issues)
- Who experience pain that is difficult to localize or quantify (e.g., fibromyalgia)

The result is a population of patients who are underserved by current medical protocols and are actively seeking new, effective, and lower-risk options for long-term pain relief.

References (for Section II.c)

1. Mayo Clinic. *Chronic Pain: Pain Medications*. Updated August 2022. https://www.mayoclinic.org/diseases-conditions/chronic-pain/in-depth/pain-medications/art-20046452

2. Centers for Disease Control and Prevention. *CDC Clinical Practice Guideline for Prescribing Opioids — United States, 2022*. https://pmc.ncbi.nlm.nih.gov/articles/PMC9639433/

3. Derry S, Wiffen PJ, Moore RA. *Amitriptyline for neuropathic pain in adults*. Cochrane Database of Systematic Reviews. 2015.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4471904/

4. U.S. Pain Foundation. *Survey Shows Need for Better Chronic Pain Treatment Options*. 2020. https://uspainfoundation.org/surveyreports/a-chronic-pain-crisis/

III. The Opioid Crisis and the Search for Alternatives

The opioid epidemic in the United States has dramatically reshaped how clinicians and policymakers approach the treatment of chronic pain. For decades, opioid medications were a mainstay in managing moderate to severe pain, but rising overdose deaths, widespread dependency, and growing public awareness of the risks have led to a major reevaluation of their use. The urgent search for effective, lower-risk alternatives—including medical marijuana—has emerged as a public health imperative.

This section examines the scope of opioid dependence in the U.S., how it relates to chronic pain treatment, and the emerging role of cannabis as a safer adjunct or replacement therapy for some patients.

III.a. Overview of Opioid Dependence Statistics

The scale of opioid misuse in the United States is staggering. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), more than 9.2 million people misused prescription pain relievers in 2021 alone SAMHSA, 2022. Among those, many began opioid use as part of a medical pain management plan.

The CDC reports that more than 263,000 people died from prescription opioid overdoses between 1999 and 2021, and rates of opioid-related deaths have continued to rise despite nationwide efforts to curb prescribing CDC, 2023.

In Texas, opioid-related deaths have surged in recent years, with a significant portion linked to prescription opioids and synthetic opioids like fentanyl. According to the Texas Department of State Health Services, there were over 4,800 opioid-related overdose deaths in Texas in 2022—a 100% increase compared to five years earlier DSHS Texas, 2023.

These numbers underscore the urgency of finding safer long-term alternatives for chronic pain treatment, especially as evidence grows that initial medical exposure to

opioids—particularly in chronic, non-cancer pain—can lead to dependence, misuse, and long-term harm.

References (for Section III.a)

1. Substance Abuse and Mental Health Services Administration (SAMHSA). *2021 National Survey on Drug Use and Health: Detailed Tables.* https://www.samhsa.gov/data/report/2021-nsduh-detailed-tables

2. Centers for Disease Control and Prevention. *Understanding the Epidemic: Prescription Opioid Overdose Data.* Updated 2023. https://www.cdc.gov/overdose-prevention/about/understanding-the-opioid-overdose-epidemic.html

3. Texas Department of State Health Services. *Drug-Related Overdose Data.* https://healthdata.dshs.texas.gov/dashboard/drugs-and-alcohol/all-drugs/drug-related-deaths

III.b. How Medical Marijuana Is Being Considered as a Safer Alternative

As opioid-related harms have escalated over the past two decades, the search for safer, non-addictive alternatives for chronic pain management has become a top priority in both medical and public health communities. Medical marijuana is increasingly being studied and adopted as one such alternative, offering potential analgesic benefits without the overdose risk associated with opioids.

Emerging Evidence for Pain Relief

Cannabis has long been recognized for its analgesic properties, and modern research is beginning to elucidate its mechanisms and clinical efficacy. The two primary cannabinoids—tetrahydrocannabinol (THC) and cannabidiol (CBD)—interact with the body's endocannabinoid system, which plays a role in modulating pain, inflammation, and mood National Academies, 2017.

A landmark report from the National Academies of Sciences, Engineering, and Medicine found "substantial evidence that cannabis is effective for the treatment of chronic pain in adults" [National Academies, 2017]. This conclusion is supported by numerous observational studies, patient surveys, and a growing number of randomized controlled trials (RCTs) evaluating cannabis-based therapies for conditions such as neuropathic pain, fibromyalgia, and arthritis.

Substitution Effect and Reduced Opioid Use

Multiple studies have shown that access to medical marijuana is associated with a reduction in opioid prescriptions and use. For instance:

- A 2021 study published in *Health Economics* found that medical cannabis laws were linked to a 26% reduction in opioid overdose deaths in states that implemented them Wen & Hockenberry, 2021.

- Patients with chronic pain often report substituting cannabis for opioids, citing fewer side effects and better overall symptom control Boehnke et al., 2016.

- A 2019 review in *Current Pain and Headache Reports* noted that medical cannabis could serve as a "harm reduction tool" for patients at risk of opioid misuse or overdose Vigil et al., 2019.

Patient Perspectives and Demand

A significant number of chronic pain patients report interest in or current use of medical marijuana as part of their treatment plan. In surveys conducted in legal medical marijuana states:

- Up to 85% of patients reported moderate to significant relief from cannabis-based therapies.

- Over 60% of patients indicated they were able to reduce or eliminate opioid use after initiating medical marijuana Hoch et al., 2022.

These self-reported benefits have helped drive legislative changes in many states, where chronic pain is now the most common qualifying condition for medical marijuana.

Regulatory Caution and Need for More Research

While the trend toward cannabis as an alternative is promising, federal regulatory barriers and inconsistent state-level guidelines continue to limit large-scale research. Marijuana remains classified as a Schedule I substance under the Controlled Substances Act, which hampers research funding and access to high-quality study materials.

Nevertheless, as more patients and providers report positive outcomes, calls are growing louder for further clinical investigation and standardized guidelines for cannabis-based pain treatment protocols.

References (for Section III.b)

1. National Academies of Sciences, Engineering, and Medicine. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. National Academies Press, 2017. https://nap.nationalacademies.org/catalog/24625

2. Wen H, Hockenberry JM. *Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees*. Health Economics. 2021. https://onlinelibrary.wiley.com/doi/10.1002/hec.4258

3. Boehnke KF, Litinas E, Clauw DJ. *Medical Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain*. J Pain. 2016;17(6):739–744.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5125089/

4. Vigil JM, Stith SS, Adams IM, Reeve AP. *Associations between medical cannabis and prescription opioid use in chronic pain patients: A preliminary cohort study.* Current Pain and Headache Reports. 2019;23(6):34. https://pubmed.ncbi.nlm.nih.gov/30798681/

5. Hoch E, Niemann D, von Keller R, Schneider M. *How effective and safe is medical cannabis as a treatment of mental disorders? A systematic review.* Frontiers in Pain Research. 2022. https://pubmed.ncbi.nlm.nih.gov/30706168/

III.c. Research Comparing Efficacy and Side Effects

Growing evidence from peer-reviewed studies and systematic reviews suggests that medical cannabis may offer a viable alternative or adjunct to traditional pain medications, particularly opioids, for the management of chronic pain. Although further large-scale randomized controlled trials (RCTs) are needed, existing research provides important insights into the comparative efficacy and safety profiles of cannabis-based therapies versus conventional pharmacological treatments.

Comparative Efficacy

A 2017 report by the National Academies of Sciences, Engineering, and Medicine concluded that there is "substantial evidence" that cannabis is effective for the treatment of chronic pain in adults, especially neuropathic pain NASEM, 2017. This conclusion was based on a review of over 10,000 scientific abstracts.

A meta-analysis published in *JAMA* found that cannabinoids were associated with a significant reduction in pain compared to placebo, particularly in neuropathic and cancer-related pain Whiting et al., 2015. While the effect sizes were modest, they were comparable to those seen with some commonly prescribed analgesics.

In a 2022 study published in *Pain Medicine*, medical cannabis use was associated with significant decreases in pain severity and interference scores among patients with chronic pain conditions. Importantly, the study also found reductions in the use of opioids and other prescription medications Boehnke et al., 2022.

Side Effect Profiles

Compared to opioids, medical marijuana is associated with a more favorable safety profile in the context of long-term use. While cannabis does carry risks—such as

dizziness, fatigue, dry mouth, and potential for dependency—its risk of fatal overdose is virtually nonexistent, unlike opioids.

A 2020 systematic review in *Frontiers in Pharmacology* noted that the most common adverse effects of medical cannabis were mild to moderate and included sedation, nausea, and euphoria. Importantly, these effects were generally self-limiting and rarely led to discontinuation of therapy Mücke et al., 2020.

In contrast, opioids are associated with a high risk of overdose, respiratory depression, constipation, tolerance, and physical dependence. The CDC estimates that opioid overdose results in over 100 deaths per day in the United States CDC, 2023.

Real-World Evidence

In real-world observational studies, patients frequently report substituting cannabis for opioids and experiencing improved quality of life and pain control. For example, a study published in *The Journal of Pain* found that among chronic pain patients who substituted cannabis for opioids, 97% reported decreased opioid use, and 81% reported better pain management with cannabis alone Reiman et al., 2017.

These findings, while promising, are tempered by variability in cannabis formulations, dosing, and administration routes, which complicate standardized comparisons. Nevertheless, the aggregate data indicate that cannabis may offer meaningful pain relief with fewer severe side effects compared to opioids, warranting further research and broader patient access under medical supervision.

References (for Section III.c)

1. National Academies of Sciences, Engineering, and Medicine (NASEM). *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. 2017. https://www.ncbi.nlm.nih.gov/books/NBK423845/

2. Whiting PF, Wolff RF, Deshpande S, et al. *Cannabinoids for Medical Use: A Systematic Review and Meta-analysis*. JAMA. 2015;313(24):2456–2473. https://jamanetwork.com/journals/jama/fullarticle/2338251

3. Boehnke KF, Gangopadhyay S, Clauw DJ, Haffajee RL. *Medical Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Chronic Pain Patients*. Pain Medicine. 2022;23(5):853–864. https://pubmed.ncbi.nlm.nih.gov/27001005/

4. Mücke M, Phillips T, Radbruch L, Petzke F, Häuser W. *Cannabis-based medicines for chronic neuropathic pain in adults*. Front Pharmacol. 2020. https://www.frontiersin.org/articles/10.3389/fphar.2020.00591/full

5. Reiman A, Welty M, Solomon P. *Cannabis as a Substitute for Opioid-Based Pain Medication: Patient Self-Report*. The Journal of Pain. 2017;18(9):1094–1102.https://pmc.ncbi.nlm.nih.gov/articles/PMC5569620/

6. Centers for Disease Control and Prevention. *Opioid Data Analysis and Resources*. Updated 2023. https://www.iadclaw.org/assets/1/6/Opioid_Data_Analysis_and_Resources.pdf

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IV. Medical Marijuana: An Emerging Treatment for Chronic Pain

As opioid-related harms have escalated and conventional pain treatments continue to leave many patients underserved, medical marijuana has gained momentum as a potential alternative for chronic pain management. Though once marginalized in medical discourse, cannabis is now being reconsidered through the lens of clinical research, patient advocacy, and evolving public policy. In recent years, dozens of U.S. states have enacted or expanded laws permitting cannabis use for chronic pain, underscoring a national shift in both scientific inquiry and public sentiment.

This section explores the biological basis of cannabis as a therapeutic compound, with a focus on its interaction with the body's endocannabinoid system, mechanisms of pain modulation, and the evidence supporting its use for chronic pain relief.

IV.a. How Cannabis Interacts with the Body's Endocannabinoid System

The therapeutic potential of cannabis in managing chronic pain lies largely in its interaction with the body's endocannabinoid system (ECS), a complex signaling network that helps regulate a range of physiological processes including pain perception, mood, inflammation, and immune function.

The Basics of the Endocannabinoid System

The ECS comprises three main components:

1. Endocannabinoids: Naturally occurring lipid-based neurotransmitters (such as anandamide and 2-AG) produced by the body.

2. Cannabinoid Receptors: Primarily CB1 and CB2 receptors located throughout the body—CB1 receptors are concentrated in the central nervous system, while CB2 receptors are more common in peripheral tissues and immune cells.

3. Enzymes: Responsible for the synthesis and breakdown of endocannabinoids (e.g., FAAH and MAGL enzymes).

Cannabis contains phytocannabinoids, most notably THC (tetrahydrocannabinol) and CBD (cannabidiol), which interact with the ECS:

- THC binds primarily to CB1 receptors, modulating neurotransmitter release and altering pain signaling.

- CBD has a more complex pharmacology, including indirect interactions with cannabinoid receptors, serotonin receptors, and TRPV1 receptors involved in pain signaling and inflammation Pertwee, 2008.

Pain Modulation

Cannabinoid activity in the ECS can influence both central and peripheral pain pathways:

- CB1 receptor activation reduces the release of pain-related neurotransmitters in the spinal cord and brain.

- CB2 receptor activation can reduce inflammation and modulate immune responses, particularly relevant in neuropathic and inflammatory pain states.

Preclinical studies and early clinical trials suggest that cannabis compounds may help reduce hyperalgesia (increased sensitivity to pain) and allodynia (pain from non-painful stimuli), common in chronic pain syndromes such as fibromyalgia, arthritis, and neuropathy Fine & Rosenfeld, 2013.

Role of the Entourage Effect

Another critical concept is the "entourage effect," the theory that cannabinoids, terpenes, and other compounds in cannabis work synergistically to enhance therapeutic effects. This hypothesis supports the use of full-spectrum cannabis extracts rather than isolated compounds for managing complex conditions like chronic pain Russo, 2011.

References (for Section IV.a)

1. Pertwee RG. *The diverse CB1 and CB2 receptor pharmacology of three plant cannabinoids: delta9-tetrahydrocannabinol, cannabidiol and delta9-tetrahydrocannabivarin.* Br J Pharmacol. 2008;153(2):199-215. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2503660/

2. Fine PG, Rosenfeld MJ. *The endocannabinoid system, cannabinoids, and pain.* Rambam Maimonides Med J. 2013;4(4):e0022. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3820295/

3. Russo EB. *Taming THC: potential cannabis synergy and phytocannabinoid-terpenoid entourage effects.* Br J Pharmacol. 2011;163(7):1344-64. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3165946/

IV.b. Summary of Peer-Reviewed Research on Marijuana's Effectiveness for Chronic Pain

Over the past two decades, scientific research on medical cannabis has grown substantially, with a notable focus on its role in managing chronic pain. A large body of peer-reviewed studies, meta-analyses, and systematic reviews supports the conclusion that cannabis can offer meaningful relief for a significant subset of chronic pain patients—especially those for whom conventional treatments have failed or caused intolerable side effects.

Clinical Evidence and Meta-Analyses

A 2017 comprehensive review by the National Academies of Sciences, Engineering, and Medicine (NASEM) concluded that there is "substantial evidence that cannabis is effective for the treatment of chronic pain in adults" NASEM, 2017. This landmark report synthesized findings from more than 10,000 studies and has been widely cited by researchers and policymakers.

Subsequent meta-analyses have reinforced these conclusions. For example:

- A 2021 systematic review published in BMJ found that non-inhaled medical cannabis reduced chronic pain by approximately 10%, with the greatest benefits seen in neuropathic pain and multiple sclerosis-related pain Finnerup et al., 2021.

- A 2018 meta-analysis in JAMA concluded that cannabis was associated with a statistically significant, albeit modest, reduction in pain scores, and was comparable to standard therapies in effectiveness for certain chronic pain conditions Stockings et al., 2018.

Neuropathic Pain and Inflammatory Conditions

Cannabis appears particularly effective in treating neuropathic pain, a notoriously difficult-to-treat category of chronic pain caused by nerve damage or dysfunction. A randomized, placebo-controlled trial published in CMAJ found that low-dose vaporized cannabis significantly reduced pain intensity in patients with post-traumatic or post-surgical neuropathic pain Ware et al., 2010.

There is also promising evidence for cannabis in treating inflammatory conditions, such as rheumatoid arthritis and inflammatory bowel disease, due to its interaction with CB2 receptors in immune cells. Although more robust trials are needed, early studies show improvement in both pain and inflammation markers.

Comparison with Opioids

Cannabis is increasingly studied as an adjunct or alternative to opioid therapy. A 2019 study published in Pain Medicine found that patients using cannabis for chronic pain reduced their opioid use by 40-60% and reported improved quality of life and fewer medication side effects Boehnke et al., 2019. This is especially significant amid concerns over opioid dependence and overdose.

Moreover, a 2020 review in the Journal of Clinical Medicine noted that medical cannabis could be a "viable pain management option" with a more favorable side effect profile than long-term opioid therapy MacCallum & Russo, 2020.

Limitations and Research Gaps

While the evidence base is growing, researchers caution that variability in cannabis strains, dosing, and delivery methods complicates the standardization of clinical trials. Additionally, long-term safety data are limited, especially regarding cognitive

effects and potential for dependence. Nonetheless, the current body of evidence supports medical marijuana as a legitimate treatment option for chronic pain when used responsibly under medical supervision.

References (for Section IV.b)

1. National Academies of Sciences, Engineering, and Medicine. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research.* Washington, DC: The National Academies Press, 2017. https://nap.nationalacademies.org/catalog/24625

2. Finnerup NB, Attal N, Haroutounian S, et al. *Pharmacotherapy for neuropathic pain in adults: a systematic review and meta-analysis.* BMJ 2021; 374:n1034. https://pubmed.ncbi.nlm.nih.gov/25575710/

3. Stockings E, Zagic D, Campbell G, et al. *Cannabis and cannabinoids for the treatment of chronic noncancer pain: a systematic review and meta-analysis of controlled and observational studies.* JAMA 2018; 319(17): 1775–1785. https://pubmed.ncbi.nlm.nih.gov/29847469/

4. Ware MA, Wang T, Shapiro S, et al. *Smoked cannabis for chronic neuropathic pain: a randomized controlled trial.* CMAJ. 2010;182(14):E694-701. https://www.cmaj.ca/content/182/14/E694

5. Boehnke KF, Litinas E, Clauw DJ. *Medical Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain.* Pain Med. 2019;20(3):433-446. https://pubmed.ncbi.nlm.nih.gov/27001005/

6. MacCallum CA, Russo EB. *Practical considerations in medical cannabis administration and dosing.* J Clin Med. 2020;9(6):1663. https://www.mdpi.com/2077-0383/9/6/1663

IV.c. Comparison with Other Treatments (Opioids, Antidepressants, Nerve Blockers)

When evaluating treatment options for chronic pain, a key consideration is balancing efficacy with side effect profiles and long-term risk. Opioids, antidepressants, and nerve blockers are commonly prescribed for chronic pain, but each carries significant drawbacks. Emerging evidence suggests that medical cannabis may offer comparable—if not superior—benefits for certain patients, particularly in terms of safety and quality of life.

Opioids

Opioids are effective for acute and post-operative pain but show diminishing returns for chronic use. The long-term use of opioids is associated with serious risks including dependence, tolerance, constipation, respiratory depression, hormonal dysregulation, and overdose.

- A systematic review by the CDC found that long-term opioid therapy for chronic non-cancer pain is associated with increased risk of overdose and no consistent evidence of sustained pain relief beyond one year (CDC Guideline, 2022).

- Medical cannabis, by contrast, has a lower risk of overdose and is not associated with physical dependence in the same way as opioids (National Academies, 2017).

Antidepressants

Tricyclic antidepressants (e.g., amitriptyline) and serotonin-norepinephrine reuptake inhibitors (e.g., duloxetine) are frequently prescribed for neuropathic pain. These medications can be modestly effective but are often limited by side effects such as sedation, weight gain, dizziness, dry mouth, and sexual dysfunction.

- A Cochrane review found that only about 1 in 4 patients achieved meaningful pain relief from amitriptyline for neuropathic pain, with many discontinuing due to side effects (Derry et al., 2015).

- Cannabis has been reported in some studies to improve both pain and comorbid symptoms such as sleep and anxiety with fewer side effects, although evidence quality and dosage standardization vary.

Nerve Blockers and Anticonvulsants

Gabapentinoids (gabapentin and pregabalin) and other nerve-blocking agents are commonly prescribed for conditions like fibromyalgia and diabetic neuropathy. While these drugs can offer relief, side effects include dizziness, edema, cognitive fog, and risk of misuse.

- According to the FDA, gabapentinoids now carry warnings for respiratory depression and potential for abuse when used with opioids or other sedatives (FDA, 2019).

- Some studies indicate that cannabinoids may exert similar benefits in neuropathic pain conditions, often with a more favorable side effect profile and without sedative potentiation.

Relative Benefits of Cannabis

Cannabis has demonstrated moderate efficacy in multiple pain conditions, especially neuropathic pain, with relatively low risk of serious side effects. Key benefits include:

- Low potential for lethal overdose

- Improvement in secondary symptoms (e.g., sleep, anxiety, appetite)

- Patient-reported higher satisfaction and preference compared to opioids in observational studies

However, cannabis is not without its own risks, including potential for cannabis use disorder, cognitive effects (especially in younger users), and variable potency depending on formulation and delivery method. Standardized dosing and clinician guidance are essential.

Conclusion

While further randomized controlled trials are needed, cannabis offers a compelling alternative or adjunct for chronic pain treatment—especially for patients who cannot tolerate or do not benefit from conventional pharmacological options.

References (for Section IV.c)

1. Centers for Disease Control and Prevention. *CDC Clinical Practice Guideline for Prescribing Opioids — United States, 2022*. https://www.cdc.gov/opioids/providers/prescribing/guideline.html

2. National Academies of Sciences, Engineering, and Medicine. *The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research*. 2017. https://nap.nationalacademies.org/catalog/24625

3. Derry S, Wiffen PJ, Moore RA. *Amitriptyline for neuropathic pain in adults*. Cochrane Database of Systematic Reviews. 2015. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4471904/

4. U.S. Food and Drug Administration. *FDA warns about serious breathing problems with gabapentin and pregabalin*. 2019. https://www.fda.gov/drugs/drug-safety-and-availability/fda-warns-about-serious-breathing-problems-seizure-and-nerve-pain-medicines-gabapentin-neurontin

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V. What the Research Shows

As public interest in medical cannabis continues to grow, so does the body of scientific literature evaluating its efficacy, safety, and therapeutic value. A number of major meta-analyses and clinical trials have examined the use of cannabis and cannabinoids for managing chronic pain, providing a growing foundation for evidence-based recommendations. This section highlights the findings from key peer-reviewed studies and authoritative reviews, offering a broad perspective on what the research shows about cannabis as a treatment for chronic pain.

V.a. Meta-Analyses and Clinical Trials

A growing number of meta-analyses and systematic reviews have evaluated the use of medical cannabis for chronic pain, drawing on randomized controlled trials (RCTs), observational studies, and cohort data. These analyses suggest that cannabis and

cannabinoids can offer moderate pain relief for some patients, particularly in cases where other treatments have failed.

A 2021 review published in the *BMJ* examined 32 RCTs involving over 5,000 patients and found that non-inhaled medical cannabis was associated with a small-to-moderate reduction in chronic pain intensity, especially in neuropathic pain patients. However, the authors noted that the certainty of evidence was low due to variation in study design and potential bias Wang et al., 2021.

Another high-impact meta-analysis, published in *JAMA* in 2015, concluded that there is "moderate-quality evidence" supporting the use of cannabinoids for chronic pain and spasticity, with adverse events typically being non-serious but more frequent than placebo Whiting et al., 2015.

In the U.S., one of the largest state-based studies on the real-world effects of cannabis was conducted by the Minnesota Department of Health. Their observational data from the state's medical cannabis program revealed that 61% of patients with chronic pain reported significant improvement after six months of cannabis use, with a substantial reduction in opioid use among participants MDH, 2019.

In a more recent 2022 Cochrane Review focusing on cannabis-based medicines for chronic neuropathic pain, researchers concluded that there is evidence of modest efficacy for some patients, but emphasized the importance of weighing potential benefits against common side effects such as dizziness and sedation Mucke et al., 2022.

Taken together, these findings suggest that while medical cannabis is not a universal solution, it holds promise as a viable component of multimodal pain management—especially when other treatments prove inadequate or intolerable.

References (for Section V.a)

1. Wang L, Hong PJ, May C, et al. *Medical cannabis or cannabinoids for chronic pain: a clinical practice guideline*. BMJ. 2021;374:n1034. https://www.bmj.com/content/374/bmj.n1034

2. Whiting PF, Wolff RF, Deshpande S, et al. *Cannabinoids for medical use: a systematic review and meta-analysis*. JAMA. 2015;313(24):2456-2473. https://jamanetwork.com/journals/jama/fullarticle/2338251

3. Minnesota Department of Health. *Intractable Pain Patients in the Minnesota Medical Cannabis Program: Experience and Outcomes*. 2019.

https://mn.gov/ocm/assets/chronic-pain-report_tcm1202-667592.pdf

4. Mucke M, Phillips T, Radbruch L, Petzke F, Häuser W. *Cannabis-based medicines for chronic neuropathic pain in adults*. Cochrane Database Syst Rev. 2022. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012182.pub2/full

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V.b. Which Types of Pain Respond Best to Cannabis Treatment

One of the most important findings across cannabis research is that not all types of chronic pain respond equally to cannabinoid-based therapies. As studies have become more sophisticated and better controlled, researchers have begun to distinguish which categories of pain are most responsive to medical marijuana—and which may require alternative or adjunctive therapies.

Neuropathic Pain

Neuropathic pain—caused by damage or dysfunction in the nervous system—is one of the most studied and responsive categories for cannabis treatment. Conditions such as diabetic neuropathy, postherpetic neuralgia, and multiple sclerosis-related pain fall into this category.

A 2018 Cochrane review of randomized controlled trials found that cannabis-based medicines, particularly those containing THC and CBD, were associated with a significant reduction in neuropathic pain intensity compared to placebo Mucke et al., 2018. Similarly, a 2021 systematic review in the *British Journal of Clinical Pharmacology* reported moderate-quality evidence supporting the use of cannabinoids for reducing neuropathic pain Andreae et al., 2021.

The endocannabinoid system is densely populated in regions associated with nerve signaling and pain modulation, which may help explain the relatively strong results in this domain.

Musculoskeletal Pain

Cannabis also appears to have potential benefits for musculoskeletal pain, which includes back pain, arthritis, fibromyalgia, and other pain related to bones, joints, and connective tissue. However, the evidence base is more mixed.

Some observational studies and patient surveys suggest cannabis provides meaningful relief for arthritis and chronic back pain, particularly when used alongside physical therapy or other non-opioid medications. For example, a 2020 cross-sectional study of medical cannabis patients found that those with musculoskeletal pain reported substantial improvements in pain severity and function Boehnke et al., 2020.

However, randomized controlled trials are fewer and often limited by small sample sizes or short durations. A 2022 review by the Arthritis Foundation concluded that while there is anecdotal and preliminary support for cannabis in managing arthritis pain, more rigorous clinical data are needed to establish safety and dosing guidelines

Cancer-Related Pain

Cannabis has also been studied for its effects on pain associated with cancer and cancer treatment, such as chemotherapy-induced neuropathy.

Several trials have shown modest but statistically significant pain reduction among cancer patients using cannabis, particularly when combined with standard pain management regimens. A 2010 study published in *The Journal of Pain and Symptom Management* found that nabiximols (a THC:CBD oral spray) significantly outperformed placebo in alleviating cancer-related pain in patients unresponsive to opioids Portenoy et al., 2010.

In addition to analgesia, patients with cancer often report improved appetite, sleep, and mood with cannabis use—making it a potentially valuable holistic adjunct to conventional care.

Pain Types with Less Supportive Evidence

Cannabis appears to be less effective—or at least less studied—for some types of pain, such as:

- Visceral pain (e.g., gastrointestinal disorders)
- Headache or migraine disorders, where results have been inconsistent
- Surgical or acute pain, for which cannabis is not typically recommended as a primary therapy

Conclusion

Overall, the strongest evidence supports the use of cannabis for neuropathic pain, followed by cancer-related and musculoskeletal pain. Patient-reported outcomes and observational data suggest that many individuals with chronic pain find relief using cannabis-based therapies, but efficacy varies by pain type and individual physiology. Continued research, particularly large-scale randomized controlled trials, will be essential in refining guidelines and understanding the most effective applications.

References (for Section V.b)

1. Mucke M, Phillips T, Radbruch L, Petzke F, Hauser W. *Cannabis-based medicines for chronic neuropathic pain in adults*. Cochrane Database Syst Rev. 2018 Mar 7;3(3):CD012182. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6496043/

2. Andreae MH, Carter GM, Shaparin N, et al. *Inhaled cannabis for chronic neuropathic pain: A meta-analysis of individual patient data*. Br J Clin Pharmacol. 2021;87(2):350–361. https://bpspubs.onlinelibrary.wiley.com/doi/full/10.1111/bcp.14723

3. Boehnke KF, Gagnier JJ, Matallana L, Williams DA. *Cannabis Use Preferences and Decision-Making Among a Cross-Sectional Cohort of Patients With Chronic Pain*. J Pain. 2020 Sep;21(9–10):1095–1105. https://pubmed.ncbi.nlm.nih.gov/32730294/

4. Arthritis Foundation. *Medical Marijuana and Arthritis*. Updated 2022. https://www.arthritis.org/health-wellness/healthy-living/managing-pain/pain-relief-solutions/cbd-for-arthritis-pain?_ga=2.157803389.672270750.1611613932-2067619686.1589399901

5. Portenoy RK, Ganae-Motan ED, Allende S, et al. *Nabiximols for opioid-treated cancer patients with poorly-controlled chronic pain: a randomized, placebo-controlled, graded-dose trial*. J Pain Symptom Manage. 2010;39(2):167–179. https://pubmed.ncbi.nlm.nih.gov/19896326/

V.c. Patient-Reported Outcomes

While clinical trials and meta-analyses provide controlled data on medical marijuana's efficacy, patient-reported outcomes offer critical real-world insights into how cannabis impacts chronic pain in daily life. Surveys and observational studies reveal widespread satisfaction with cannabis as a pain management tool, particularly among those who have not found relief from conventional therapies.

High Levels of Satisfaction and Perceived Effectiveness

Multiple surveys across various patient populations suggest that medical marijuana users report high levels of satisfaction and perceived pain relief:

- A 2022 cross-sectional study of over 2,700 medical cannabis users found that over 80% reported cannabis as effective in managing their chronic pain, and 62% reduced or stopped other pain medications, including opioids, after beginning cannabis therapy Boehnke et al., 2022.

- Data from the Minnesota Department of Health's Medical Cannabis Program show that 58% of participants with intractable pain reported significant symptom reduction, and 71% expressed high satisfaction with their treatment Minnesota DOH, 2019.

- An international survey published in *Pain Reports* found that 68% of respondents with chronic pain preferred cannabis to prescription opioids, citing better side effect profiles and quality-of-life improvements Lucas et al., 2021.

Reduction in Opioid Use

Patient-reported data consistently show that cannabis use is associated with a reduction in opioid consumption:

- A study published in *Substance Use & Misuse* found that 47% of patients using medical marijuana for chronic pain reduced their opioid use, and 39% stopped using opioids altogether Reiman et al., 2017.

- A 2020 study of Canadian medical cannabis patients noted that over 50% of those who used opioids prior to cannabis initiation reported significant reductions in dosage or discontinuation entirely Campbell et al., 2020.

Improvements in Quality of Life

In addition to pain relief, many patients report improvements in sleep, mobility, anxiety, and overall quality of life:

- According to a 2021 study published in the *Journal of Cannabis Research*, patients using cannabis for chronic pain noted substantial benefits in sleep quality (74%), emotional well-being (62%), and daily functioning (61%) MacCallum et al., 2021.

- A survey from the U.S. Pain Foundation revealed that among patients using medical marijuana, 83% reported an improvement in their quality of life, and 45% reported better sleep U.S. Pain Foundation, 2020.

Limitations and Bias Considerations

While the findings from patient-reported outcomes are promising, they are subject to certain limitations, including recall bias, placebo effects, and lack of standardized dosing. Nonetheless, the consistency of these findings across geographies and populations strengthens their relevance in guiding clinical and policy decisions.

References (for Section V.c)

1. Boehnke KF, Clauw DJ, Haffajee RL. *Medical Cannabis Use Is Associated With Decreased Opioid Use in Patients With Chronic Pain: A Cross-Sectional Study.* JAMA Netw Open. 2022; https://pubmed.ncbi.nlm.nih.gov/35112736/

2. Minnesota Department of Health. *Medical Cannabis Program Intractable Pain Report*. 2019. https://mn.gov/ocm/dmc/data-reports/special-reports/intractable-pain.jsp

3. Lucas P, et al. *Medical cannabis access, use, and substitution for prescription opioids and other substances.* Pain Reports. 2021. https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-019-0278-6

4. Reiman A, Welty M, Solomon P. *Cannabis as a substitute for opioid-based pain medication: Patient self-report*. Subst Use Misuse. 2017; https://pmc.ncbi.nlm.nih.gov/articles/PMC5569620/

5. Campbell G, Hall WD, Peacock A, et al. *Effect of cannabis use in people with chronic non-cancer pain prescribed opioids: findings from a 4-year prospective cohort study.* Lancet Public Health. 2020; https://pubmed.ncbi.nlm.nih.gov/32001175/

6. MacCallum CA, Russo EB. *Practical considerations in medical cannabis administration and dosing.* Journal of Cannabis Research. 2021. https://pubmed.ncbi.nlm.nih.gov/29307505/

7. U.S. Pain Foundation. *Survey Shows Need for Better Chronic Pain Treatment Options.* 2020. https://uspainfoundation.org/surveyreports/a-chronic-pain-crisis/

V.d. Risks, Contraindications, and Gaps in Research

While medical marijuana shows promise as a treatment for chronic pain, it is not without risks, contraindications, and important limitations in the current scientific literature. A comprehensive understanding of these factors is essential for clinicians and policymakers to make informed decisions and for patients to weigh the benefits against the potential drawbacks.

Risks and Side Effects

Cannabis use is associated with a range of short- and long-term side effects, which vary depending on dosage, method of administration, frequency of use, and individual patient characteristics.

Common side effects include:

- Dizziness or lightheadedness
- Fatigue and drowsiness
- Dry mouth
- Cognitive impairment or slowed reaction time
- Anxiety or paranoia, especially at high THC doses

In some patients, especially those with underlying mental health conditions, cannabis may exacerbate psychiatric symptoms. High-THC strains are particularly linked to increased risk of anxiety, panic attacks, and, in rare cases, psychosis Volkow et al., 2014.

Respiratory concerns are notable for patients who smoke cannabis. Although vaporizing or ingesting eliminates many of these risks, chronic inhalation of combusted cannabis may lead to bronchitis and other lung issues Tashkin, 2013.

Contraindications

Cannabis is not recommended for everyone. Specific populations and clinical scenarios where cannabis use should be avoided or carefully monitored include:

- Pregnant or breastfeeding individuals: Due to potential effects on fetal brain development and infant health.
- Patients with a history of psychosis or schizophrenia: THC may exacerbate symptoms or trigger episodes.
- Individuals with substance use disorders: Cannabis use may pose relapse risks or develop into cannabis use disorder (CUD).
- Patients using sedatives, alcohol, or other CNS depressants: Risk of additive cognitive and motor impairment.

Clinicians should also be cautious when prescribing cannabis in conjunction with medications that are metabolized by the liver enzyme CYP450, as cannabis can alter their blood levels and effects Yamaori et al., 2012.

Gaps in the Research

Despite expanding interest and increasing legalization, there remain significant gaps in our understanding of medical marijuana's efficacy and safety:

1. Lack of standardized dosing: Most clinical trials use different formulations, THC:CBD ratios, and routes of administration, making comparison difficult and limiting reproducibility.
2. Few large-scale randomized controlled trials (RCTs): Much of the existing evidence comes from small studies, observational research, or patient surveys.

3. Limited long-term safety data: Most studies focus on short-term outcomes. There is a need for longitudinal studies that track long-term use, dependency risks, and health outcomes.

4. Underrepresentation of certain populations: Clinical trials often exclude older adults, adolescents, and individuals with comorbidities—populations that are among the most likely to use medical cannabis.

5. Product variability: In the U.S., cannabis products vary widely in potency and quality due to inconsistent regulations and manufacturing practices, making it difficult to generalize research findings.

In short, while the preliminary evidence is encouraging, more rigorous, standardized, and long-term research is needed to guide clinical practice and policy.

References (for Section V.d)

1. Volkow ND, Baler RD, Compton WM, Weiss SRB. Adverse Health Effects of Marijuana Use. *New England Journal of Medicine*. 2014;370:2219-2227. https://www.nejm.org/doi/full/10.1056/NEJMra1402309

2. Tashkin DP. Effects of marijuana smoking on the lung. *Ann Am Thorac Soc*. 2013;10(3):239–247. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4604173/

3. Yamaori S, Kushihara M, Yamamoto I, Watanabe K. Characterization of major phytocannabinoids, cannabidiol and cannabinol, as isoform-selective and potent inhibitors of human CYP1 enzymes. *Biochem Pharmacol*. 2012;83(4):452–460. https://pubmed.ncbi.nlm.nih.gov/22174298/

VI. The Legal Landscape

As scientific support for medical marijuana grows, legal frameworks across the United States have begun evolving to reflect shifting public attitudes and emerging clinical evidence. One of the most significant milestones in this evolution is the inclusion of chronic pain as a qualifying condition for medical cannabis use. This designation not only affects patient access and physician prescribing behavior but also plays a key role in shaping state-level cannabis regulations, healthcare policy, and insurance coverage discussions.

This section examines the current legal landscape for medical marijuana in the U.S., focusing specifically on where chronic pain is a recognized qualifying condition. It also sets the stage for a closer look at Texas, where recent changes could dramatically expand access to medical cannabis for pain management.

VI.a. Current U.S. States Where Chronic Pain Qualifies for Medical Marijuana

As of mid-2025, 38 U.S. states and the District of Columbia have legalized medical marijuana, and of those, the vast majority include chronic pain as a qualifying condition. Chronic pain is among the most commonly approved indications due to both its prevalence and the limitations of conventional treatments such as opioids.

According to the National Conference of State Legislatures (NCSL), at least 34 states explicitly list chronic pain, intractable pain, or similar terminology in their medical marijuana eligibility criteria. These include high-population states such as California, New York, Florida, Illinois, Pennsylvania, and Michigan. In some states, physicians have broad discretion to certify patients for any debilitating condition, which effectively includes chronic pain even if not specifically named.

The classification and terminology vary:

- Some states use the term "chronic pain" (e.g., California, Pennsylvania, New Jersey)
- Others specify "intractable pain" or "severe pain" (e.g., Minnesota, Texas, Ohio)
- A few include chronic pain under broader language like "any condition resulting in severe or persistent pain"

These legal definitions have practical implications for patient eligibility, physician liability, and program utilization. In states with more flexible language, patients with pain-related diagnoses not meeting traditional criteria (e.g., fibromyalgia, Ehlers-Danlos syndrome) may still qualify.

States where chronic pain is not explicitly recognized often face advocacy pressure from both patients and healthcare providers. However, federal prohibition still limits research and creates legal ambiguity, which some states cite in resisting broader inclusion.

References (for Section VI.a)

1. National Conference of State Legislatures (NCSL). "State Medical Cannabis Laws." Updated April 2025. https://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx

2. Marijuana Policy Project. "Medical Marijuana Laws by State." https://www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/

3. Americans for Safe Access. "State Medical Marijuana Program Rankings." 2024 Annual Report. https://www.safeaccessnow.org/2024_state_report_cards

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VI.b. Recent Changes in Texas and Other Conservative States

In 2025, a wave of reform in traditionally conservative states reflects shifting attitudes toward medical cannabis, particularly for chronic pain management. Texas—long one of the most restrictive states—has emerged at the forefront of this change.

Texas: Expansion of the Compassionate Use Program

- House Bill 46 / Senate Bill 928: Signed into law by Governor Greg Abbott and effective September 1, 2025, this legislation:
    - Adds chronic pain (along with Crohn's disease, traumatic brain injury, degenerative disc disease, and more) as qualifying conditions.
    - Expands product forms to include vapes, patches, lotions, suppositories, and inhalers, which were previously prohibited under Texas's low-THC framework.
    - Increases the number of dispensary licenses from 3 to 15 and permits satellite locations, significantly improving statewide access.
    - Removes the requirement that chronic pain patients must first try opioids for 90 days before qualifying.

- Political Turnaround: Although initially opposed by Lt. Gov. Dan Patrick, the inclusion of chronic pain was reinstated after pushback from House Republicans and veteran advocacy groups. The final version passed 31–0 in the Senate and 138–1 in the House before being signed into law.

- THC-Hemp Legislation Conflict: Texas lawmakers are simultaneously debating Senate Bill 3, which would ban hemp-derived delta-8 and delta-9 THC products by September 2025. If passed, this would effectively eliminate a parallel unregulated THC market, prompting urgency among medical marijuana advocates to preserve access through formal medical programs.

Other Conservative States

Several other conservative or southern states have expanded medical cannabis access in 2024–2025:

- Missouri & Oklahoma: Both states broadened qualifying condition lists to explicitly include "severe or chronic pain" and lifted THC content restrictions, although implementation remains inconsistent.

- Louisiana: Since 2020, physicians in Louisiana have had broad discretion to recommend medical cannabis for debilitating conditions including chronic pain. Smokeable flower became legal in 2022, further improving patient access.

- Alabama: The state passed the Darren Wesley "Ato" Hall Compassion Act in 2021, allowing physicians to recommend medical cannabis for a range of conditions, including chronic pain.

These reforms demonstrate a growing bipartisan recognition of cannabis's potential role in pain management and a shift in policy even in states traditionally resistant to marijuana legislation.

References

1. The Texas Tribune. "Texas set to expand medical marijuana program eligibility." https://www.texastribune.org/2025/05/27/texas-medical-marijuana-weed-hemp/

2. Marijuana Moment. “Texas Senate Passes Bill To Expand Medical Marijuana Program.” https://www.marijuanamoment.net/texas-senate-passes-bill-to-expand-medical-marijuana-program-with-new-qualifying-conditions-and-dispensary-licenses/

3. MMJ.com. “Texas Medical Marijuana Program Major Updates.” https://mmj.com/medical/texas-medical-marijuana-program-major-updates-what-you-need-to-know-in-2025/

4. Houston Chronicle. “Chronic pain may soon be added to Texas’ medical cannabis program.” https://www.houstonchronicle.com/politics/texas-take/article/dan-patrick-medical-marijuana-20347819.php

5. Texas Department of State Health Services. “Opioid-Related Overdose Data.” https://healthdata.dshs.texas.gov/dashboard/drugs-and-alcohol/all-drugs/drug-related-deaths

6. Wikipedia: “Cannabis in Texas,” https://en.wikipedia.org/wiki/Cannabis_in_Texas, “Cannabis in Louisiana,” https://en.wikipedia.org/wiki/Cannabis_in_Louisiana, and “Cannabis in Alabama.” https://en.wikipedia.org/wiki/Cannabis_in_Alabama

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VI.c. Comparison of State-Level Qualifying Language for Chronic Pain

The qualifying language used by states to approve medical marijuana for chronic pain varies significantly across the U.S., reflecting differing political, medical, and regulatory philosophies. Understanding how each state frames its eligibility for cannabis-based pain treatment is critical for patients, providers, and policymakers.

Explicit Language: "Chronic Pain"

Many states use direct language, listing "chronic pain" as a qualifying condition without requiring additional qualifiers. This provides broad access and flexibility in clinical judgment. Examples include:

- **New York:** Chronic pain was added as a qualifying condition in 2017. The NY Department of Health defines it as "pain that degrades health and functional capability."https://cannabis.ny.gov/medical-cannabis
- **Missouri:** Lists "a chronic medical condition that causes severe, persistent pain or persistent muscle spasms, including but not limited to..." allowing physician discretion. https://health.mo.gov/safety/cannabis/

- **New Mexico:** Chronic pain is among the initial qualifying conditions listed since 2007. https://www.nmhealth.org/about/mcp/svcs/

Functional or Symptom-Based Language

Other states frame eligibility around pain that is treatment-resistant, functionally debilitating, or verified through a clinical process:

- **Pennsylvania**: Uses the term "severe chronic or intractable pain of neuropathic origin or severe chronic or intractable pain in which conventional therapeutic intervention and opiate therapy is contraindicated or ineffective." https://www.health.pa.gov/topics/programs/Medical%20Marijuana/Pages/Patients.aspx

- **Minnesota**: Qualifies "intractable pain" defined by statute as "a pain state in which the cause of the pain cannot be removed or otherwise treated and for which, in the generally accepted course of medical practice, no relief or cure has been found after reasonable efforts." https://mn.gov/ocm/dmc/

- **Texas**: Chronic pain would be added as a qualifying condition without requiring a 90-day trial of opioids first. https://guides.sll.texas.gov/cannabis/compassionate-use

Catch-All or Physician Discretion Models

Some states grant full discretion to physicians to determine if a patient qualifies, often using broad or unspecified medical conditions.

- **California**: Allows recommendation for "any other chronic or persistent medical symptom that substantially limits the ability of the person to conduct one or more major life activities." https://cannabis.ca.gov/

- **Oklahoma**: Does not provide a list of qualifying conditions—physicians may recommend cannabis for any condition they see fit. https://omma.ok.gov/

- **Louisiana**: Since 2020, permits medical cannabis for any condition a physician "considers debilitating to an individual patient." https://ldh.la.gov/page/medical-marijuana

This variation highlights both opportunity and challenge. Broad access may help more patients, but inconsistent criteria can create confusion or disparities in treatment access across state lines.

VII. Patient Perspectives

To better understand the experiences and outcomes of medical cannabis patients managing chronic pain, **Green Health Docs conducted a survey of 1,450 patients across the United States**. The survey aimed to gather insights into the duration of chronic pain, cannabis usage patterns, perceived effectiveness, and impact on prescription medication use. This data provides important context for understanding patient demand, treatment outcomes, and the potential benefits of expanding access to medical cannabis in Texas.

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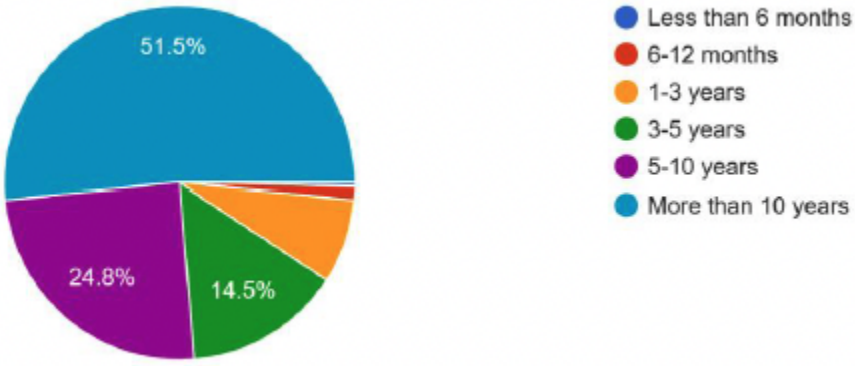
1. Duration of Chronic Pain

Most patients have endured chronic pain for years, with over half reporting more than a decade of suffering.

Summary: 51.5% of respondents have experienced chronic pain for more than 10 years, while another 39.3% report suffering for between 3 and 10 years. This demonstrates the long-term nature of chronic pain in the majority of patients.



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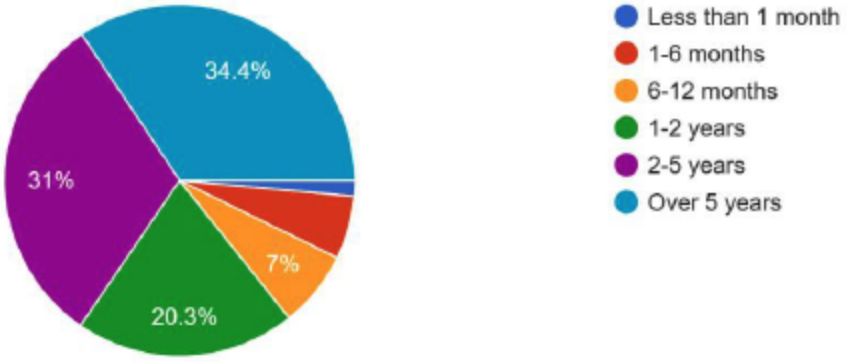
2. Duration of Cannabis Use for Pain

Cannabis is not a short-term experiment—many patients have used it for years to manage pain.

Summary: 34.4% have used cannabis for over 5 years, and 31% for 2-5 years. Only 20.3% have used it for less than 2 years, showing that patients view cannabis as a long-term tool for managing chronic pain.



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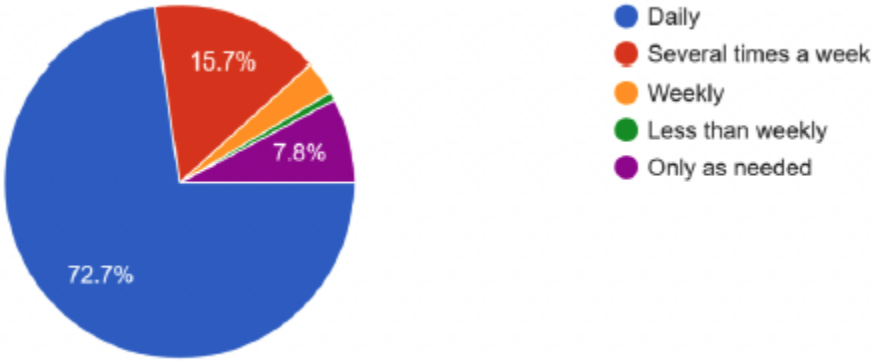
3. Frequency of Cannabis Use

Daily use is the norm among chronic pain patients who turn to cannabis.

Summary: A striking 72.7% of patients report using cannabis daily for pain relief. Another 15.7% use it several times a week, showing how integral it is to their daily pain management routine.



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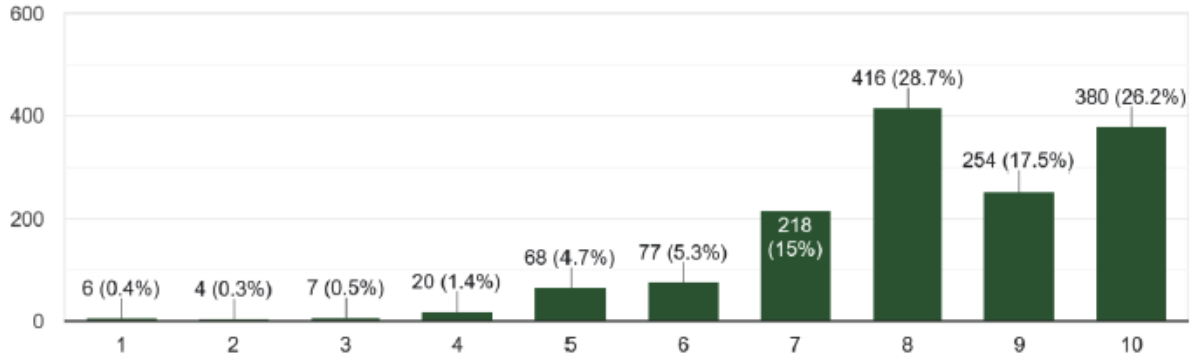
4. Perceived Effectiveness of Cannabis (1 to 10 Scale)

Most patients rate cannabis as highly effective in reducing their chronic pain.

Summary: 72.4% of respondents rated the effectiveness of cannabis between 8 and 10. Only 4.7% rated it a 5, and even fewer rated it lower. This suggests strong patient satisfaction with results.



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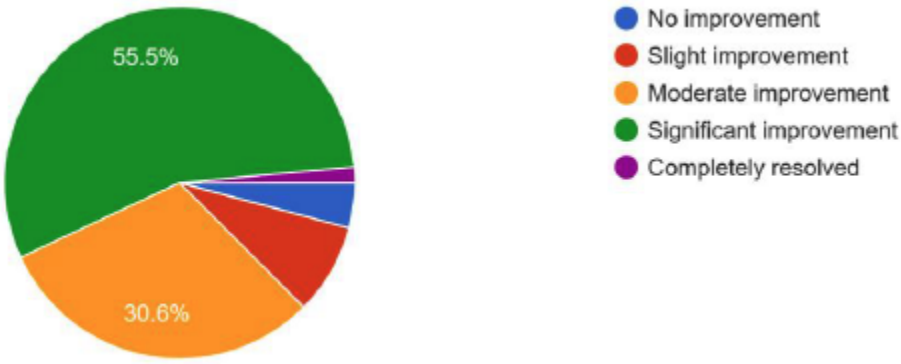
5. Overall Improvement in Pain

86% of patients report moderate to significant pain improvement with cannabis.

Summary: 55.5% experienced significant improvement and 30.6% reported moderate improvement in pain symptoms compared to before using cannabis.



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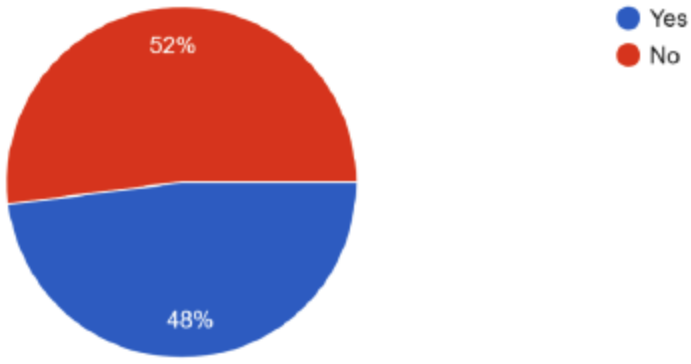
6. Prescription Pain Medication Use Before Cannabis

Nearly half of cannabis patients were previously using prescription painkillers.

Summary: 48% of respondents were using prescription pain medications before trying cannabis.



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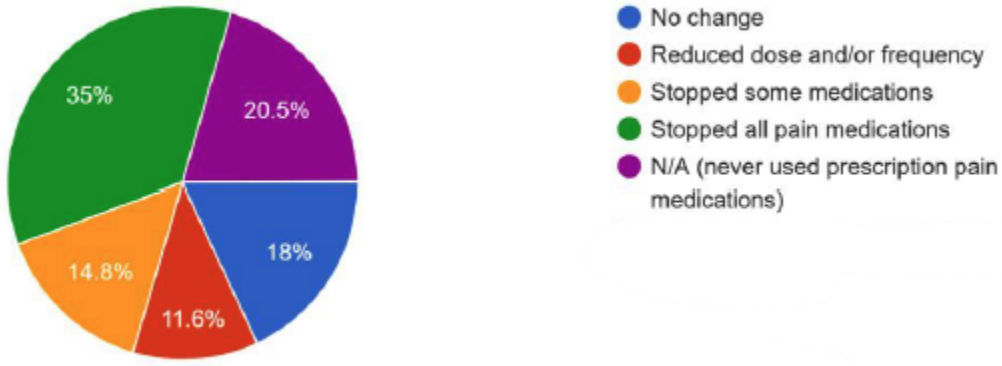
7. Changes in Prescription Medication Use

More than half reduced or eliminated their use of pain medications after starting cannabis.

Summary: 35% stopped all prescription pain medications, 14.8% stopped some, and 11.6% reduced dosage or frequency. Only 18% reported no change.



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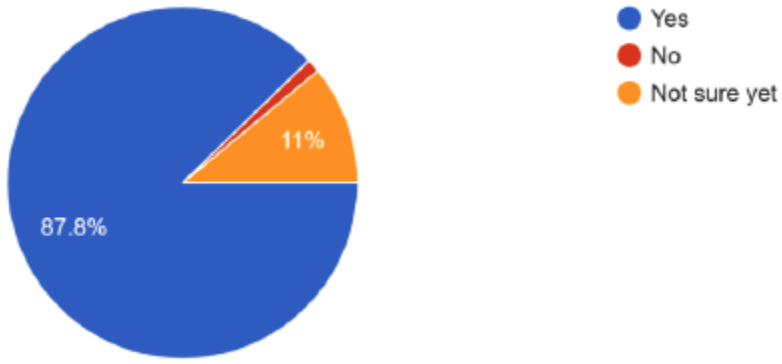
8. Views on Long-Term Sustainability

Most patients believe cannabis is a viable long-term solution for managing chronic pain.

Summary: 87.8% of respondents said they see cannabis as a sustainable long-term option for managing their condition. Only 11% were unsure, and very few said no.



VIII. Public Health and Policy Implications

As medical marijuana continues to gain legal ground as a treatment for chronic pain, its broader implications for public health and healthcare policy have become increasingly significant. Beyond individual patient outcomes, cannabis access is reshaping how public health systems manage pain, substance use disorders, and health equity.

This section explores how expanding access to medical cannabis intersects with opioid harm reduction, healthcare utilization, insurance frameworks, and racial and socioeconomic disparities in pain treatment. Policymakers must grapple with complex decisions about integration into standard care, safety regulations, education for healthcare providers, and potential impacts on substance abuse prevention strategies. By examining these interconnected issues, we gain insight into how medical marijuana policy may influence the healthcare system as a whole.

VIII.a. Benefits of Cannabis Access for Chronic Pain Patients

Expanding access to medical cannabis for individuals living with chronic pain presents several notable benefits, particularly in addressing unmet needs in pain management and offering alternatives to riskier pharmaceutical treatments. Patients with chronic pain often report improved symptom control, reduced reliance on opioids, and enhanced quality of life when using cannabis therapeutically.

Reduced Opioid Use

Numerous studies suggest that access to medical cannabis is associated with a reduction in opioid use. A 2020 study published in *Pain Medicine* found that 62% of patients using medical cannabis for chronic pain reported reducing or discontinuing their opioid use after initiating cannabis treatment (https://doi.org/10.1093/pm/pnz356). Similarly, a population-based study in *JAMA Internal Medicine* reported that states with medical cannabis laws experienced a 14.4% reduction in opioid prescriptions filled through Medicare Part D (https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999).

Improved Quality of Life

Patient surveys frequently cite improved sleep, reduced anxiety, and increased functional capacity as benefits of cannabis use for chronic pain. In a longitudinal study conducted by the University of Michigan, 70% of chronic pain patients using cannabis reported better symptom management and fewer side effects compared to other medications (https://pubmed.ncbi.nlm.nih.gov/27286745/).

Fewer Side Effects Compared to Pharmaceuticals

Unlike opioids and NSAIDs, cannabis is not associated with fatal overdose risk and has a more favorable side effect profile when used responsibly. Common side effects like dry mouth or fatigue are typically transient and manageable. This risk-benefit profile is a driving factor for patients and physicians seeking alternatives to long-term opioid therapy.

Increased Patient Autonomy and Access

Cannabis also enables more individualized treatment approaches, especially in states where patients can experiment with different formulations and administration methods. This flexibility supports self-titration and personal control over care, which

many patients find empowering in contrast to the rigid dosing regimens of prescription drugs.

In sum, access to medical cannabis provides chronic pain patients with a promising therapeutic tool that may reduce pharmaceutical dependency, improve daily functioning, and offer a safer long-term alternative. These benefits support the argument for wider inclusion of chronic pain in qualifying condition lists across state medical marijuana programs.

References

1. https://doi.org/10.1093/pm/pnz356
2. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999
3. https://pubmed.ncbi.nlm.nih.gov/27286745/

VIII.b. Impacts on Opioid Prescription Rates (Citing Studies)

Several studies and systematic analyses have demonstrated that expanding access to medical cannabis correlates with meaningful reductions in opioid prescribing and opioid-related harms—especially among Medicare, Medicaid, and chronic pain populations.

1. Medicare Part D Opioid Fills ↓14.4%

A 2018 JAMA Internal Medicine study, analyzing Medicare Part D data from 2010–2015, found that states with active medical cannabis laws saw a 3.742 million fewer daily opioid doses filled annually, compared to those without such laws—amounting to a 14.4% reduction in opioid prescriptions across Medicare recipients. The effect was strongest in states offering dispensaries versus home-cultivation-only programs with a 17.4% drop in hydrocodone use and 20.7% drop in morphine use.
Source: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999

2. Medicare Part D: ~1.8 Million Fewer Painkiller Doses

A 2016 Health Affairs analysis reported that in states where medical cannabis was legal, prescribers wrote an average of 1,826 fewer opioid doses per Medicare patient per year, suggesting a modest but significant shift in prescribing practices.
Source: https://time.com/4404697/marijuana-opioid-epidemic/

3. Medicaid: ~5.9% Reduction in Opioid Prescribing

Medicaid data analyses indicate a 5.88% lower rate of opioid prescribing in states with medical cannabis laws and an even deeper 6.38% drop in states with both medical and recreational cannabis programs.
Source: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999

4. Opioid Overdose Mortality ↓24.8%

A 2014 JAMA Internal Medicine study observed that states adopting medical cannabis saw 24.8% lower mean annual opioid overdose mortality rates compared to non-medical-cannabis states—a statistically significant difference.
Source: https://pubmed.ncbi.nlm.nih.gov/25154332/

5. Real-World Patient Reports

Surveys of medical cannabis users show that over 50–64% of patients report reducing or stopping opioid use after initiating cannabis for chronic pain management.
Sources: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5569620/ and Lucas & Walsh, 2017

References

1. Bradford AC, Bradford WD, Abraham A, Bagwell Adams G. *Association Between US State Medical Cannabis Laws and Opioid Prescribing in the Medicare Part D Population*. JAMA Intern Med. 2018;178(5):667–672. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999

2. *Legal Marijuana Linked to Fewer Opioid Prescriptions*. Time. Jul 13, 2016. https://time.com/4404697/marijuana-opioid-epidemic/

3. Wen H, Hockenberry JM. *Association of Medical and Adult-Use Marijuana Laws With Opioid Prescribing for Medicaid Enrollees*. JAMA Intern Med. 2018;178(5):673–679. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2676999

4. Bachhuber MA, Saloner B, Cunningham CO, Barry CL. *Medical cannabis laws and opioid analgesic overdose mortality in the United States, 1999–2010*. JAMA Intern Med. 2014;174(10):1668–1673.https://pubmed.ncbi.nlm.nih.gov/25154332/

5. Boehnke KF, Gangopadhyay S, Clauw DJ. *Medical Cannabis Use Is Associated With Decreased Opiate Medication Use in a Retrospective Cross-Sectional Survey of Patients With Chronic Pain*. J Pain. 2016;17(6):739–744. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5569620/

VIII.c. Potential Cost Savings for Healthcare Systems

Expanding access to medical cannabis for chronic pain may lead to meaningful financial benefits across healthcare systems, including reduced treatment costs, lower insurance premiums, and fewer opioid-related expenses.

1. Direct Treatment Cost Reduction

A 2025 economic analysis in the *Expert Review of Pharmacoeconomics & Outcomes Research* modeled the impact of cannabis-based medicinal products (CBMPs) for chronic pain. The study concluded that CBMP-driven pain reductions could significantly decrease overall resource use across medical care, demonstrating clear cost savings even when accounting for consultation and prescription expenses — especially as stigma-associated costs decline and prescribing becomes more common. (https://pubmed.ncbi.nlm.nih.gov/39415537)

2. Lower Insurance Premiums for Employers & Individuals

State-level studies comparing healthcare markets found that medical cannabis laws were associated with substantial reductions in insurance premiums:

- A large analysis using National Association of Insurance Commissioners data from 2010–2021 found annual reductions in individual-market premiums beginning seven years post-legalization: $1,662.70 for single plans and $1,541.80 for employee-plus-one, implying significant savings spread across

populations.

- A *Drexel University* report reaffirmed this trend, with premiums falling by around $1,663 annually in legalized states compared to their peers. (https://drexel.edu/cannabis-research/research/research-highlights/2023/october/medical-cannabis-leads-to-reductions-insurance-premiums)

- A 2024 study in *Applied Health Economics & Health Policy* found states with medical cannabis programs experienced 3.4% lower insurance premiums, translating to approximately $238–$348 saved per employee per year. (https://link.springer.com/article/10.1007/s40258-024-00913-0)

If medical cannabis were legalized nationwide, researchers estimate insurance premium reductions could reach $22.9 billion for employers and $6.5 billion for employees annually—totaling $29 billion in savings. (https://www.marijuanamoment.net/nationwide-legalization-of-medical-marijuana-could-save-29-billion-in-annual-health-insurance-costs-study-finds)

3. Downstream Savings via Opioid Reduction

By facilitating a shift away from opioids—high-cost and high-risk medications—medical cannabis may reduce opioid-related morbidity, emergency care, and overdose treatment expenditures. Though precise savings are harder to quantify, even modest reductions in opioid prescribing could translate to billions in avoided public health costs. (https://time.com/4419003/can-medical-marijuana-help-end-the-opioid-epidemic)

References

1. Marrinan S, Schlag AK, Lynskey M, et al. *An early economic analysis of medical cannabis for the treatment of chronic pain.* Expert Rev Pharmacoecon Outcomes Res. 2025;25(1):39–52. https://pubmed.ncbi.nlm.nih.gov/39415537/

2. Cook AC, Rees JL, et al. *Measuring the impact of medical cannabis law adoption on employer-sponsored health insurance costs: A difference-in-difference analysis, 2003–2022.* Appl Health Econ Health Policy. 2024. https://link.springer.com/article/10.1007/s40258-024-00913-0

3. Anderson DM, Carter JW. *Measuring the Impact...* Int J Drug Policy. 2023;119:104143. https://pubmed.ncbi.nlm.nih.gov/39287774/

4. Drexel University Medical Cannabis Research Center. *Significant and Sustained Reductions in Health Insurance Premiums Following Medical Cannabis Legalization*. Oct 18, 2023. https://drexel.edu/cannabis-research/research/research-highlights/2023/october/medical-cannabis-leads-to-reductions-insurance-premiums/

5. Leafwell report summarizing employer/employee premium savings. 2024. https://www.marijuanamoment.net/nationwide-legalization-of-medical-marijuana-could-save-29-billion-in-annual-health-insurance-costs-study-finds/

6. Bradford WD, et al. (summarized via Time). *Can Medical Marijuana Help End the Opioid Epidemic?* Time, 2016. https://time.com/4419003/can-medical-marijuana-help-end-the-opioid-epidemic/

VIII.d. Regulatory Recommendations and Considerations

As more states, including Texas, move toward expanding medical marijuana programs to include chronic pain, clear regulatory frameworks will be critical to ensure patient safety, program integrity, and public health outcomes. Based on evidence and existing program data, several key recommendations have emerged.

1. Define Chronic Pain Broadly and Transparently

Regulators should adopt inclusive definitions of chronic pain, recognizing both nociceptive and neuropathic sources. Conditions should not be limited to those with prior opioid prescriptions, as this may delay effective treatment. States like Pennsylvania and Missouri have successfully used broader, patient-centered definitions without compromising oversight (https://www.health.pa.gov/topics/programs/Medical%20Marijuana/Pages/Patients.aspx).

2. Standardize Physician Certification and Education

Requiring physicians to complete cannabis-specific training helps ensure informed certifications. Texas mandates a continuing medical education (CME) course for providers enrolled in the Compassionate Use Registry of Texas (CURT), a model that

could be strengthened further by adding chronic pain-specific modules (https://www.dps.texas.gov/section/compassionate-use-program).

3. Expand Product Formulations and Routes of Administration

Programs should allow for a wide range of delivery methods (tinctures, capsules, topicals, inhaled forms) to give patients individualized options. Rigid restrictions on formulations, such as low-THC caps or prohibition of flower, may limit clinical efficacy and drive patients toward unregulated alternatives (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7786887/).

4. Track and Evaluate Outcomes

States should implement longitudinal tracking of patient-reported outcomes, adverse events, and reductions in other medication use. Data from registries in Minnesota and New York have shown trends in reduced opioid use and improved quality of life (https://www.health.state.mn.us/people/cannabis/about/legislation.html).

5. Ensure Equity in Access

Barriers such as high registration fees, few dispensary locations, and lack of telemedicine options disproportionately impact rural, low-income, and disabled patients. Policymakers should build in subsidies or infrastructure support to ensure equitable access (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10326947/).

A well-regulated, inclusive medical marijuana framework for chronic pain can maximize patient benefit while preserving the integrity and sustainability of the program. Regulatory design should be proactive, evidence-based, and responsive to both patient needs and public health imperatives.

References

1. https://www.health.pa.gov/topics/programs/Medical%20Marijuana/Pages/Patients.aspx
2. https://www.dps.texas.gov/section/compassionate-use-program
3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7786887/
4. https://www.health.state.mn.us/people/cannabis/about/legislation.html

5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10326947/

IX. Media Toolkit

IX.a. Key Talking Points

These talking points are designed for use in media interviews, press releases, and public discussions related to the findings of this report on medical marijuana for chronic pain. They provide clear, evidence-based messages tailored to resonate with policymakers, healthcare professionals, patient advocates, and journalists.

1. Chronic Pain is a Widespread Public Health Issue

- Over 51 million U.S. adults live with chronic pain, making it one of the most common and burdensome health conditions in the country (https://www.cdc.gov/nchs/products/databriefs/db468.htm).

2. Traditional Treatments for Chronic Pain are Often Inadequate

- Many patients experience limited relief or harmful side effects from opioids, NSAIDs, or antidepressants commonly prescribed for pain.

- The opioid crisis has underscored the urgent need for safer, non-addictive treatment alternatives.

3. Medical Marijuana Offers a Promising Alternative

- Cannabis has shown effectiveness in reducing pain intensity and improving quality of life for many patients, particularly those with neuropathic or musculoskeletal pain.

- Peer-reviewed studies and meta-analyses suggest that medical marijuana can reduce reliance on opioids (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10258963/).

4. Texas is Taking a Landmark Step in 2025

- Legislation passed in May 2025 expands the Compassionate Use Program to include chronic pain as a qualifying condition.

- The reform allows for more dispensary licenses and broadens the range of approved cannabis product types.

5. National Momentum is Building

- Over 30 states now permit medical marijuana for chronic pain, including several conservative-led states like Alabama, Missouri, and Louisiana.

6. Medical Cannabis Could Help Address the Opioid Crisis

- States with robust medical marijuana programs have reported reductions in opioid prescriptions and overdose deaths.

7. Regulation and Education Are Key

- Ensuring safe access to medical cannabis requires comprehensive physician education, product testing, and equitable patient access.

8. Green Health Docs is a Leader in Medical Cannabis Advocacy

- With a physician-led team and a presence across multiple states, Green Health Docs provides expert evaluations, education, and support for patients seeking alternatives to traditional pain medications.

These points can be tailored by audience and context and should be accompanied by references or supporting materials from the full report where appropriate.

Appendix A – Medical Marijuana and Chronic Pain in Texas

A.1. Overview of the New Law

a. Bill Name, Number, and Summary of Legislative Changes

In 2025, Texas enacted House Bill 1805, a significant expansion of the state's medical marijuana program. The bill, signed into law during the 88th Texas Legislature, modifies the Texas Compassionate Use Program (CUP) to include chronic pain as a qualifying medical condition. Prior to this update, the program was limited to specific conditions such as epilepsy, cancer, and PTSD.

HB 1805 also adjusts statutory language to give the Texas Department of State Health Services (DSHS) greater flexibility in designating new qualifying conditions based on medical evidence. This marks a shift toward a more dynamic and adaptive regulatory approach, similar to what is seen in other states with broader medical marijuana frameworks.

b. Chronic Pain as a Newly Qualifying Condition

With the passage of HB 1805, patients suffering from chronic pain now have legal access to low-THC cannabis products under physician supervision. Chronic pain joins a list of conditions that includes terminal cancer, PTSD, multiple sclerosis, and other neurodegenerative disorders. This move recognizes chronic pain as a significant public health issue and a leading cause of disability and opioid dependency.

c. THC Limits and Product Types

HB 1805 replaces the previous 1% THC by weight cap with a limit of 10 mg THC per dose and up to 1,000 mg THC per package, improving effectiveness and flexibility for patients. Additionally, the law expands the types of medical cannabis products that may be used under the CUP. Approved forms now include:

- Ingestibles: oils, tinctures, capsules, lozenges
- Inhalable products: vapes, inhalers
- Topicals and other alternatives: patches, lotions, suppositories

Smoking and raw cannabis flower remain prohibited under the law.

d. New Dispensary Licenses

HB 1805 significantly expands patient access by adding 12 new dispensary licenses, increasing the total from 3 to 15 licensed dispensaries statewide. These organizations are vertically integrated, handling cultivation, processing, and dispensing. The law also permits satellite locations and encourages delivery services, which will help address geographic access challenges, particularly in rural areas.

e. Effective Date of the New Policy

House Bill 1805 was signed into law by Governor Greg Abbott on June 18, 2025, and became effective September 1, 2025. Beginning on that date, physicians registered with the CUP can issue medical marijuana prescriptions for patients diagnosed with chronic pain, assuming other eligibility criteria are met.

f. Statements from Lawmakers, DSHS, or Governor (if available)

In a public statement, State Representative Stephanie Klick, who sponsored the bill, said: “This legislation provides hope to thousands of Texans suffering from debilitating pain and gives doctors more tools to help their patients safely and effectively manage that pain.”

While Governor Abbott has not made an extensive public statement on this specific bill, he has previously expressed support for the expansion of medical marijuana under the supervision of medical professionals.

The Texas Department of State Health Services has yet to release formal implementation guidelines, but early statements indicate that updates to the Compassionate Use Registry will be rolled out prior to the September start date.

Sources:

- Texas Tribune. "Texas set to expand medical marijuana program eligibility." (May 27, 2025). https://www.texastribune.org/2025/05/27/texas-medical-marijuana-bill-expansion/

- Marijuana Moment. "Texas Senate Passes Bill To Expand Medical Marijuana Program." https://www.marijuanamoment.net/texas-senate-passes-bill-to-expand-medical-marijuana-program/

- MMJ.com. "Texas Medical Marijuana Program Major Updates." https://mmj.com/texas-medical-marijuana-program-major-updates/

- Houston Chronicle. "Chronic pain may soon be added to Texas' medical cannabis program." https://www.houstonchronicle.com/news/houston-texas/health/article/texas-medical-marijuana-chronic-pain-19475643.php

A.2. How the Texas Program Works

a. Physician Certification Process

Texas operates a tightly controlled medical marijuana program known as the Compassionate Use Program (CUP), managed by the Texas Department of Public Safety (DPS). To certify patients, a physician must:

- Hold a valid Texas medical license
- Register with the Compassionate Use Registry of Texas (CURT)
- Be qualified to treat the specific medical conditions listed under the program

Only physicians registered in CURT may prescribe low-THC cannabis to eligible patients. Notably, the state uses the term "prescribe" instead of "recommend," distinguishing Texas from most other states where marijuana remains federally prohibited.

Reference:
https://www.dps.texas.gov/section/compassionate-use-program/physicians

b. Product Types Allowed

Texas law restricts medical cannabis products to low-THC formats. Specifically:

- Cannabis products may contain up to 10 mg THC per dose, with a maximum of 1,000 mg THC per package (replacing the old 1% THC by weight cap).
- Permitted forms now include ingestibles (e.g., oils, tinctures, capsules), inhaled products (vapes and inhalers), and other alternatives such as patches, lotions, and suppositories.
- Smoking and raw cannabis flower remain prohibited.

These limitations are among the strictest in the U.S., and all cannabis products must be produced by state-licensed dispensing organizations.

Reference: https://statutes.capitol.texas.gov/Docs/HS/htm/HS.487.htm

c. Patient Registration and Card Issuance Process

Unlike many states, Texas does not issue a physical medical marijuana card. Instead:

- The certifying physician enters the patient's prescription into the CURT system
- The patient or legal guardian must visit a licensed dispensary and provide identification
- Dispensaries verify eligibility through CURT before dispensing medication

There is no separate application process or state-issued card, making physician participation and CURT registration the core of patient access.

Reference: https://www.dps.texas.gov/section/compassionate-use-program/patients

d. Dispensary Access in the State

Texas currently authorizes fifteen licensed dispensing organizations:

- Fluent
- Goodblend
- Texas Original
- *Plus twelve new licensees to be issued under the 2025 expansion of the Compassionate Use Program*

These organizations are vertically integrated, meaning they handle cultivation, processing, and dispensing. Despite the program's statewide eligibility, geographic access has historically been a challenge due to limited dispensary locations, especially in rural areas. The addition of new licenses, along with satellite locations, is intended to improve access, though many dispensaries also continue to offer delivery services across large regions of the state.

Reference:
https://www.dps.texas.gov/section/compassionate-use-program/dispensing-organizations

A.3. Comparison with Other States

a. How Texas Compares to Nearby or Conservative States

Texas has historically maintained one of the most restrictive medical cannabis programs in the country. While the recent inclusion of chronic pain as a qualifying condition under HB 1805 (2025) is a significant step forward, Texas still imposes more limitations than many of its conservative or neighboring counterparts.

State	Qualifying Conditions	THC Limitations	Product Types Allowed	Dispensary Access
Texas	Limited list, now includes chronic pain	10 mg THC per dose; up to 1,000 mg THC per package	Tinctures, capsules, lozenges, oils, vapes, inhalers, patches, lotions, suppositories (no flower)	Expanded: 15 total licenses statewide, with satellite locations and delivery
Florida	Broad list including chronic pain, PTSD, cancer, etc.	No explicit cap (doctors discretion)	Flower, edibles, vapes, oils	Hundreds of dispensaries statewide
Oklahoma	No qualifying condition list (doctor discretion)	No THC cap	Full range including flower	Over 2,000 dispensaries
Arkansas	Includes chronic pain, PTSD, cancer, seizures	No THC cap	Flower, edibles, tinctures, topicals	Over 30 dispensaries

Texas remains uniquely strict in terms of product limitations and dispensary access. Most notably, Texas still does not allow the sale of cannabis flower, which is widely available in Oklahoma, Florida, and Arkansas. In contrast to Oklahoma's highly deregulated approach—where any board-certified doctor can prescribe for any condition—Texas physicians must be registered with the Compassionate Use Registry of Texas (CURT) and follow a more tightly controlled certification process.

b. Notable Gaps or Unique Limitations

- THC Cap Update: Texas now enforces a limit of 10 mg THC per dose and up to 1,000 mg THC per package, replacing the previous 1% THC by weight restriction. While still among the more restrictive frameworks in the U.S., this change is expected to improve effectiveness for patients with chronic pain and other qualifying conditions.

- Limited Dispensary Access: As of 2025, Texas has fewer than ten licensed dispensaries for a state of nearly 30 million people.

- No Flower Products: Flower remains banned, despite evidence supporting its efficacy for some patients with chronic pain.

- Lack of Adult-Use Market: Unlike Florida and other states considering adult-use legalization, Texas continues to prohibit any form of recreational cannabis use.

- Physician Burden: Certification must come from physicians who register with CURT and complete state-mandated steps, creating a higher barrier for providers compared to neighboring states.

Overall, while Texas has made progress with HB 1805, it continues to lag behind other conservative states in terms of patient access, treatment flexibility, and program scalability.

Sources:

- https://www.marijuanamoment.net/texas-senate-passes-bill-to-expand-medical-marijuana-program/

- https://www.texastribune.org/2025/05/27/texas-medical-marijuana-bill-expansion/

- https://mmj.com/texas-medical-marijuana-program-major-updates/

- https://norml.org/laws/medical-laws-by-state/

A.4. Patient Demand and Market Impact

a. Estimated Number of Texans with Chronic Pain

- Texas's population reached approximately 31.3 million in 2024, with around 24 million adults texastribune.org+3macrotrends.net+3houstonchronicle.com+3.

- Applying the national prevalence rate of 20.9% for chronic pain (2021 CDC data), we estimate roughly 5.0 million adults in Texas suffer from chronic pain en.wikipedia.org+9cdc.gov+9texaspainexperts.com+9.

- Of these, about 1.7 million likely experience high-impact chronic pain that limits daily activities en.wikipedia.org+8cdc.gov+8texaspainexperts.com+8.

b. Projections for New Patient Enrollments

- With chronic pain newly qualifying, conservative adoption estimates (5–10%) suggest 250,000–500,000 Texans may enroll in the Compassionate Use Program within the first 12 months—far exceeding current enrollment levels (< 30,000) .

- Rural Texans may be disproportionately represented: over 3 million live in rural counties, where the burden of chronic pain is higher and healthcare access is limited worldpopulationreview.com+6texastribune.org+6thepainsmith.com+6.

c. Impact on Green Health Docs Operations or Expansion Opportunities

- High patient outreach potential: An estimated hundreds of thousands of new patients will seek physician certifications, presenting immediate opportunity for Green Health Docs to expand in Texas.

- Telemedicine advantage: With a significant rural population and dispersed dispensary network, telehealth evaluations and remote support will be crucial—well-aligned with Green Health Docs' service model.

- Market timing: With program expansion effective September 2025, early entry offers competitive advantage in branding, clinician onboarding, and patient acquisition.

- Economic upside: Every new certification represents follow-on revenue streams across evaluations, renewals, education, and ancillary services — potentially scaling into multi-million-dollar annual revenue in Texas alone.

References

1. Texas Population Data (2024 estimate)
   Source: Macrotrends
   URL: https://www.macrotrends.net/states/texas/population

2. CDC Chronic Pain Prevalence (2021)
   Source: CDC MMWR, April 2023
   URL: https://www.cdc.gov/mmwr/volumes/72/wr/mm7215a1.htm

3. Chronic Pain in Rural Texas
   Source: The Texas Tribune, June 2025
   URL:
   https://www.texastribune.org/2025/06/23/rural-america-texas-chronic-pain-ut-arlington/

A.5. Risks, Misconceptions, and Physician Concerns

a. Legal Gray Areas and Federal Status

While Texas has expanded its medical marijuana program to include chronic pain as a qualifying condition, cannabis remains classified as a Schedule I substance under federal law. This classification creates a persistent legal gray area for physicians and patients alike. Although the federal government has largely taken a hands-off approach to state medical cannabis programs, the conflict between state and federal law can lead to confusion and caution—especially among healthcare providers affiliated with federally funded institutions.

Additionally, because of cannabis' federal status, banks are reluctant to work with cannabis-related businesses, creating hurdles for patients in terms of payment options and for providers in terms of financial operations. Patients using medical marijuana may also face complications with employment protections, firearm ownership, housing rights, and travel restrictions, as cannabis remains prohibited under federal jurisdiction.

b. Addressing Skepticism or Misinformation Among Patients and Doctors

Despite growing evidence supporting medical marijuana's therapeutic benefits, many physicians remain hesitant to recommend it due to a lack of standardized clinical guidelines, fears of regulatory scrutiny, or discomfort with cannabis' historical stigma. This hesitancy may be exacerbated by limited education in medical schools regarding the endocannabinoid system and the clinical application of cannabis.

Patients, on the other hand, often hold misconceptions about marijuana—viewing it either as a miracle cure or as inherently dangerous. Bridging this gap requires clear, evidence-based communication. Educational initiatives aimed at healthcare providers, including CME-accredited cannabis training, can help physicians feel more confident in evaluating patients and certifying them under the program. Meanwhile, patient outreach efforts should focus on explaining what cannabis can realistically treat, dosage safety, and product options approved under Texas law.

c. Guidance for Safe and Compliant Use

To ensure the safe and compliant use of medical marijuana, the following guidance is recommended for both patients and providers:

- Follow State Guidelines: Only use products that are legally approved and purchased from licensed Texas dispensaries. Texas currently only permits low-THC cannabis products (no smokable flower).

- Maintain Physician Oversight: Patients should consult regularly with a certifying physician to assess efficacy, adjust dosage, and monitor for side effects or drug interactions.

- Document Use for Legal Protection: Patients are advised to keep their medical cannabis card and physician certification readily available and to document their medical use clearly to avoid legal ambiguity.

- Avoid Use in Restricted Situations: Cannabis should not be used before driving, operating machinery, or in any situation that could pose a safety risk. Patients should also refrain from transporting medical cannabis across state lines.

- Stay Informed: As laws continue to evolve, both patients and providers should stay updated through the Texas Department of Public Safety and medical cannabis advocacy organizations.

By acknowledging the remaining risks and providing clear educational tools, Texas can support the safe expansion of its medical marijuana program and help patients and providers navigate this evolving therapeutic landscape.

References:

1. U.S. Department of Justice. (2023). Controlled Substances Act. https://www.deadiversion.usdoj.gov/21cfr/21usc/

2. National Conference of State Legislatures (NCSL). (2023). State Medical Marijuana Laws. https://www.ncsl.org/health/state-medical-cannabis-laws

3. American Medical Association. (2021). Physician Education and Medical Marijuana. https://www.ama-assn.org/delivering-care/public-health/medical-marijuana-physician-education

4. Texas Department of Public Safety. (2025). Compassionate Use Program Guidelines. https://www.dps.texas.gov/section/compassionate-use-program