

Looking Beyond the Opioid Misuse Epidemic: The Role for Non-Pharmacologic Treatment of Musculoskeletal Pain

A Policy Statement from Northwestern Health Sciences University

Since opioid misuse became the focus of urgent national attention, effort has been primarily directed toward opioid prescribing practices, emergency care in the event of overdose, and access to drug treatment programs. While these proximal measures to combat opioid misuse are enacted, the underlying causes for opioid misuse remain largely unaddressed. Importantly, this includes 1 in 3 Americans who experience a chronic pain problem that is inadequately or inappropriately treated.

Among the most common causes of pain are musculoskeletal conditions, most notably back pain. Back pain is the leading cause of years lived with disability in the US, and is one of the most common reasons adults seek healthcare. Unfortunately, it remains a leading cause for opioid prescriptions¹ with over half of regular opioid users reporting back pain.² This is worrisome not only because of the overuse of opioid analgesics, but because these prescribing habits persist in spite of a complete lack of evidence showing effectiveness for common back complaints.³ The mismanagement of back pain with opioids has been identified as a major public health concern by the international spine care community.^{4,5}

Recent publication of clinical guidelines and related reports calling attention to the need for non-pharmacologic and integrative care approaches to treat pain has brought the role of complementary and integrative healthcare (CIH) providers into greater focus. It has also created a sense of urgency, re-thinking how CIH providers can be more effectively engaged to address the opioid misuse epidemic. Efforts to improve pain management in the US, and concomitantly combat the opioid misuse crisis, should include the following:

1. First-line Treatment as Primary Prevention of Opioid Misuse

Non-pharmacological treatments, **including reassurance, exercise, chiropractic spinal manipulation, acupuncture and massage are recommended as first-line treatments for pain** in numerous best practice guidelines including, among others, the American College of Physicians,⁶ [The Joint Commission](#) and CDC.⁷ Non-pharmacologic treatment measures such as exercise therapy, spinal manipulation, acupuncture and yoga are also recommended as alternatives to opioid prescribing in a 2018 report published by [the Minnesota Department of Human Services](#).

Best practice guidelines recommend prioritizing conservative courses of chiropractic care, acupuncture, and massage before more invasive treatments. This approach is more likely to result in **better patient outcomes, with fewer side-effects**. Care pathways and health system designs that steer pain patients toward non-drug options first would prevent exposure to high-risk therapies like opioids and other narcotics, injections, and surgery. Compelling new research shows that when patients with

musculoskeletal problems seek the care of CIH providers, the likelihood of a prescription for pain medication of any kind is greatly reduced.⁸

2. Secondary Prevention of Opioid Misuse for at-risk Populations

A growing segment of the US population has faced addiction in the past. Many more are at risk for addiction, or are otherwise considered to be vulnerable populations at higher than average risk for poor outcomes with medication use (e.g. the elderly, pregnant women, children and adolescents). This creates additional need to **ease patient access to non-pharmacological therapies**, and provide safer pain management options for at-risk populations. Integrative pain management can be critical to preventing relapse in addicts who face surgery, suffer from acute injuries, or are in need of chronic pain management. Integrative care wraps a team of healthcare providers and support services around pain patients, coordinating individualized pain management across providers and addiction specialists, preventing relapse or increased risk exposure with opioids.

3. Tertiary Prevention through Pain Management of Addicted Individuals

Substance abuse problems are often an unintended consequence of inadequate pain relief. This can occur through the abuse of prescription pain relievers, as well as the use of illicit drugs to self-medicate. Back pain sufferers report higher rates of marijuana, cocaine, methamphetamine and heroin use than adults without back pain.⁹ For those who are substance addicted, many continue to experience pain. Inadequate relief prevents some from pursuing substance abuse rehabilitation, makes recovery more difficult, and presents a persistent risk for relapse. Increasing awareness and access to non-drug pain treatment options may help some initiate rehabilitation, support those in rehabilitation, and provide an additional measure of prevention for relapse. CIH providers should be considered an **important part of addiction teams**, taking a multi-modal approach to both addiction recovery and pain management.

Value of CIH Providers as part of Healthcare Teams

While the current emphasis on reducing the inappropriate and often tragic use of opioids is urgent and well-reasoned, more attention should now be given to non-pharmacologic, upstream interventions that address the problem of musculoskeletal pain.

For many patients and their healthcare providers, managing musculoskeletal pain is often complicated, challenging and ineffective if addressed with a single mode of treatment. For this reason, CIH providers should be empowered to work at the top of their license, because they can provide pain relief to patients, and serve as extenders to primary care and addiction care team leads. This includes monitoring patient outcomes, conducting screening and prevention procedures, conferring on case management strategies and coordinating care plans. Collaboration can be virtual (e.g. telehealth networks like [Project ECHO](#)), community based (i.e. referral network) or within the same physical space (e.g. clinic or hospital setting).

Expanding and bringing other professionals onto the care team will also create opportunities to tailor the treatment approach to the needs and preferences of the patient. Evidence-based medicine is predicated on the consideration of patient preferences alongside high quality evidence and clinical experience. Empowering pain patients in shared clinical decision results in better outcomes¹⁰ and, we believe, is an inherent component of how most CIH encounters are characterized: hands-on, high-touch, with longer visit times and deeper patient-provider relationships.

Integrative and Collaborative Care Settings

Across the country and locally in Minnesota, CIH providers are increasingly found in hospitals, health systems, Federally Qualified Community Clinics, VA Hospitals and Clinics, and other healthcare settings. Successful Minnesota examples of integrative healthcare teams addressing pain management include:

- The **Penny George Institute for Health and Healing**, within the **Allina Health** system, offers the most comprehensive array of integrative medicine services. This includes integrating acupuncture into emergency departments of affiliated hospitals, including Abbott Northwestern Hospital, St. Francis Regional Medical Center, New Ulm Medical Center, Owatonna Hospital, The Mother Baby Centers, and the Virginia Piper Cancer Institute.
- **HealthPartners** has chiropractic doctors on staff at a quarter of locations throughout the Twin Cities.
- Integrative health is a featured component of the **Hennepin HealthCare** system, where acupuncturists and chiropractic doctors work collaboratively with board certified family medicine physicians and others. Most of the CIH providers there are graduates of Northwestern Health Sciences University.
- In St. Paul, medically underserved patients gain access to chiropractic care in two Federally Qualified Health Centers – **Minnesota Community Care** and **Open Cities Health Center**. Northwestern Health Sciences University supplies student-interns to assist chiropractic faculty providers, increasing capacity to care for special populations.
- In rural northern Minnesota communities, chiropractors are relieving the burden of back pain cases from primary care physicians in clinics operated by **Sanford Health**.
- In 2017, the **Minneapolis VA Health Care System** was designated a Whole Health Design Site. There, chiropractors and acupuncturists are part of a healthcare team “... focused on empowering and equipping Veterans to take charge of their health and well-being.”
- Pediatrician Lynn Gershan, MD, at the **University of Minnesota Masonic Children’s Hospital** in Minneapolis is a strong advocate for the acupuncturists who are part of her integrative healthcare team.
- Low-income patients of the Phillips neighborhood in Minneapolis have access to chiropractic, acupuncture and massage therapy services in the **Integrative Clinic of Minnesota**, in addition to services provided by the University of Minnesota Medical School and the Alder Graduate School.

In addition to health systems and hospitals, an increasing number of chiropractic doctors, licensed acupuncturists and massage therapists are joining each other in private practice clinics throughout Minnesota where patients can receive non-pharmacological care for back pain and other musculoskeletal programs.

Barriers to Adoption

In spite of many examples of CIH providers contributing high value healthcare in integrative settings, barriers to integration that discourage the hiring of CIH providers within hospital and clinic settings exist.

Unfortunately, hospitals and health systems are dis-incentivized to hire providers or recommend procedures whose reimbursement rates are lower than others, in spite of being high value in terms of efficacy and low risk. Further, there is reluctance to refer patients outside of health systems and networks, driven more by financial reasons than with the best interest of patients in mind. Fundamental system barriers include:

- Limited patient access, in the form of arbitrary visit and procedure limits based solely on provider type, and not patient need.
- Depressed third-party payer reimbursement for covered services when delivered by a CIH provider, including doctors of chiropractic, licensed acupuncturists and massage therapists.
- Lack of care coordination across providers, and between health systems and private practices.

In a 2018 publication, researchers from the Johns Hopkins Bloomberg School of Public Health and the National Institutes of Health reported a lack of **consistent insurance plan coverage for acupuncture** and other nonpharmacologic interventions along with wide variation in utilization management strategies such as prior authorization and visit limits. The authors also emphasized the need for comprehensive insurance coverage of treatments for chronic low back pain.¹¹

Health plans and employers have a responsibility to offer coverage policies that incentivize care aligned with high likelihood of effectiveness and low risk. Currently, most federal and commercial insurance plans do not reflect best practices for managing back pain, with high barriers to non-drug interventions compared to opioid and other pharmacological interventions.¹² Eliminating or lowering access and financial barriers to non-pharmacological treatments is critical to ensuring insurance reflects the evidence.¹³ This includes a reduction or elimination of co-pays and co-insurance for evidence-based non-drug treatments for pain, and eliminating arbitrary limits on visits as a means to incentivize patients to choose non-pharmacological treatments first.

A recent bulletin from the World Health Organization has called for health care systems to incentivize high-value care, aligned with best practice guidelines, and includes chiropractic spinal manipulation, acupuncture, and massage therapy.⁴ They recommend strong governance and policy changes at multiple levels within the healthcare system to prioritize policies that steer clinicians and consumers toward well-informed decisions, and provide financial support to evidence-based, non-pharmacological treatment.

Call to Action

Steps to address the lack of adequate pain management for Americans, while stemming the opioid misuse epidemic, include

- increased policy consideration of primary and secondary prevention for opioid misuse;
- financial incentives to triage pain patients at risk of opioid abuse toward CIH care;
- public relations strategies to promote non-pharmacologic pain management, especially among high risk and abuse populations;
- continuing medical education programs for physicians and other healthcare professionals focused on the education, roles and services offered by CIH providers;
- Integration of CIH within pain management clinics and treatment abuse centers.

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