



Guiding a Natural, Safer Care Journey

Doctors of Chiropractic Deliver Safe, Drug-Free
and Effective Pain Relief That Patients Prefer

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Abstract

Neuromusculoskeletal pain continues to rank among the most common reasons Americans utilize healthcare services. However, due to the nation's continued opioid crisis and awareness of the risk of pharmacologic care pathways, Americans are increasingly seeking natural, drug-free methods to manage their pain. Given these challenges, chiropractic care should be a first-line approach to helping patients experience pain relief and improved mobility. Not only has chiropractic care demonstrated its efficacy for the most common neuromusculoskeletal disorders such as low back pain, neck pain and headaches, but also patients have consistently reported high satisfaction with the care. Increasing referrals to doctors of chiropractic (DCs), integrating DCs into multidisciplinary care teams are essential to increase utilization of this safe, drug-free care pathway.





Background

From 2002 through 2018, researchers discovered “extensive escalation of pain prevalence” across adult men and women in the U.S. ages 25 through 84.¹ The study found the steepest increases in joint pain, which grew by 21% over the 17-year period, and for low back and neck pain (15% and 16% increases). Researchers note that their findings “support the need for broad interdisciplinary research on, and interventions for effective responses to the growing problem of pain in the United States.”



Too often, however, a common intervention for pain is a prescription painkiller, such as opioid-based drugs. Opioids pose significant health and safety risks, of which Americans are beginning to see the devastating outcomes that have occurred across the nation. Since the early

2000s, the U.S. has struggled with an epidemic of opioid use disorder and overdose deaths that continues to worsen. Two-thirds (66%) of Americans told the Kaiser Family Foundation that prescription opioid abuse is a very serious problem in the U.S.² while a separate 2018 poll shows 43% of Americans believe prescription pain drugs are a serious problem in their own community, up from 33% in 2016.³

In 2021, for the first time, drug overdose deaths surpassed 100,000 over 12 months, the Centers for Disease Control and Prevention (CDC) announced in November.⁴ The CDC’s National Center for Health Statistics estimated there were 100,306 drug overdose deaths, an increase of more than 28% from the 78,056 deaths during the same period the year before. Opioid overdose deaths, in particular, increased to 75,673 in the same 12-month period, up from 56,064 the year before. While the CDC estimated that the vast majority of those opioid deaths (64,178) are from synthetic forms (primarily fentanyl), overdose deaths from natural and semi-synthetic opioids, such as prescription pain medication, also increased from 12,542 in 2020 to 14,037 in 2021.

The opioid epidemic seems to have also changed Americans’ perspective about prescription painkillers. The results of a 2017 Gallup-Palmer College of Chiropractic report,



for instance, show that 78% of Americans prefer to try other, more natural ways to address their physical pain before they take pain medication prescribed by a doctor.⁵ That same report also showed more Americans believed non-drug pain management methods, such as chiropractic care, were more effective than a prescription painkiller.

Yet despite this preference and clinical guidelines recommending non-drug pain management as a first-line care pathway, many physicians still tend to initially prescribe opioids or other prescription drugs. A 2021 study of how acute low back pain becomes chronic (three months or longer), researchers found patients

are still receiving prescription pain medications during their first primary care visit.⁶ Specifically, 1,544 out of the 5,233 patients studied received prescriptions for non-recommended medications – 999 of these were opioids. A cross-sectional study from 2009 to 2017 also found that opioids were prescribed during 21.6% of new-onset, low back pain office visits,⁷ despite prevailing guidelines advising against the practice.

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3 Associated Press-NORC Center for Public Affairs Research.

“Americans Recognize the Growing Problem of Opioid Addiction.” Issue Brief. April 5, 2018. https://apnorc.org/wp-content/uploads/2020/02/APNORC_Opioids_Report_2018.pdf

4 The Centers for Disease Control and Prevention, National Center for Health Statistics. “Drug Overdose Deaths in the U.S. Top 100,000 Annually.” Press Release. November 17, 2021. https://www.cdc.gov/nchs/pressroom/nchs_press_releases/2021/20211117.htm

5 Gallup. “Americans Prefer Drug-Free Pain Management Over Opioids.” Research Brief. 2017. <https://news.gallup.com/reports/218495/s.aspx>

6 Stevans JM, Delitto A, Khoja SS, et al. Risk Factors Associated With Transition From Acute to Chronic Low Back Pain in US Patients Seeking Primary Care. *JAMA Netw Open*. 2021;4(2):e2037371. doi:10.1001/jamanetworkopen.2020.37371

7 Gray, Bradley M et al. “Clinical Knowledge and Trends in Physicians’ Prescribing of Opioids for New Onset Back Pain, 2009–2017.” *JAMA network open* vol. 4,7 e2115328. 1 Jul. 2021, doi:10.1001/jamanetworkopen.2021.15328

Solution

An Effective, Drug-Free Pathway

Conversely, chiropractic care is not only drug-free, but is also highly effective for managing both acute and chronic neuromusculoskeletal pain. Low back pain, for example, is the top cause of disability around the world.⁸ Globally, 577 million people reported low back pain in 2017, up from 377.5 million people in 1990, a growth rate outpacing the population increase.⁹ In the U.S., low back and neck pain incurred the highest costs among 154 conditions evaluated, with an estimated \$134.5 billion in spending attributed to their care.¹⁰

Further, while only 1.2% of patients with low back pain receive surgery for the condition, they account for nearly 30% of costs.¹¹ This finding is especially concerning given that laser spine surgeries grew by 276% between 2002 and 2014.¹²

Conservative, non-invasive treatment guidelines for low back pain can reduce these costs¹³ and improve patient outcomes.¹⁴ The authors of a 2018 Lancet multi-paper series on the condition came to the same conclusion.¹⁵ Such guidelines consistently recommend reassurance (e.g., most episodes of acute low back pain resolve quickly and have a very low likelihood of serious underlying pathology) and advice to maintain activity as tolerated.



These low back pain guidelines are consistently validated with additional evidence in the form of meta-analyses and clinical trials. For example, a meta-analysis published in 2021 searched literature databases for dates ranging from 2000 to 2016 to determine how spinal manipulative therapy results compare to other interventions for chronic low back pain.¹⁶ Incentivizing use of conservative therapists may be a strategy to reduce risks of early and long-term opioid use. Initial visits to chiropractors or physical therapists are associated with substantially decreased early and long-term use of opioids.¹⁷ DCs deliver nearly 97% of spinal manipulative therapy in the U.S., according to a recent analysis of claims data covering a 12-month experience in a national commercially insured population.¹⁸

For the meta-analysis, researchers examined individual participant data which yields a more precise assessment of the outcome. They concluded there was sufficient evidence to suggest that spinal manipulative therapy delivers similar positive outcomes to other interventions for pain relief and improvement of functional status. Further, researchers contended that this type of care delivered most often by DCs would appear to be “a good option for the treatment of chronic low back pain.”

Other researchers arrived at a similar conclusion after conducting a non-randomized, controlled trial, published in 2021, concerning patients with acute and chronic nonspecific low back pain who were treated with spinal manipulative therapy.¹⁹ The study examined the body’s inflammatory response to low back pain comparing blood tests of those with the condition to a symptom-free control group. Even after just a short course of spinal manipulative therapy, significant decreases in the proteins the body creates to initiate and regulate inflammation were detected. This indicates that spinal manipulative therapy can work as an accelerant to not only relieve pain, but also return the body to homeostasis without pharmacologic intervention.

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14 Dieleman JL, Cao J, Chapin A, et al. US Health Care Spending by Payer and Health Condition, 1996-2016. *JAMA*. 2020;323(9):863-884. doi:10.1001/jama.2020.0734

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16 de Zoete, Annemarie et al. “The effect of spinal manipulative therapy on pain relief and function in patients with chronic low back pain: an individual participant data meta-analysis.” *Physiotherapy* vol. 112 (2021): 121-134. doi:10.1016/j.physio.2021.03.006

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19 Teodorczyk-Injeyan, Julita A et al. “Effects of spinal manipulative therapy on inflammatory mediators in patients with non-specific low back pain: a non-randomized controlled clinical trial.” *Chiropractic & manual therapies* vol. 29,1 3. 8 Jan. 2021, doi:10.1186/s12998-020-00357-y

Beyond Low Back Pain

While low back pain is the leading cause of disability worldwide²⁰ and the most common reason a person seeks care from a DC, chiropractic care delivers pain relief for other conditions, as well. Neck pain, for example, which affects 277 million people worldwide,²¹ is another frequent complaint among patients who seek chiropractic care. A meta-analysis published in 2021 reviewed randomized controlled trials assessing the effect of spinal manipulative therapy for acute neck pain. Researchers concluded that spinal manipulative therapy alone, or in combination with other modalities, was effective for patients with acute neck pain and demonstrated better results than a pharmacologic approach to pain management. Researchers performing a randomized controlled trial also concerning spinal manipulative therapy and a type of headache that radiates from the neck arrived at the same conclusion.²²

Considering these studies and many others have demonstrated the efficacy of chiropractic care for neuromusculoskeletal pain, it is perhaps not surprising that patients are also consistently satisfied with the care, according to research. An observational study published in 2020 examined experiences of 1,853 U.S. chiropractic patients with chronic low back or neck pain.²³ In a three-month follow-up questionnaire, patients

nearly unanimously (97%) responded that their DC made them feel at least “a little bit better” with 71% indicating that they felt “much better.” Similarly, 94% of patients responded that the chiropractic care at least “somewhat” helped them, while 73% indicated that it helped “a lot.” Patients also overwhelmingly had positive assessments of other aspects of care such as the DC listening and explaining care, as well as the time the doctor spent with them.

Another satisfaction survey compared responses from patients who received care for their back pain from a DC to those who received care from a medical primary care doctor. When surveyed, 95% of the patients who received care from a DC agreed that receiving chiropractic care for back pain made sense to them versus 75% of patients treated by a medical primary care doctor. Similarly, more patients (79%) treated by a DC agreed that chiropractic care would be a suitable treatment for back pain compared to only 45% of patients treated by a medical primary care doctor. Likely as a result of their experiences, only 25% of patients who visited a DC and 41% of patients treated by a medical primary care doctor reported that taking prescription drugs for back pain made sense.

These findings are significant considering that -- even though guidelines advise against the practice -- 52% of opioid prescriptions are for low back pain.²⁴ However, when comparing opioids versus spinal manipulative therapy, harmful medication-related incidents occurred 42 times more often in patients who were first prescribed opioids as opposed to patients who first received the treatment.²⁵

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Expanding Care Access

Given the clinical efficacy and satisfaction record of chiropractic care, inexperienced providers and patients may need to be educated about the potential benefits and referred to a DC in their community. This knowledge gap was highlighted in a National Association of Worksite Health Centers (NAWHC) advisory roundtable in December 2021 featuring leaders of hospitals that manage onsite employer clinics.²⁶ Participants indicated they find it challenging to integrate DCs in their worksite clinics, in part, due to unfamiliarity with chiropractic care or inaccurate perceptions about the practice and its doctors. They revealed that some hospitals and private medical practices will not credential a DC due to their lack of knowledge about DC training and past perceptions of chiropractic knowledge and abilities.

Educating other providers in the referral network, such as medical primary care physicians, orthopedic physicians, physical and occupational therapists, can help more of their patients experience pain relief and satisfaction with their care without the risk of opioids or other pharmacologic interventions. Likewise, integrating DCs into worksite clinics or multidisciplinary group practices and health systems can yield similar benefits while helping to control healthcare spending.

A prospective observational pilot study at a community health center, for example, measured the effectiveness of two interventions among an underserved population: a multidisciplinary pain team versus chiropractic care alone. Study outcomes were pain and functional disability measured by the Pain Disability Questionnaire (PDQ), and reduction of opioid usage.²⁷ Results, published in 2020, showed that PDQ scores for the chiropractic group dropped from an average of nearly 80 to 55, indicating a significant improvement in both pain and disability. PDQ scores for the multidisciplinary pain team without chiropractic care increased slightly from 110 to 113 on average. The small percentage of study participants using opioids had discontinued the medication at a follow-up visit. Researchers concluded that offering chiropractic care along with other services would hopefully limit external referrals to costly specialists, advanced imaging and opioid prescriptions.

A similar earlier study was published in 2019 where DCs were also integrated into a multidisciplinary healthcare facility exclusively utilized by a financially disadvantaged, inner-city population that included primary care, a chiropractic program and an on-site pharmacy dispensary.²⁸ After receiving chiropractic care, pain scores by region dropped by the following:

cervical (–30.8%), thoracic (–37.2%), lumbar (–40.5%), sacral (–43.9%) and extremity pain (–43.0%). Moreover, opioid usage among patients decreased 26.3% from baseline to discharge.

As far as spending, a separate similar study that compared per-patient costs at three primary care sites within a multi-clinic health system found that the site that integrated DCs reported expenditures of \$162 per patient in the first year and \$186 per patient in the second year.²⁹ The other two sites without chiropractic care, however, both reported expenditures of more than \$305 per patient each year with one site reporting spending of \$467 per patient in the first year.

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Conclusion

The U.S. continues to face two public health crises that are tightly interwoven: neuromusculoskeletal pain and opioid misuse. The opioid epidemic has made many Americans concerned about taking an opioid or another potentially addictive drug for their pain, yet the debilitating condition has limited their ability to work and carry out activities of daily living. These patients and their providers need to be educated that for more than a century, chiropractic care has helped people experience pain relief without drugs or surgery while generating the highest satisfaction rates in the healthcare industry.³⁰

Patients deserve natural, safe, effective options to deal with their pain and to be made aware of these options. Many, however, will not benefit from chiropractic care unless their other healthcare providers recommend and refer them to a DC, which may require community outreach and education. By spreading the word about the outcomes and satisfaction that patients can experience through chiropractic care, more DCs can become the preferred choice for patients experiencing neuromusculoskeletal pain, which can enable them to avoid a pharmacologic intervention and achieve their health and quality of life goals.

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