Chronic Pain Management Therapies in Medicaid: Policy Considerations for Non-Pharmacological Alternatives to Opioids

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Although most Medicaid agencies cover services that can be used as alternatives to opioids for pain management, significantly fewer states have policies or procedures in place to encourage their use. Between March and June 2016, the National Academy for State Health Policy (NASHP) conducted a survey of all 51 Medicaid agencies to determine the extent to which states have implemented specific programs or policies to encourage or require non-opioid therapies for acute or chronic non-cancer pain. We contacted each Medicaid Director via email. In cases of non-response, we followed up with Medicaid Medical Directors. Ultimately, we received responses from 41 states and the District of Columbia.

Key Findings:

• Nearly 1-in-5 American adults suffer from chronic pain, and long-term opioid regimens have become increasingly more common as a treatment for non-cancer pain.
• Medicaid populations are prescribed opioids at a disproportionately higher rate than non-Medicaid populations and are also more likely to experience an overdose.
• Opioids are clinically indicated for some types of pain, but there is a lack of evidence supporting their long-term use to treat non-cancer pain. However, the evidence base for alternative treatments such as acupuncture and chiropractic manipulation is also mixed.
• Most Medicaid agencies cover services that can be used to treat pain in lieu of opioids, but less than half have taken steps to specifically encourage or require their use.
• Medicaid agencies are faced with important policy considerations, including budget constraints that make covering additional services difficult and provider and beneficiary educational needs to raise awareness on when these services may be appropriate.
• The evidence base for or against non-pharmacological alternatives will become more robust as more Medicaid agencies implement programs encouraging the use of these services.

Clinicians use a variety of pharmacological and non-pharmacological therapies to treat pain. Pharmacological treatments include opioid narcotics (e.g., oxycodone, codeine, morphine) as well as non-opioid pain relievers (e.g., nonsteroidal anti-inflammatory drug (NSAIDs) such as ibuprofen and naproxen or corticosteroids). Anticonvulsant and antidepressant medications are also effective in treating some pain. Non-pharmacological therapies commonly used to address pain include physical therapy, cognitive behavioral therapy, and exercise. Other services, commonly known as complementary, alternative, or integrative therapies, include massage, acupuncture, and chiropractic manipulation.
Pain in America

Pain significantly impacts the American health care system, with nearly 1 in 5, or 40 million, adults experiencing severe pain, and an estimated 25.3 million adults experiencing chronic pain. Individuals with severe pain are more likely to use additional health care services and experience worse health outcomes compared to individuals with no or low pain.

Since 1999, use of opioid analgesics to treat pain in the United States has increased. Although the United States comprises just five percent of the world’s population, Americans consume 80 percent of the world’s opioid pain medications, including 99 percent of the world’s hydrocodone. Evidence supports the use of opioids for short-term pain therapy but has pointed to greater risk with long-term use, including development of opioid use disorders. The rate of opioid related overdose deaths has increased in tandem with opioid sales, contributing to more than 165,000 deaths in the United States between 1999 and 2014.

Medicaid populations are prescribed opioid painkillers at twice the rate of non-Medicaid populations and are three-to-six times more likely to experience an overdose. In response to the rise of opioid use disorders and opioid related overdose deaths, a number of state and federal agencies have worked to reduce the health care system’s reliance on opioid narcotics to treat pain. Earlier this year, the Centers for Disease Control and Prevention (CDC) released guidelines for prescribing opioids to treat chronic non-cancer pain in adults. In its recommendations, the CDC urges clinicians to consider non-pharmacologic and non-opioid therapies when treating chronic pain and recommend opioid therapy only when expected benefits outweigh risks to the patient. The Centers for Medicare & Medicaid Services (CMS) also addressed safe prescribing in an informational bulletin encouraging Medicaid agencies to promote the use of opioid alternatives. Lastly, the National Pain Strategy, developed by the Interagency Pain Research Coordinating Committee, called for an individualized, multi-modal, and interdisciplinary approach to pain management.

A Brief Review of the Evidence Base for Opioids and Alternative Non-Pharmacological Therapies for Pain

Over the past two decades, long-term opioid therapy has become increasingly more common as a treatment for non-cancer pain. The current medical literature shows that while opioids are clinically appropriate in some cases, particularly as frontline therapies for cancer pain and on a short-term basis after invasive surgery, there are certain types of pain, such as from fibromyalgia, where evidence indicates opioids are not an effective treatment option.
A 2015 systematic review found no evidence supporting long-term opioid use as a treatment for chronic pain. While none of the studies identified examined pain, function, or quality of life for more than one year after starting opioid therapy, the authors did find evidence that long-term use was associated with increased risks of harm, particularly at higher doses. It should be noted that long-term use of non-opioids also carries some risk for individuals. Long-term use or high-dosages of NSAIDs or acetaminophen may increase the risk of stomach, kidney, or liver problems.

The current literature on non-pharmacological alternatives is mixed, although there is a growing body of evidence to support the use of alternative services to treat chronic pain. For example, a systematic review found that cognitive behavioral therapy had small to moderate effects on pain, disability, and mood immediately post-treatment when compared with usual treatment. Similarly, a systematic review found that acupuncture may benefit individuals with osteoarthritis. The systematic reviews also suggest lower costs for patients experiencing spine pain who received chiropractic care, although the included studies had many methodological limitations.

Conducting reliable studies of alternative pain management therapies for chronic pain can be particularly challenging in both design and interpretation. To date, many studies have included small sample sizes, and the cost-effectiveness of alternative pain management services compared against conventional treatments has not been adequately studied. As more evidence becomes available, state Medicaid agencies can better evaluate which services should be included as a covered benefit. These coverage decisions may ultimately vary based on the type and location of the pain.

### Non-Opioid Pain Management Strategies in Medicaid

#### Medicaid Authorities to Cover Alternative Services

Medicaid agencies can use a range of authorities to cover alternative pain management treatment services. For example, the Social Security Act directly authorizes Medicaid agencies to cover physical therapy as an optional service. The Social Security Act also affords Medicaid agencies significant flexibility in covering additional services allowable under state law, most notably through the Rehabilitation Services Option and Other Licensed Practitioner Services (see text box). Medicaid agencies can use this flexibility to cover alternative chronic pain management services, including acupuncture, massage therapy, and cognitive behavioral therapy.

In addition to state plan authorities, states have covered alternative pain management services using various waiver and demonstration authorities. For example, California recently included a Chronic Non-Malignant Pain Management Project designed to “improve the use of multi-modal pain manage-
ment strategies” as part of the Public Hospital Redesign and Incentive in Medi-Cal program within the state’s Section 1115 Demonstration.28 States have also used Home and Community-Based Services (HCBS) Waivers for eligible populations, as seen in Colorado’s 1915(c) waiver for persons with Spinal Cord Injuries.29, 30

The Henry J. Kaiser Family Foundation (KFF) tracks Medicaid benefits across the country, including U.S. Territories.31 The most recent data available (from 2012) found that:

- 39 Medicaid agencies reimbursed physical therapy services;32
- 38 Medicaid agencies reimbursed psychologist services;33
- 36 Medicaid agencies reimbursed occupational therapy services;34 and
- 27 Medicaid agencies reimbursed chiropractic services.35

In total, all but six states (Alabama, Connecticut, Georgia, Louisiana, Oklahoma, and Rhode Island) reimbursed providers for at least one of those categories of services. KFF found that the predominant reimbursement methodology for these services was fee-for-service, which may impact how these services could be used to treat pain. For example, states that reimburse for psychologist services may not necessarily reimburse for cognitive behavioral therapy to treat pain.

Coverage and utilization management policies for these services may further vary in states with managed care arrangements. It is important to note that federal regulations that went into effect in July 2016 ensure that utilization management policies (e.g. treatment limits) in managed care arrangements cannot be more restrictive than policies covered under the state plan.36 Managed care waivers are also potential avenues for states to increase coverage for alternative pain management services.

**State Strategies to Encourage or Require Alternative Non-Opioid Treatments**

As seen in Figure 1, of the 41 agencies that responded to NASHP’s survey, only 12 states (29.2 percent) responded that they have implemented specific programs or policies to encourage or require the use of non-opioid pain management therapies. When comparing these findings with the KFF data presented in the previous section, it is clear that while most states and the District of Columbia cover services that could be used as alternative pain treatments, fewer than half have taken formal actions to increase their use to treat chronic non-cancer pain. These results should not be construed to imply that Medicaid agencies have not made opioids and pain management a priority. In fact, many respondents who answered “No” in the survey discussed policies that their agencies have taken to increase appropriate opioid prescribing, most commonly though the development of clinical guidelines or through pharmacy benefit management strategies, including dosage restrictions, quantity limits, and prior authorization requirements. However, the survey was not designed to capture these types of policies, so any attempt to quantify the number of states pursuing these strategies would be incomplete.

Beyond Medicaid, state legislatures are becoming increasingly involved in setting state policies governing opioid prescribing. Between March and June 2016, six states (Connecticut, Massachusetts, Maine, New York, Rhode Island, and Vermont) passed laws either codifying limits on certain opioid prescriptions or authorizing a state agency to promulgate regulations to impose such limits.38 In theory, Medicaid providers will increasingly look to non-opioid and non-pharmacological interventions for different types of pain as opioids become more restricted. It will be important to assess the impact of these new laws, particularly for populations at greater risk of opioid use disorders or overdose. Research on the effec-
tiveness of similar laws is mixed. A review of legislation passed between 2006 and 2012 found that laws designed to reduce opioid abuse, including requiring tamper-resistant prescription forms and requiring physicians or pharmacists to utilize prescription drug monitoring programs, were not associated with reductions in hazardous opioid use or overdose in disabled Medicare populations. Conversely, two studies published in June 2016 found that implementation of prescription drug programs were associated with reduced opioid prescribing and opioid-related deaths.

Figure 1 - Survey Results: “Has your Medicaid agency implemented specific policies or programs to encourage or require alternative pain management strategies in lieu of opioids for acute or chronic non-cancer pain?”

State Case Studies

Florida
Florida was one of the earliest states to pilot complementary and alternative medicine (CAM) services for chronic pain. In 2002, the state Legislature authorized a three-year Integrative Therapies Program in two counties near Tampa Bay. The pilot, which operated as a disease management program within the state’s primary care case management authority, launched in 2004 and was expanded to a third county in 2005 to include Tampa Bay. Eligible individuals diagnosed with chronic fatigue syndrome, chronic back or neck pain, or fibromyalgia could receive enhanced services, including acupuncture, chiropractic services, and massage therapy. An evaluation conducted by researchers at the University of South Florida in 2006 found a nine percent reduction in per member per month costs, and consumer surveys...
showed that participants were satisfied with the program and the care they received.\textsuperscript{43} The program was extended for another three years, but an evaluation conducted by researchers at the University of Florida in 2011 did not find cost savings during the program extension and recommended that Medicaid discontinue the program.\textsuperscript{44}

**Oregon**

In Oregon, Medicaid covers benefits based on whether a treatment for a given condition meets cost- and clinical-effectiveness criteria warranting inclusion on the state’s Prioritized List.\textsuperscript{45} Effective July 1, 2016, the Oregon Health Authority (OHA) covers many alternative pain management treatments for patients with lower back pain assessed to have a medium to high risk of a poor functional prognosis, including acupuncture, chiropractic manipulation, cognitive behavioral therapy, osteopathic manipulation, physical and occupational therapy, and, in limited cases, surgery.\textsuperscript{46, 47} Oregon Medicaid also recommends comprehensive pain treatment plans that may include yoga, rehabilitation, massage, and/or supervised exercise therapy, but availability of these services is determined by the state’s Coordinated Care Organizations (CCOs).\textsuperscript{48}

A more limited package of alternative pain management treatments are covered for those patients assessed to have a low risk of a poor functional prognosis.\textsuperscript{49} Oregon’s Prioritized List specifies that opioids should be a second line medication for these low-risk patients, following NSAIDs, acetaminophen, and/or muscle relaxants. Regardless of functional prognosis, opioid prescriptions during the first-six weeks of pain are limited to seven-day supplies of short-acting opioids, additional therapies, such as spinal manipulation or physical therapy, must also be considered. After six weeks, individuals must have shown a 30 percent increase in function to continue receiving opioids (up to a maximum of 90 days of opioid treatment). Prescriptions after six weeks are also limited to seven-day supplies of short acting opioids and must be prescribed in conjunction with alternative therapies.\textsuperscript{50}

CCOs also have the discretion to pay for otherwise non-covered services using a portion of their global budgets set aside for flexible spending.\textsuperscript{51} For example, AllCare CCO uses flexible spending to cover disposable heat pads and personal trainers for individuals as an alternative to opioids for pain.\textsuperscript{52}

**Rhode Island**

Rhode Island’s Section 1115 Demonstration authorizes certain individuals enrolled in Medicaid managed care delivery systems to receive CAM services for chronic pain.\textsuperscript{53} Rhode Island Medicaid has implemented this benefit through its Communities of Care program, a state initiative designed to reduce unnecessary emergency room utilization. Medicaid managed care enrollees with four or more emergency room visits within a 12-month period are eligible to receive acupuncture, chiropractic, or massage therapy services. The state’s two managed care plans, Neighborhood Health Plan of Rhode Island (NHPRI) and United HealthCare of New England, were responsible for developing participation criteria for their enrollees. For example, NPRHI published clinical practice guidelines for its Ease the Pain program, which specified when CAM services referrals were appropriate. Under NHPRI’s guidelines, qualifying individuals diagnosed with back pain, neck pain, and fibromyalgia can be referred for acupuncture, massage, or chiropractic services; for qualifying individuals diagnosed with migraines, acupuncture is the only covered service because “evidence-based recommendations regarding the use of chiropractic or massage therapy could not be made.”\textsuperscript{54}
Vermont
In June 2016, Governor Peter Shumlin signed omnibus legislation to combat opioid abuse in Vermont. The law authorized $200,000 to fund a pilot program that will offer acupuncture services to Medicaid enrollees diagnosed with chronic pain. The legislation requires the pilot to develop evidence-based eligibility requirements built on the cause and location of an individual’s pain to ensure that acupuncture is appropriate. The law also requires the Medicaid agency to consult with an advisory group of pain management specialists and acupuncture providers to ensure the program reflects the current best practices.

Barriers, Challenges, and Considerations for State Medicaid Agencies

Evidence-Based Policymaking
Without clearer evidence for quality outcomes and cost-effectiveness, some policymakers may be understandably hesitant to support some alternative non-pharmacological pain management therapies. Even when alternative services are explicitly covered in practice guidelines, insurers have acknowledged the need for more research. For example, in NHPRI’s Clinical Practice Guidelines, the plan authorized referrals for acupuncture and massage for neck pain, but the guidelines note that there was “insufficient evidence to support or refute [acupuncture],” and that inconclusive evidence for massage “does not exclude the possibility that massage may provide an immediate or short-term benefit.”

Several states are weighing the lack of evidence for effective alternative pain management therapies against the known risks associated with long-term opioid use and are experimenting with interventions that bear watching. For example, the newly authorized Vermont pilot (see Case Study) will certainly add to the evidence on the effectiveness of acupuncture as an alternative to opioids for Medicaid-eligible individuals with a diagnosis of chronic pain. As appropriate and feasible, Medicaid agencies may also wish to consider partnering with sister agencies or commercial insurers to align program offerings with broader work underway in their state to study the impact of alternative pain management services on Medicaid populations.

Provider and Beneficiary Education
As coverage for alternative pain management therapies grows, Medicaid agencies may need to work with providers and beneficiaries to ensure alternative treatments are considered when appropriate. Provider education is a key strategy for states in implementing effective pharmacy benefit management to prevent opioid-related harms. This holds true as states expand coverage for alternative pain management therapies in Medicaid. The Oregon Health Authority, for example, is actively working with key stakeholders to develop educational materials to help providers make referrals for newly covered services. The platform and curriculum for Oregon’s provider education activities are still in development, but they are intended to raise providers’ awareness and understanding of newly covered services. Likewise, the aforementioned Vermont law mandates two hours of continuing education on opioid prescribing for all licensed health professionals with prescribing authority, including information on alternative pain management therapies.
CMS also encourages state Medicaid agencies to leverage provider education activities to ensure best practices in opioid prescribing and dispensing when clinically appropriate. For example, the CDC concluded that methadone should not be considered a first-line medication for chronic non-cancer pain, because it accounts for a disproportionate share of overdose deaths compared to other opioid analgesics when used for pain relief. Referencing the CDC findings, CMS has recommended that state Medicaid agencies remove methadone from preferred drug lists for pain management. Medicaid agencies can also work with providers to increase screening and assessment for opioid use disorders as well as increase utilization of state prescription drug monitoring programs which are currently active in every state but Missouri.

The extent to which beneficiary education may be necessary will likely vary across states. A 2014 study published by the CDC found significant regional variation in the use of complementary health care services. In particular, the percentage of adults in the “West North Central” and “Mountain” regions were much more likely to receive massage therapy, chiropractic manipulation, or osteopathic manipulation than individuals living in the “East South Central” and “South Atlantic” regions of the country. These findings support the argument that economic, environmental, and cultural factors can impact provision of certain health care services.

State Budget Constraints
In our survey, multiple states indicated that budget constraints have limited their ability to expand coverage for new alternative pain management services. For example, although the Washington State Interagency Guideline on Prescribing Opioids for Pain includes recommendations to treat pain using a multimodal approach that includes both physical and behavioral health interventions, the state’s Medicaid agency does not currently cover many of the encouraged alternative treatments. Similarly, the Alabama Medicaid Agency indicated that adding or expanding coverage for additional non-opioid therapies would require additional funding, which so far has not been made available in the FY17 budget.

Medicaid Managed Care Organizations
Nationally, over 60 percent of Medicaid enrollees are enrolled in a comprehensive managed care plan. With this in mind, states have a significant opportunity to address chronic pain by supporting or requiring alternative pain management therapies through Medicaid managed care contracts. In our survey, Indiana reported that although opioids can be used as a first-line therapy, case managers employed by the managed care organizations work closely with beneficiaries and providers to connect individuals with covered alternative services as appropriate.

Opioid Dependence Significantly Increases the Risk of Heroin Abuse
Alternative pain management therapies have the potential to reduce dependence on opioids to treat acute and chronic pain, which may ultimately address the nation’s opioid crisis. However, state policies restricting opioids may have unintended consequences, particularly for individuals already receiving high-dose or long-term opioid therapies for pain. Between 2010 and 2012, Florida implemented laws and enforcement actions to reverse an upward trend of opioid overdose deaths in the state. As a result, opioid-prescribing rates fell and rates of overdose deaths associated with opioid analgesics declined 27 percent in that period; however, rates of heroin overdose deaths doubled during that same time period.
According to the CDC, individuals who abuse or are dependent on prescription opioids are 40 times more likely to abuse or be dependent on heroin (for context, individuals who abuse or are dependent on alcohol or marijuana are two-times and three-times more likely to abuse heroin, respectively). Ensuring adequate treatment for individuals on an opioid regimen, including safe tapering to lower doses as necessary and appropriate, and finding effective non-opioid treatments for individuals who have yet to begin an opioid regimen may be the most critical policy considerations in reducing rates of opioid overdose injury and death.

**Conclusion**

Pain is a complex, multifaceted condition that affects millions of Americans. The current evidence has found significant risks associated with long-term opioid therapy with little evidence on the effectiveness for long-term chronic pain treatment, which has spurred state Medicaid agencies to increasingly explore the appropriateness, efficacy, and cost-effectiveness of alternative pain management therapies. As articulated in the National Pain Strategy, the burden of pain cannot be reduced without greater and sustained investment in clinical research that identifies safe and effective pain treatments. Policymakers and clinicians will undoubtedly benefit from Medicaid’s contributions to the evidence base as CMS and state Medicaid agencies continue to test alternative strategies, disseminate findings, and align Medicaid program offerings with evidence-based clinical recommendations.

**Endnotes**

3. Ibid.
10. Ibid.


27. §1905(a)(11) of the Social Security Act


30. Colorado Application for 1915(c) HCBS Waiver: CO.0961.R01.00-Jul 01, 2015.

31. It is important to note that the KFF data tracks which states allow direct reimbursement to the specific provider type (e.g., directly reimbursing a physical therapist for physical therapy services); states that do not directly reimburse these providers may actually cover the service if billed by another provider (e.g., an institutional setting). For more information, please see the notes in the following references.


37. Accounting for the states that didn’t respond to the survey, the maximum number of states that could have answered “Yes” is 21.


40. Y Bao, et al., “Prescription Drug Monitoring Programs Are Associated With Sustained Reductions In Opioid Prescribing By Physicians,” Health Affairs 35, no. 6 (June 1, 2016): 1045-51.

41. SW Patrick, CE Fry, TF Jones, MB Buntin, “Implementation Of Prescription Drug Monitoring Programs Associated With Reductions in Opioid-Related Death Rates,” Health Affairs 35, no. 7 (July 1, 2016): 1324-32.


44. For more information on Oregon’s Prioritized List, please see: http://www.oregon.gov/oha/herc/Documents/Brief-History-Health-Services-Prioritization-Oregon.pdf

45. Oregon Health Authority Prioritized List of Health Services, Guideline Note 56. July 1, 2016.


48. Oregon Health Authority Prioritized List of Health Services, Guideline Note 56.
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Acknowledgments:
The authors wish to thank all of the Medicaid officials and staff that responded to our survey and follow-up correspondence. We also wish to thank the following individuals who generously gave their time to further inform and/or review this issue brief: Darren Coffman, Jerry Fingerut, Deb Florio, Robert Glass, MaryAnne Lindeblad, Melinda Rowe, Denise Taray, Kathy Wilgert. The authors also wish to thank Katie Dunn and Trish Riley from the National Academy for State Health Policy for their guidance and contributions to this paper. Finally, we thank our project officer, Lynnette Araki, and her colleagues at the Health Resources and Services Administration (HRSA), as well as Anne Herron and her colleagues at the Substance Abuse and Mental Health Services Administration (SAMHSA), for their invaluable review and support.

This project was supported by HRSA, an agency of the U.S. Department of Health and Human Services (HHS), under grant number UD3OA22891, National Organizations of State and Local Officials (NOSLO) Cooperative Agreement. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred from, HRSA, SAMHSA, HHS, or the U.S. Government.