Addressing the Opioid Crisis through Non-Pharmacological Acupuncture Interventions

Introduction

Over the last several years, the nationwide opioid crisis has become a focus of policymakers at every level of government. According to the National Institute on Drug Abuse, more than 90 Americans die of opioid overdoses each day, not including the numerous related public health issues that stem from widespread opioid misuse. There are countless local and state government initiatives to address the crisis, and the federal government has taken steps as well.

The underlying causes of the current crisis in America are varied and persistent – there will be no “silver bullet” to reverse what has developed over decades. However, many of the proposed solutions have centered around limiting the supply and distribution of prescription pain medicine in the U.S. Doctors are being encouraged to limit opioid prescriptions and pursue alternative treatments for their patients’ pain needs. Acupuncture treatment is an effective, non-pharmacological modality with a strong evidence base to support its use for treating a variety of chronic and acute pain symptoms. Under the direction and oversight of a certification body like the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM®), who certify NCCAOM® National Board-Certified Acupuncturists™, acupuncture can and should emerge as a widely-used, powerful addition to any pain treatment care plans.

Causes and Development of the Opioid Epidemic

Over the last 15-20 years, a crisis developed in the United States with the proliferation and widespread abuse of prescription opioid medications and illegal opioid drugs. Healthcare providers prescribed these medications at staggering rates, and heroin and synthetic opioids like fentanyl began to flood the illegal drug market, causing drastic increases in addiction, overdoses and drug-related deaths. According to the National Survey on Drug Use and Health (NSDUH) carried out by the Substance Abuse and Mental Health Services Administration (SAMHSA), more than 11 million Americans misused prescription opioids in 2016 alone, and 2.1 million developed an opioid use disorder. There have been more than 300,000 opioid overdose deaths in America since 2000, and while final numbers are yet to be tallied, early data suggests that at least 64,000 overdose deaths occurred in 2016, which would mark the highest number ever recorded in the country.¹

Since 1999, the number of opioid-related deaths has quadrupled.² It is staggering that almost two-thirds of Americans have been prescribed an opioid for pain issues, that 49% report knowing someone who has been addicted to prescription opioids, and one in five Americans know someone whose opioid abuse led to their death.³

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¹ The Federal Response to the Opioid Crisis. Testimony by Dr. Elinore McCance-Katz, Assistant Secretary for Mental Health and Substance Use, Substance Abuse and Mental Health Services Administration, before the Senate Health, Education, Labor and Pensions Committee, October 5, 2017.


A number of factors contributed to the development of the current crisis. In the late 1990s and early 2000s, pain began to be recognized and treated by many in the medical community as a “fifth vital sign,” largely stemming from Pain Management Guidelines included by The Joint Commission (a hospital regulatory body) and the inclusion of pain-related questions in the Centers for Medicare and Medicaid Services (CMS) patient satisfaction surveys. By asking patients to rate their doctors based on their own experience of pain (and tying physician reimbursement to those surveys), CMS incentivized physicians to over-rely on opioid medications that would dull patient pain without regard for consequences.

Doctors began to prescribe opioid medications to treat a wide range of pain complaints in ever-increasing doses. Pharmaceutical companies pushed opioid drugs as safe and addiction-free, and physicians were incentivized to keep upping patient doses to treat patients who complained of pain. The massive availability of prescription opioids led many to abuse them becoming addicted even without ever using illegal drugs.

A perfect storm emerged as an influx of cheap heroin into the United States, along with the development of fentanyl and other synthetics, allowed for easy and widespread abuse of illegal opioids for the addicts.

Addressing the Opioid Crisis at the Federal Government Level

On October 26, 2017, President Donald Trump and the then-acting Secretary of Health and Human Services, Eric Hargan, officially declared the opioid epidemic a national Public Health Emergency. The move allows the federal government to waive certain regulations and give more flexibility and independence to states utilizing federal funds for treatment, especially with regards to expanding telemedicine services. However, the declaration stopped short of a full national emergency.

In addition to the effects of the public health declaration, federal agencies in HHS, including the Food and Drug Administration (FDA), the National Institutes of Health (NIH), CDC, and SAMHSA, have continued to implement efforts to address the crisis. These agencies are working under the direction of HHS’ five-point Opioid Strategy, released in April 2017 as an overarching framework for coordinating the federal government’s response to the crisis. Among other goals, the strategy aims to:

- Support cutting-edge research that advances our understanding of pain and addiction, leading to the development of new treatments, and identifies public health interventions to reduce opioid-related health harms; and
- Advance the practice of pain management to enable access to high-quality, evidence-based pain care that reduces the burden of pain for individuals, families, and society while also reducing the inappropriate use of opioids and opioid-related harms.

These last two points are key, as the development and promulgation of safe, effective, and widely available alternatives to drugs will be essential to the improved treatment of pain and the reduction of opioid prescriptions. Other bodies have also recognized the importance of alternative pain management in addressing the crisis.

The President’s Commission

The final report from the White House’s Opioid Commission, released November 1, 2017, provides a wide swatch of recommendations regarding drug addiction and the opioid crisis, ranging from law enforcement solutions to the development of non-addictive pain medicines. However, the report also places a focus on the importance of developing and spreading alternative pain management strategies.

“Chairman’s Letter: First, individuals with acute or chronic pain must have access to non-opioid pain management options. Everything from physical therapy, to non-opioid medications, should be easily accessible as an alternative to opioids… We should incentivize insurers and the government to pay for non-opioid treatments for pain beginning right in the operating room and at every treatment step along the way. In some cases, non-addictive pain medications are bundled in federal reimbursement policies so that hospitals and doctors are essentially not covered to prescribe non-opioid pain management alternatives.”

Recommendation 19:” The Commission recommends CMS review and modify rate-setting policies that discourage the use of non-opioid treatments for pain, such as certain bundled payments that make alternative treatment options cost prohibitive for hospitals and doctors, particularly those options for treating immediate post-surgical pain… Although in some conditions, behavioral programs, acupuncture, chiropractic surgery, as well as FDA-approved multimodal pain strategies have been proven to reduce the use of opioids, while providing effective pain management, current CMS reimbursement policies, as well as health insurance providers and other payers, create barriers to the adoption of these strategies.

Recommendation 52:” The Commission recommends federal agencies, including HHS (NIH, CDC, CMS, FDA, and SAMHSA), Department of Justice (DOJ), the Department of Defense (DOD), the Veteran’s Administration (VA), and the Office of National Drug Control Policy (ONDCP), should engage in a comprehensive review of existing research programs and establish goals for pain management and addiction research (both prevention and treatment).”

Centers for Disease Control & Prevention
The CDC has released a number of guidelines and best practices for providers regarding non-opioid treatments for chronic and acute pain. The Centers continue to develop new materials and are working in conjunction with other federal agencies on broader guidelines. Specifically, in 2016, the CDC released the Guideline for Prescribing Opioids for Chronic Pain, which addressed official recommendations for providers dealing with pain patients.

Recommendation 1:” Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain… If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate.”

“Effective approaches to chronic pain should:
• Use nonopioid therapies to the extent possible.
• Focus on functional goals and improvement, engaging patients actively in their pain management.”

The Joint Commission
The Joint Commission is an independent organization responsible for accrediting a large proportion of the hospitals and healthcare facilities in the United States. Effective Jan. 1, 2018, the Joint Commission released updates to their Pain Assessment and Management Standards for Hospitals, largely in response to the opioid crisis and the perception that Joint Commission standards had contributed to the proliferation of opioid prescriptions in the 21st century. A number of the revised standards emphasize the importance of alternative pain management.

LD 04.03.13 (Leadership): Pain assessment and pain management, including safe opioid prescribing, is identified as an organizational priority for the hospital.
• “Elements of Performance (EP) 2:” The hospital provides nonpharmacologic pain treatment modalities.
• “EP 3:” The hospital provides staff and licensed independent practitioners with educational resources and programs to improve pain assessment, pain management, and the safe use of opioid medications based on the identified needs of its patient population.
• “EP 4:” The hospital provides information to staff and licensed independent practitioners on available services for consultation and referral of patients with complex pain management needs.”

8 Continued: “While evidence for some nonpharmacologic modalities is mixed and/or limited, they may serve as a complementary approach for pain management and potentially reduce the need for opioid medications in some circumstances. The hospital should promote nonpharmacologic modalities by ensuring that patient preferences are discussed and, at a minimum, providing some nonpharmacologic treatment options relevant to their patient population.” The requirement specifically lists acupuncture therapy as a suggested physical modality.
9 Continued: “The technical advisory panel for The Joint Commission’s pain standards review project recommended that organizations have readily available educational resources that staff and licensed independent practitioners can use to review pain assessment and pain management principles based on their specific specialty or even a specific clinical situation that they may encounter.”
10 Continued: “Access to pain specialists by consultation or referral reflects best practice in addressing patients with complex pain management needs.”
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“Provision of Care, Treatment, and Services (PC) 01.02.07:” Provision of Care, Treatment, and Services: The hospital assesses and manages the patient’s pain and minimizes the risks associated with treatment.
• “EP 3:” The hospital treats the patient’s pain or refers the patient for treatment. Treatment strategies for pain may include nonpharmacologic, pharmacologic, or a combination of approaches.
• “EP 4:” The hospital develops a pain treatment plan based on evidence-based practices and the patient’s clinical condition, past medical history, and pain management goals.
• “EP 5:” The hospital involves patients in the pain management treatment planning process through the following: … providing education on pain management, treatment options, and safe use of opioid and nonopioid medications when prescribed."

The Healthcare Leadership Council
The Healthcare Leadership Council (HLC) is a coalition of chief executives representing all areas of the health care industry.

In June 2018, the HLC released a set of recommendations for addressing the opioid crisis, entitled “A Roadmap for Action.” Developed through the HLC’s National Dialogue for Healthcare Innovation initiative, the Opioid Roadmap included a wide swath of recommendations specifically addressing non-opioid, non-pharmacological treatments for pain.11

Recommendations for Lawmakers:
• 4. Support research, funding, and expanded access to innovative and evidence-based therapies, technologies, and approaches for integrated pain management as well as SUD treatment.
• 5. Work with healthcare stakeholders to build a base of evidence to support non-opioid, opioid-sparing, and non-pharmacologic treatments for pain and direct Medicare to reimburse for therapies that are shown to manage chronic and acute pain while minimizing the risk of opioid addiction.

Recommendations for Regulators:
• 3. CMS should review and modify all reimbursement policies to ensure that they do not create barriers for multi-modal pain treatment (including non-opioid, opioid-sparing, and non-pharmacologic therapies), as well as evidence-based SUD treatment.
• 5. Federal agencies, such as the CDC, CMS, and the FDA, should promote clinician and patient education and awareness of appropriate and evidence-based pharmacologic and non-pharmacologic pain management therapies through guidance to providers.
• 6. CMS should expand upon its existing Opioid Misuse Strategy to develop and leverage existing models for value-based payment for integrated pain management and comprehensive SUD treatment that incentivize evidence-based practices and quality care.

Acupuncture: An Effective, Proven Modality for Pain and Addiction Treatment
At its heart, the opioid crisis is a crisis of pain management in the U.S. Clearly, there is a need for the proliferation of effective, nonpharmacological pain management treatments to reduce the incidence of opioid prescriptions and help alleviate the struggles of chronic pain patients. Acupuncture

treatment is an evidence-based, cost-effective, and widely available modality for treating a wide variety of pain issues. The practice of safe acupuncture should be at the forefront of discussions for addressing the opioid crisis, as it has the potential to replace initial opioid prescriptions and to reduce the need for continuing opioid use for chronic and acute pain. In fact, evidence suggests that acupuncture can even be effectively utilized to combat symptoms of drug withdrawal. As federal agencies and state and local governments examine ways to address the opioid crisis, they should focus on expanding the use of acupuncture treatment as a widely-used, powerful, and safe modality for pain management, when performed by qualified, certified acupuncturists.

Acupuncture as Effective Pain Management

Though acupuncture treatment can be used to treat a host of symptoms ranging from respiratory and neurological disorders to physical manifestations of tension and stress, perhaps the most vital use of acupuncture is pain control. As opioid prescriptions have risen and insurance companies have focused their reimbursement policies on cheap, generic drugs, holistic and integrative pain management plans have become less and less common. Comprehensive pain clinics, which were once considered the gold standard for treating chronic pain, closed in droves, or received drastic funding cuts. However, in settings where non-drug pain management is still a priority, acupuncture is often considered the “go-to” integrative therapy, as it is minimally invasive, creates only mild burden on the patient, and most of all, is extremely effective.

Acupuncture has been shown to be effective for treating numerous types of pain, especially chronic pain. Specifically, the strongest evidence has emerged for back pain, neck pain, shoulder pain, chronic headaches, and osteoarthritis. One meta-analysis of almost 18,000 patients across 29 randomized controlled trials found that true acupuncture was significantly more effective than the absence of the service or sham acupuncture (placebo) controls. More specifically, the Acupuncture Evidence Project has tabulated research studies that have found evidence of positive or potential positive effects of acupuncture on different conditions, covering 46 different symptoms. Major practitioner groups have begun to realize the potential of acupuncture as a pain management modality, and in 2017, the American College of Physicians (ACP) published guidelines strongly recommending acupuncture as an effective treatment for chronic and acute lower back pain, a condition which often leads to opioid prescriptions among sufferers. The ACP also promotes payment reforms by public and private insurers to cover these services.

Acupuncture as Opioid Reduction or Replacement

Acupuncture can be used in place of an initial opioid prescription when faced with acute or chronic pain concerns. In fact, beyond simply treating pain, the mechanisms of acupuncture actually produce and release endogenous opioids in the body, acting as a natural analgesic without prescribing opioid drugs. Additionally, acupuncture activates opioid receptors in the brain, which would likely allow lower doses of opioid medication to be more effective when used together with acupuncture treatments.

Acupuncture can therefore provide the same analgesic effects of opioid medications without the harmful potential for abuse or addiction. Significantly, studies on acupuncture as an opioid complement can result in reduced consumption of opioid-like medications (OLM) by more than 60% in postsurgical environments.\textsuperscript{16, 17}

**Acupuncture for Addiction Treatment and Rehabilitation**

Beyond replacing or reducing opioid prescriptions for chronic and acute pain, acupuncture can actually be used to address symptoms post-addiction or abuse. Acupuncture for addiction has a broad evidence base showing that treatment can reduce or alleviate opioid withdrawal symptoms.\textsuperscript{18} The National Acupuncture Detoxification Association catalogs more than 1,000 programs across the United States and Canada that use acupuncture as a treatment modality for overcoming addiction, and as the number of opioid addicts in the U.S. continues to rise, acupuncture can and should be more widely used as a way to achieve drug independence.\textsuperscript{19}

**Acupuncture-Centered Solutions for Addressing the Opioid Crisis**

As a safe, evidence-based, effective, and most importantly, nonpharmacological treatment for pain management, acupuncture needs to be at the forefront of the efforts to combat the opioid crisis in America. Three main actions can move towards this goal.

- As federal, state, and local governments work to promulgate education, best practices, and recommendations for healthcare providers around opioid prescriptions and pain treatments, acupuncture should be emphasized and endorsed as a proven method to decrease and even replace opioid doses and OLMs.

- The evidence base around acupuncture’s effectiveness needs to be expanded, and should be a focus on the increasing resources being spent on research.

- The federal government should place a priority on fixing the reimbursement issues with CMS that incentivize physicians and hospitals to rely on opioid drugs over less dangerous nonpharmacological treatments for pain.

**Increasing Acupuncture Awareness**

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there is a moderate focus on determining when to initiate or continue opioids for chronic pain, which makes reference to nonpharmacologic therapy. Any guidelines developed by the Health Department, or any other federal agency, as well as updates to existing guidelines, should include information on such therapies and guidelines for how to refer to those therapies instead of prescribing opioids as a primary option. Specifically, since the evidence supports the effectiveness of acupuncture for many of the exact problems that opioids aim to address, a focus should be made on recommending or simply educating on the availability and use of acupuncture treatments.

As supplements to their 2016 guidelines, the CDC also publishes a series of educational modules and webinars to aid providers in applying the guidelines. These modules, which are eligible for continuing education (CE) credits for providers, should include information on nonpharmacological treatments like acupuncture, and can be an essential tool in educating providers on the options that are available to them and their patients beyond opioid drugs.

Prioritizing Acupuncture Research

While the existing evidence base surrounding acupuncture for chronic and acute pain concludes that acupuncture can be effective or very effective for a wide variety of symptoms, more research is needed, especially since the lack of peer-reviewed, well-understood research contributed to the rise of opioids as a prescriber tool. The President’s Commission also identified this as a necessary goal in their report. Specifically, the Commission called on federal agencies to review existing research programs and establish goals for continuing research.

Many of these agencies, especially the FDA, will likely focus on non-opioid analgesics, or developing more effective treatments for opioid overdoses – certainly worthwhile pursuits. However, for meaningful change, mitigating the risks of the opioid crisis must be paired with significant efforts to address the root causes of the problem – namely, the staggering amount of opioid prescriptions. To do so, the federal government must focus on developing a hearty body of evidence around alternative pain management treatments, with an emphasis on nonpharmacological options. HHS and its sub-agencies, specifically the ONDCP, the CDC, and the VA, should work to identify and fund research projects into the uses of acupuncture for chronic and acute pain. Reproducing the promising results of the many studies cited above would be a good start, and testing the effects of acupuncture on an even wider range of symptoms would allow healthcare providers to understand exactly how effective a treatment it can be.

Finally, the use of acupuncture in dealing with specific episodes of care, such as those involving high prescription rates for perioperative and postoperative acute pain, is ripe for study under the CMS. Specifically, the particular authority granted to the Center for Medicare and Medicaid Innovation (CMMI) would allow for the development of a demonstration model to track and quantify the effects of acupuncture for such pain. There is a need for more data on the effects of acupuncture for pain in clinical settings, and a CMMI demonstration would provide a useful opportunity to test both the clinical outcomes and cost-effectiveness of acupuncture treatment compared to opioid prescriptions and other pain management options. This would allow for replication and expansion of the promising outcomes seen by state-based pilots, such as those in Vermont’s Medicaid program in 2017.

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Improving Reimbursement for Acupuncture & Other Non-Opioid Treatments

The President’s Commission specifically identified issues with CMS’ rate-setting policies as a driver of high opioid prescription rates. In the current system, bundled payments can make alternative treatment options cost-prohibitive for hospitals and physicians, especially when considering post-surgical acute pain. When hospitals participate in bundled payments for surgical procedures, the facility is reimbursed a single dollar amount for the entire episode of care. As the Commission report states, “any costs the hospital incurs for creating and administering a multimodal pain management strategy essentially get deducted from its fixed fee payment... inadequate reimbursement significantly hampers providers’ ability to utilize non-opioid treatment for postsurgical pain.”

Similar issues exist with payers besides CMS as well. Overall, though research suggests that multimodal approaches, especially combining nonpharmacological treatments like acupuncture with smaller opioid prescriptions, can be significantly more effective than opioid-only treatments, reimbursement systems continue to incentivize prescribing cheap, generic drugs. In keeping with the broad recommendations of nonpharmacological treatments, CMS should work with hospitals and practitioners to revise rate-setting policies to disincentivize opioid prescription and encourage wider use of alternative pain management therapies, especially acupuncture.

Currently, very few state Medicaid payers offer reimbursement for acupuncture treatment, despite the broad evidence base for effectiveness as pain management. Ohio, one of the states hardest hit by the opioid epidemic, made headway recently by beginning to cover acupuncture for the treatment of low back pain and migraines in 2017. The Ohio Medicaid program further broadened its rules effective Jan. 1, 2018 and allows independent acupuncturists to register as Medicaid providers and perform their services for Medicaid patients. The move towards covering acupuncture began as a response to Ohio Governor John Kasich’s Cabinet Opiate Action Team guidelines that recommended non-opioid pain treatment whenever possible. Other states should follow Ohio’s (as well as Oregon and Vermont’s, both states that have added or expanded Medicaid coverage for acupuncture in response to the opioid crisis) and explore avenues for covering and reimbursing acupuncture services through Medicaid.

The number of programs that The National Acupuncture Detoxification Association has cataloged across the United States and Canada that use acupuncture as a treatment modality for overcoming addiction, and as the number of opioid addicts in the U.S. continues to rise, acupuncture can and should be more widely used as a way to achieve drug independence.

23 Rickards, James, Kim Wentz, and Trevor Douglass. “OHP Fee-for-Service Coverage of Back and Spine Pain Diagnosis and Treatment.” March 6, 2017. Oregon Health Authority.