Foundation for Chiropractic Progress

CHIROPRACTIC

A SAFER STRATEGY THAN OPIOIDS

© Foundation for Chiropractic Progress 2016

ABOUT THE AUTHORS:

Laura Carabello, Principal, CPR Strategic Marketing Communications Gerard Clum, DC, President Emeritus, Life Chiropractic College West and Director, The Octagon, Life University William Meeker, DC, MPH, President, Palmer College of Chiropractic - San Jose Campus

TABLE OF CONTENTS

OVERVIEW
THE PRESCRIBER PROBLEM
HOSPITALS CONTRIBUTE TO THE PROBLEM
THE PAIN-PROFIT NEXUS
WHERE DO WE GO FROM HERE?
NON-PHARMACOLOGIC APPROACHES THE FIRST OPTIONS IN DEALING WITH CHRONIC PAIN
PREVALENCE OF BACK AND NECK PAIN, HEADACHES AND NEURO-MUSCULOSKELETAL CONDITIONS
CHIROPRACTIC CARE AND THE TRIPLE AIM OF BETTER CLINICAL OUTCOMES, GREATER PATIENT SATISFACTION AND LOWER COST OF CARE
"NEVER ONLY OPIOIDS" — PAIN ACTION ALLIANCE TO IMPLEMENT A NATIONAL STRATEGY (PAINS)
AVAILABILITY OF CHIROPRACTIC CARE IMPROVES THE VALUE OF HEALTH BENEFITS PLANS
AMERICANS WANT AND DESERVE CHIROPRACTIC CARE
END NOTES

OVERVIEW

The United States has awakened on every level to the crushing impact of the opioid use/abuse epidemic. Calls have come from the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA) and the Institute of Medicine (IOM) for a shift away from opioid use toward non-pharmacologic approaches to address chronic pain.

An important non-pharmacologic approach in helping to solve this crisis is chiropractic care.

This discussion offers greater understanding of the scope of the opioid situation, the elements that have contributed to it and an approach that emphasizes nonpharmacologic care. Collectively, we must begin to extricate ourselves from our current ineffective, dangerous and often fatal reality.

The use of opiate drugs and the abuse of these products, has become the story of the day in the popular press -- as well as in the scientific literature. In the process, pain management is finally getting the attention it deserves. The media fanfare surrounding this subject has finally caused the consumer most affected to raise awareness as never before, and will perhaps help to curb the demand for these devastating drugs.

We are being bombarded daily with grim news about drug abuse, physician overprescribing of pain medications, both in-office and at hospital emergency rooms, and the shocking realities of this nationwide drug use catastrophe. The absence of clinical logic and effectiveness for opiate use in the vast majority of settings, the real and present dangers of opiate use and the prescription practices of physicians have been called into question from every corner of health care.

When combined with the relentless pursuit of financial gain, these circumstances are magnified many times over by the nation's drug manufacturers. The dire predictions of an epidemic drug problem in the homes of countless average Americans have come to fruition.

The data speaks for itself. Overdose deaths involving prescription opioids have quadrupled since 1999,¹ as have sales of these prescription drugs.² From 1999 to 2014, more than 165,000 people --- three times the U.S. military deaths during the twenty years of the Vietnam War -- have died in the U.S. from overdoses related to prescription opioids.³

Today, at least half of all U.S. opioid overdose deaths involve a prescribed opioid.⁴ In 2014, more than 14,000 people died from overdoses involving these drugs, with the most commonly overdosed opioids -- Methadone, Oxycodone (such as OxyContin®), and Hydrocodone (such as Vicodin[®]) -- resulting in death.

Regrettably, overdose deaths resulting from opioid abuse have risen sharply in every county of every state across the country, reaching a new peak in 2014: 28,647 people, or 78 people per day -- more than three people per hour.

There are two basic categories of opiate overdose:⁵ Illegal - cheap and abundant heroin and other street drugs, the result of underworld and criminal distribution; and Legal -- responsible for almost double the number of overdose deaths: prescriptions fueled by physicians and the pharmaceutical industry. This may be a meaningless distinction in light of the fact that opiate overdoses in the U.S. are now a public health catastrophe and are finally getting the attention they deserve. President Obama quite remarkably said that the opiate epidemic is as great a threat as terrorism.

Finally, the newest estimates on the cost of opioid abuse to U.S. employers is estimated at \$18 billion in sick days, lost productivity and medical expenses. According to a study from health information firm Castlight Health, employers are paying for one-third of opioid prescriptions that end up being abused. Patients who were given more than a 90-day supply and received a prescription from one or more providers were defined as having opioid abuse."6



PAGE 3 © Foundation for Chiropractic Progress 2016

DEFINING OPIOIDS

Opioids are a class of drugs that include the illicit drug heroin as well as the licit (legal) prescription pain-relievers oxycodone, hydrocodone, codeine, morphine, fentanyl and others.

Opioids are chemically related and interact with opioid receptors on nerve cells in the brain and nervous system to produce pleasurable effects and relieve pain. Addiction is a primary, chronic and relapsing brain disease characterized by an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

Of the 21.5 million Americans age 12 or older that had a substance use disorder in 2014, 1.9 million had a substance abuse disorder involving prescription pain relievers and 586,000 had a substance abuse disorder involving heroin.

It is estimated that 23 percent of individuals who use heroin develop opioid addiction.

Source: American Society of Addiction Medicine. http://www.asam.org/docs/



THE PRESCRIBER PROBLEM

In their quest to meet patient need and demand for chronic pain relief, American doctors are often forced by consumer demands and practice challenges to prescribe and over prescribe narcotic painkillers. Their training and experience have not focused on alternative treatment options, until now. According to a National Safety Council (NSC) 2016 Survey: 99 percent of medical doctors prescribe highly-addictive opioids – and for longer than the three-day period recommended by the CDC. ⁷ The venerable *Wall Street Journal* went as far as referring to prescribing doctors as "...the enablers of an earlier generation of American pain-pill abuse." ⁸

When the NSC released these results on the heels of the CDC guidelines for treating chronic pain, 23 percent of doctors said they prescribe at least a month's worth of opioids.



Additionally, 74 percent of doctors incorrectly believe morphine and oxycodone, both opioids, are the most effective ways to treat pain. Furthermore, the problem has reached the point where painkillers with high addictive potential, which include commonly prescribed drugs such as OxyContin, Percocet and Vicodin, now account for more drug overdose deaths than heroin and cocaine combined.⁹

Misinformation particularly seems to be at play when it comes to tackling back pain. While more than 70 percent of doctors say they prescribe narcotic painkillers for back pain...these drugs are not considered the ideal treatment for either condition, according to the National Safety Council. Interestingly, the NSC found in an earlier survey that roughly half of all patients are actually more inclined to see their doctor again if non-narcotic painkillers are offered.¹⁰



NATIONAL FIBROMYALGIA & CHRONIC PAIN ASSOCIATION

Fibromyalgia is a life-altering chronic pain condition with a wide variety of symptoms, including unrefreshing sleep, cognitive alterations, amplification of sensory input, and fatigue. The presence and severity of symptoms occur over a very wide continuum in the population, and can become disabling.

Current scientific research interest in the concept that persistent pain arising in the periphery from joints, myofascial trigger points, headaches, trauma, etc., leads to changes in the nervous system characteristic of fibromyalgia is referred to as "central sensitization." Advances in research support the understanding that central sensitization, a state of hyperarousal of the central nervous system, is a key element in fibromyalgia (FM). Neuroplasticity in several regions of the brain is thought to underlie the increased perception of pain.

Autonomic nervous system dysfunction may explain the overall flu-like symptoms experienced by people with FM. Studies of FM show a correlation between decreased levels of dopamine and increased levels of excitatory neurochemicals, like Substance P, in maintaining activity of the fight-or-flight mechanism of the autonomic nervous system in nonthreatening situations.

HOSPITALS CONTRIBUTE TO THE PROBLEM

Pain management is admittedly an important aspect of in-patient care. However, the emphasis on pain management in a hospital setting, required by accreditation mandates and emphasis, added greatly to the opiate prescription and consumption continuum. Many physicians have commented that in their training as physicians they were taught to view pain as a "vital sign" that they should constantly monitor and aggressively treat.¹¹ Some have pointed to the policies and practices of the Joint Commission, the non-profit body responsible for the accreditation of hospitals in the U.S., as a contributing source related to the opiate prescription and use problem. Whether it was the policy of the Joint Commission that pain be managed pharmacologically or not, the untold long term consequences are evident and greatly contributed to the routine use of these drugs on a day in and day out basis. ¹²

More recently, critics of how prescription painkillers are administered in the U.S. called upon health officials to phase out hospital procedures and questionnaires used to manage pain.¹³ More than five dozen non-profit groups and medical experts sent a letter to the Joint Commission, asking it to revisit its standards for pain management. Only hospitals that have been accredited by the Joint Commission can receive payments from government plans like Medicare and Medicaid, making the group's standards highly influential. • The National Fibromyalgia & Chronic Pain Association promotes integrative health-care for fibromyalgia and recognizes the importance of spinal health. Appropriate chiropractic care as a non-pharmacological pain treatment in a biopsychosocial model of care is recommended.

These groups say the current system inadvertently encourages the overprescribing of addictive drugs like Vicodin and OxyContin, fueling an epidemic of overdoses tied to the opioid medications. The letter specifically takes issue with guidelines instructing doctors to ask patients to assess their pain.

However, the Pain Management Standards support the use of integrative care (non-opioid pharmacological and non-pharmacological) approaches to pain management. The outcome of this controversy remains to be seen, but it appears that it is generating bi-partisan attention from Congress.

In a bold and pioneering move, St. Joseph's Regional Medical Center in Paterson, New Jersey recently announced it has become the first hospital in the country to implement a program that will manage patients' pain in the emergency room with integrative care and without the use of opioid painkillers. Painkillers most frequently used in the ER in the past were Oxycodone, Vicodin and Percocet, according to Mark Rosenberg, MD, the Emergency Department chair.¹⁴

Previous whiplash events and pain during neck extension (reported by 85 percent of respondents in national survey by NFMCPA of more than 2,000 people reporting symptoms that would lead to a diagnosis of fibromyalgia) are commonly reported.* In pilot data using cervical magnetic resonance imaging (MRI) in sagittal flexion, neutral, and extension position of 49 patients, 35 (71%) met the criterial for positional cervical cord compression (PC3). PC3 is defined as cord abutment, compression or flattening with a spinal canal diameter of <10 MM by magnetic resonance sagittal flexion, neutral, and extension images.

Chronic pain overlapping conditions with fibromyalgia include TMJ/TMD, endometriosis, interstitial cystitis, migraines, tension headaches, low back pain, vulvodynia/prostatitis, IBS, Gulf War Illness, multiple chemical sensitivity and ME/CFS.

* Source: http://www.fmcpaware.org/ ohsu-nfmcpa-survey-of-symptomsother-than-pain-for-fda-meetingpart-1.html

Contributed May 16, 2016



Jan Chambers, president of the NFMCPA, which provides services for over 200,000 constituents and connects with more than 162,000 Facebook fans. • Our job here together is to look at the whole equation and understand how we can stop people from going from a prescription, to an addiction.

- Mark Rosenberg, MD, St. Joseph's Regional Medical Center

THE PAIN-PROFIT NEXUS



In 1996, Purdue Pharmaceuticals released a new opiate, OxyContin, onto the market with FDA approval. There was no evidence that the new formulation worked any better than other off-patent older opiates. OxyContin was directly marketed to doctors whose narcotic prescription patterns had been studied, and they were known to be opiate over-prescribers. OxyContin was also provided free of charge to patients for limited time periods through a voucher system.

Doctors, pharmacists and others in health care were treated to an onslaught of direct marketing. Primary care physicians were encouraged to prescribe OxyContin liberally for chronic pain of all kinds, and OxyContin was deliberately and falsely presented as a drug with a small risk of addiction. Purdue was later found guilty of criminal charges in this misrepresentation.¹⁵

In only a few years, OxyContin became the leading cause of opiate prescription overdose in the U.S. Purdue racked up revenues, and four years after it was introduced, OxyContin was generating more than a billion dollars in annual sales.

Today, we are facing a situation where the good intention of pain relief was upended by special interests. The appalling irony is that studies have not shown any collective improvement in chronic pain.

Although the drugs can have some short-term effects, opioid-based painkillers such as Oxycodone and Percocet have largely minimal effects on chronic lower back pain unrelated to other injuries, according to the latest research from The George Institute in Australia. Researchers found in a review of studies that the drugs do not always work for patients, and many participants in studies drop out because any benefits are outweighed by side effects.

For the study, published in *JAMA Internal Medicine*, researchers reviewed the results of 20 randomized, controlled trials with a total of 7,925 participants.

Of these, 13 trials looked at the short-term effects of opioids on chronic low back pain, and none of the placebo-controlled trials included patients with acute low back pain. At least half of participants in these trials withdrew because the drugs did not work or they experienced adverse health events.

Overall, the studies showed opioids can benefit chronic low back pain patients on a short-term basis, but that even at doses much higher than recommended the benefits are moderate.

We do not yet understand the effects of the long term use of opioid analgesics, as no trials have followed up patients beyond 3 months. Importantly, we do know that these medicines can have significant harmful effects when used inappropriately or for longer periods of time. The recent CDC guideline for prescribing opioids for chronic pain provides some excellent advice for clinicians considering use of opioid analgesics for their patients.

- Dr. Andrew McLachlan, professor at the University of Sydney

Source: Feller, Stephen; Study: Opioids not effective for long-term back pain; Health News; May 26, 2016; http://www.upi.com/Health_News/2016/05/26/Study-Opioids-not-effective-for-long-term-back-pain/5451464269189/

CHRONIC PAIN

Chronic pain is often defined as any pain lasting more than 12 weeks. Whereas acute pain is a normal sensation that alerts us to possible injury, chronic pain is very different. Chronic pain persists-often for months or even longer.

It is also linked to numerous psychological, social, and physical conditions such as depression, anxiety, stress, socio-economic status, physical conditioning, gender, and a host of other issues. According to the Institute of Medicine, as many as one-third of American adults – 100 million people – are living with some form of chronic pain as currently defined.

Source: National Institutes of HealthNIH Medline Plus http://www.painmed.org/ patientcenter/facts_on_pain.aspx

WHERE DO WE GO FROM HERE?

In March 2016, the CDC released a new set of guidelines to reduce the use of opioids to treat chronic pain,¹⁶ while the U.S. Department of Health and Human Services released the *National Pain Strategy*, outlining a roadmap for providing all patients appropriate, high-quality and evidence-based care for pain.¹⁷

Proportion of United States Adult Population Reporting Chronic Medical Conditions, 2012



Source: National Center for Health Statistics, National Health Interview Survey, 2012

Pain (acute/chronic) is a disease process. It effects the central nervous system as well as emotional components. This exploration of pain as a disease process rather than just an inconvenient symptom is essential to responding appropriately to pain. ¹⁸

Chester "Trip" Buckenmaier, III, MD, Colonel
 US Army, Program Director Defense & Veterans
 Center for Integrative Pain Management (DVCIPM)



The CDC guidelines and the *National Pain Strategy* share an important element to address the out-of-control opiate environment in the U.S.: encouraging medical doctors to utilize non-pharmacologic, conservative care and consider non-addictive alternative options, behavioral changes and non-addictive pain relievers.

From the Samueli Institute, a not-for-profit organization that is advancing the science of healing worldwide,¹⁹ Bonnie Sakallaris, RN, PhD, VP, Optimal Healing Environments, sums it up this way: "...when you look at the IOM report, the FDA guidelines, and the CDC guidelines, all of them recommend that non-opioid and non-pharmacologic approaches be the first approaches in dealing with chronic pain... with recommendations that we provide the treatment of greatest benefit -- and that opioids are not the first line therapy for chronic pain.." ²⁰

Sandy Gordon, B.Sc. CEC, Director, Collaboratives of the Samueli Institute, noted, "We need a cultural transformation that places the patient at the center of a personalized, tailored, integrated multi-disciplinary model of self-care and directed care drawing upon all available evidence based modalities to relieve pain and improve function."

NON-PHARMACOLOGIC APPROACHES — THE FIRST OPTIONS IN DEALING WITH CHRONIC PAIN



At the intersection of these momentous and much needed recommendations are the use of safe and effective, conservative care options prior to prescribing addictive and potentially fatal opioids.

Chiropractic care is a handson, non-invasive approach documented to be effective in the acute and chronic neuro-musculoskeletal pain environment, yielding improved clinical outcomes, reduced costs and high levels of patient satisfaction.²¹

Chiropractic patients may receive spinal adjustments and/or alternative drugless therapies that assist the *innate* capabilities of the body to relieve pain, restore health and prevent disease. Chiropractic adjustments may aid in musculoskeletal mobilization to reduce pain and improve function.²²

Chiropractic care takes on even greater importance when one considers the opportunity it offers to potentially avoid the risks of prescription opioids: misuse, abuse, and opioid use disorder (addiction). In 2014, almost two million Americans abused or were dependent on prescription opioids.²³ As many as one in four people who receive prescription opioids long term for non-cancer pain in primary care settings struggle with addiction.²⁴

A recent study examining very large Medicare datasets found a statistically significant inverse correlation between per-capita doctor of chiropractic (DC) supply (and spending on chiropractic manipulation), and the percent of younger patients obtaining opioid prescriptions. In other words, in geographic locations with more chiropractors and a higher level of Medicare payments for chiropractic spinal manipulation, there were fewer patients taking opioid drugs. Although only exploratory in nature, this study suggests that the availability of chiropractic services may be able to ameliorate or limit the use of prescription opioids.²⁵ The moment demands an immediate change in provider and patient behavior.

The problem remains that opioids frequently are prescribed for acute and subacute low back pain, despite low quality or inconclusive supporting evidence regarding their use in this circumstance. Furthermore, there are no randomized control trials that have shown opioids to improve function.²⁶

PREVALENCE OF BACK AND NECK PAIN, HEADACHES AND NEURO-MUSCULOSKELETAL CONDITIONS

The importance of chiropractic care is further amplified since many individuals are prescribed opioids for back, low back and neck pain, headaches, neuromusculoskeletal conditions and other related conditions. An estimated 126.6 million Americans (one in two adults) are affected by a musculoskeletal condition– comparable to the total percentage of Americans living with a chronic lung or heart condition–costing an estimated \$213 billion in annual treatment, care and lost wages, according to a new report issued by the United States Bone and Joint Initiative (USBJI).

According to the report, the most prevalent musculoskeletal disorders are arthritis and related conditions; back and neck pain; injuries from falls, work, military service and sports; and osteoporosis, a loss of bone density increasing fracture risk, primarily in older women. Back and neck pain affects nearly one in three, or 75.7 million adults in the U.S.²⁷

Additional reports from the CDC confirm that 17 percent of adults have experienced a migraine or severe headache, 15 percent have experienced pain in the neck area, 29 percent had experienced pain in the lower back, and 5 percent had experienced pain in the face or jaw area.

Collectively, this data adds up to millions of Americans who suffer with chronic pain related to specific conditions – people who could potentially find relief with chiropractic care and benefit from improved overall health. According to a report published by the Agency for Healthcare Research and Quality (AHRQ), spinal manipulative therapy effectively and significantly reduced pain and improved function for patients with nonspecific low back pain.



CHIROPRACTIC CARE AND THE TRIPLE AIM OF BETTER CLINICAL OUTCOMES, GREATER PATIENT SATISFACTION AND LOWER COST OF CARE

With the prevalence of back, low back and neck pain, and the documented role of non-invasive, drug-free chiropractic care to successfully address these conditions and alleviate pain, providers in multiple disciplines and throughout the health care continuum are now advocating chiropractic care as a leading alternative to usual medical care. It is important to note that in 2010, it was estimated that doctors of chiropractic (DCs) perform up to 94 percent of spinal manipulations in the U.S.²⁸



The time is now for early integration of alternative treatment for pain relief...multiple non-pharmacological approaches, methods and practitioners with evidence to support their inclusion should be considered important tools in addressing these public health challenges.²⁹

- PAINS Project



"NEVER ONLY OPIOIDS" — PAIN ACTION ALLIANCE TO IMPLEMENT A NATIONAL STRATEGY (PAINS)

Patient satisfaction with chiropractic care is well-documented. A BMC Musculoskeletal Disorders study on upper cervical chiropractic care for neck pain, headache, mid-back, and low back pain concludes that 9.1 out of 10 patients indicate a very high level of patient satisfaction. In another study of North Carolina patients seeking treatment for acute low back pain from various health care professionals (primary care physicians, chiropractors, orthopedic surgeons, etc.) researchers found that those who visited a chiropractor had a higher degree of satisfaction in the care they received.³⁰

Chiropractic care is also documented for better outcomes. The Journal *Spine* published the first reported randomized controlled trial comparing full evidencebased clinical practice guidelines (CPGs) treatment, including spinal manipulative therapy administered by chiropractors, to family physician-directed usual care (UC) in the treatment of patients with acute mechanical low back pain (AM-LBP). Compared to family physician-directed UC, full CPG-based treatment including chiropractic spinal manipulative therapy (CSMT) is associated with significantly greater improvement in condition-specific functioning.³¹ Additional studies published in peer-reviewed journals, continually confirm better clinical outcomes resulting from chiropractic care:

Acute and chronic chiropractic patients experienced better outcomes in pain, functional disability, and patient satisfaction; clinically important differences in pain and disability improvement were found for chronic patients. ³²

- Journal of Manipulative and Physiological Therapeutics

For neck pain and headaches, cervical spine manipulation was associated with significant improvement in headache outcomes in trials involving patients with neck pain and/or neck dysfunction and headache.³³ – Duke University

TABLE 4. PATIENTS' SATISFACTION WITH AND PERCEPTION OF CARE

Primary Care.			
Variable	Orthopedic, or, HMO Provider	Chiropractor	P Value
Number of Patients	1027	606	
Satisfaction with care. (% answering "excellent")	% of patients		
Information given?	30.3	47.1	<0.001
Treatment of back problem?	31.5	53.1	< 0.001
Overall results of treatment?	26.5	42.1	< 0.001
Perception of care (% answering "yes")			
Detailed history of back pain taken?	68.4	88.4	< 0.001
Careful examination of back performed?	79.9	96.1	<0.001
Cause of problem clearly explained?	74.6	93.6	< 0.001

Source: http://www.nejm.org/doi/full/10.1056/NEJM199510053331406#t=articleBackground

There is also dramatic evidence of the value of chiropractic care in surgical avoidance that results in not only cost savings, but also patient outcomes and satisfaction. Journal *Spine* published a study reporting: "Reduced odds of surgery were observed for those whose first provider was a chiropractor - 42.7 percent of workers [with back injuries] who first saw a surgeon had surgery, in contrast to only 1.5 percent of those who saw a chiropractor." ³⁴

Yet another a study that analyzed data from 85,000 Blue Cross Blue Shield (BCBS) beneficiaries in Tennessee over a two-year span concluded: Low back pain initiated with a DC saves 40 percent on health care costs when compared with care initiated through a medical doctor (MD).³⁵



AVAILABILITY OF CHIROPRACTIC CARE IMPROVES THE VALUE OF HEALTH BENEFITS PLANS

A landmark report prepared by a global leader for trusted human resources and related financial advice, products and services, finds that the addition of chiropractic care for the treatment of low back and neck pain will likely increase value-for-dollar in U.S. employer-sponsored health benefit plans. Authored by Niteesh Choudhry, MD, PhD, and Arnold Milstein, MD, this report summarizes the existing economic studies of chiropractic care published in peer-reviewed scientific literature, and uses the most robust of these studies to estimate the costeffectiveness of providing chiropractic insurance coverage in the U.S.³⁶ Low back and neck pain are extremely common conditions that consume large amounts of health care resources. Chiropractic care, including spinal manipulation and mobilization, are used by almost half of U.S. patients with back-pain seeking treatment. The peer-reviewed scientific literature evaluating the effectiveness of U.S. chiropractic treatment for patients with back and neck pain suggests that these treatments are at least as effective as other widely used treatments.

High quality randomized cost-effectiveness studies have to date only been performed in the European Union (EU). To model the EU study findings for U.S. populations, researchers applied U.S. insurer-payable unit price data from a large database of employer-sponsored health plans. The findings rest on the assumption that the relative difference in the cost-effectiveness of low back and neck pain treatment with and without chiropractic services are similar in the U.S. and the EU.

The results of the researchers' analysis are as follows:

- **Effectiveness:** Chiropractic care is *more effective* than other modalities for treating low back and neck pain.
- Total cost of care per year:
 - For low back pain, chiropractic care increases total annual per patient spending by only \$75 compared to medical physician care.
 - For neck pain, chiropractic care reduces total annual per patient spending by \$302 compared to medical physician care.
- **Cost-effectiveness:** When considering effectiveness and cost together, chiropractic care for low back and neck pain is *highly cost-effective*, represents a good value in comparison to medical physician care and to widely accepted cost-effectiveness thresholds.

These findings, in combination with existing U.S. studies published in peerreviewed scientific journals, suggest that chiropractic care for the management of low back and neck pain is likely to achieve equal or better health outcomes at a cost that compares very favorable to most therapies that are routinely covered in U.S. health benefits plans. As a result, the addition of chiropractic coverage for the treatment of low back and neck pain at prices typically payable in U.S. employersponsored health benefit plans will likely increase value-for-dollar by *improving* clinical outcomes and either reducing total spending (neck pain) or increasing total spending (low back pain) by a smaller percentage than clinical outcomes improve.



AMERICANS WANT AND DESERVE CHIROPRACTIC CARE

For the overwhelming number of people who suffer with chronic pain, chiropractic care offers a drug-free, non-invasive and cost-effective alternative to opioid drugs. The time has come for putting patient safety and health above self-interest and profits.

Solution Physicians who persist in dangerous prescribing patterns must heed CDC guidelines and begin prescribing safer alternatives such as chiropractic care for chronic pain management.



- Pharmaceutical manufacturers must take stock of the havoc and dire outcomes that have been created by their opioid products – and institute more responsible marketing and physician education that will result in improved prescribing habits.
- Generation Hospital emergency rooms should introduce options for managing patients' pain without the use of opioid painkillers.
- Payers and plan sponsors both government and commercial - can improve member satisfaction with benefits programs by making chiropractic care an accessible, affordable option for chronic pain relief, with reimbursement of doctors of chiropractic as covered providers.
- Musculoskeletal pain is one of the leading causes of disability in the active military and veteran populations. Consequently, chiropractic services should be expanded in the Department of Defense and veteran's health care systems.³⁷

Chiropractic is the largest, most regulated, and best recognized of the complementary and alternative health care professions. In fact, patient surveys reported in the *Annals of Internal Medicine* show that chiropractors are used more often than any other alternative provider group and patient satisfaction with chiropractic care is very high.

There is steadily increasing patient use of chiropractic in the United States, which has tripled in the past two decades.³⁸

Despite this seemingly positive rise in utilization, a new report entitled "Gallup-Palmer College of Chiropractic Inaugural Report: Americans' Perceptions of Chiropractic" concludes that only 33.6 million U.S. adults (14 percent) seek chiropractic care each year. It also indicates that more than half of U.S. adults view doctors of chiropractic positively and agree they're effective at treating neck and back pain. American attitudes about chiropractors are effective at treating neck and back pain, and the majority (57 percent) of adults are likely to see a chiropractor for neck or back pain.³⁹



AS A NATION, WE SIMPLY CANNOT AFFORD TO PROCEED IN A MODE THAT PROMULGATES "BUSINESS AS USUAL." AMERICANS, CONSTITUTING ONLY 4.6 PERCENT OF THE WORLD'S POPULATION, HAVE BEEN CONSUMING 80 PERCENT OF THE GLOBAL OPIOID SUPPLY, AND 99 PERCENT OF THE GLOBAL HYDROCODONE SUPPLY. AT STAKE IS THE HEALTH AND WELFARE OF MILLIONS OF AMERICANS, WITH MANY LIVES LITERALLY HANGING IN THE BALANCE. 40

END NOTES

- ¹ CDC. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2016. <u>http://wonder.cdc.gov</u>
- ² Frenk SM, Porter KS, Paulozzi LJ. Prescription opioid analgesic use among adults: United States, 1999–2012. NCHS data brief, no 189. Hyattsville, MD: National Center for Health Statistics. 2015.
- ³ CDC. <u>http://www.cdc.gov/drugoverdose/data/overdose.html</u>; accessed April 13, 2016.
- ⁴ CDC. http://www.cdc.gov/drugoverdose/data/overdose.html; accessed April 13, 2016.
- ⁵ Huyler, Frank, MD April 3, 2016; <u>http://www.nydailynews.com/opinion/frank-huyler-united-states-pain-relief-ar-ticle-1.2585740</u>; accessed April 13, 2016.
- ⁶ Johnson, Steven Ross; Opioid abuse costs U.S. employers \$18 billion in sick days and medical expenses; Modern Health care, April 20, 2016; <u>http://www.modernhealth care.com/article/20160420/NEWS/160429998?utm_</u> source=modernhealth care&utm_medium=email&utm_content=20160420-NEWS-160429998&utm_campaign=financedaily; accessed April 28, 2016.
- ⁷ National Safety Council; NSC Poll: 99% of Doctors Prescribe Highly-addictive Opioids Longer than CDC Recommends; March 24, 2016; <u>http://www.nsc.org/Connect/NSCNewsReleases/Lists/Posts/Post.aspx?ID=108</u>; accessed April 13, 2016.
- ⁸ Campo-Flores, A. and Kamp, J. (2016, May 14). Hooked: One Family's Ordeal With Fentanyl. The Wall Street Journal. Retrieved from http://www.wsj.com/articles/hooked-one-familys-ordeal-with-fentanyl-1463158112.
- ⁹ CDC. <u>http://www.cdc.gov/media/releases/2011/p1101_flu_pain_killer_overdose.html</u>; accessed May 29, 2016.
- ¹⁰ National Safety Council, 2016.
- ¹¹ J Am Board Fam Med May-June 2009 vol. 22 no. 3 291-298; <u>http://www.jabfm.org/content/22/3/291.full</u>; accessed May 9, 2016.
- ¹² Baker, David MD ; Pain News Network; Joint Commission Defends Hospital Pain Standards, April 15, 2016; http://www.painnewsnetwork.org/stories/2016/4/15/joint-commission-defends-hospital-pain-questions;
- ¹³ Perrone, Matthew; Painkiller critics take aim at hospital surveys, procedures; Associated Press, April 13, 2016. <u>http://www.apnewsarchive.com/2016/Painkiller-critics-say-patient-surveys-and-hospital-procedures-have-en-couraged-doctors-to-overprescribe-painkillers/id-a48f0d9556c3442394da1f5b44e01692; accessed April 13, 2016.</u>
- ¹⁴ Duffy, Christine; New Jersey hospital emergency room becomes first in U.S. to end use of opioid painkillers, March 28, 2016. <u>http://pix11.com/2016/03/28/new-jersey-hospital-emergency-room-becomes-first-in-u-s-to-end-use-of-opioid-painkillers/</u>; accessed April 13, 2016.
- ¹⁵ Huyler, Frank, MD April 3, 2016; <u>http://www.nydailynews.com/opinion/frank-huyler-united-states-pain-relief-ar-ticle-1.2585740</u>; accessed April 13, 2016.
- ¹⁶ CDC. CDC Guideline for Prescribing Opioids for Chronic Pain; <u>http://www.cdc.gov/drugoverdose/prescribing/</u>guideline.html; accessed April 13, 2016.
- ¹⁷ Interagency Pain Research Coordinating Committee (IPRCC); National Pain Strategy 2016; http://iprcc.nih. gov/docs/HHSNational_Pain_Strategy.pdf?utm_medium=nl&utm_source=internal&mrkid=<u>%7B%7Blead.</u> Id%7D%7D&mkt_tok=3RkMMJWWfF9wsRokuKjAcO%2FhmjTEU5z17eQkWae3IMI%2F0ER3fOvrPUfGjI4HS8ZiMg%2BTFAwTG5toziV8R7LMKM1ty9MQWxTk; accessed April 13, 2016.
- ¹⁸ Samueli Institute; <u>https://siib.adobeconnect.com/p82d43yfqf3/?launcher=false&fcsContent=true&pb-Mode=normal</u>; accessed April 18, 2016.
- ¹⁹ Samueli Institute, 2016.
- ²⁰ Samueli Institute, 2016.
- ²¹ National Board of Chiropractic Examiners; Practice Analysis of Chiropractic 2015; Chapter Two; <u>http://nbce.</u> wpengine.com/wp-content/uploads/chapter_02.pdf; accessed May 5, 2016
- Advancing Pain Management in Oregon; The Oregon Pain Management Commission (OPMC), p.16; www.oregonpa.org/resources/documents/presentation102705-2slides.pdf; accessed April 28, 2016.
- ²³ Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2014. <u>http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf</u>; accessed April 18, 2016.

- ²⁴ Boscarino JA, Rukstalis M, Hoffman SN, et al. Risk factors for drug dependence among out-patients on opioid therapy in a large US health-care system. Addiction 2010;105:1776-82. <u>http://dx.doi</u>
- ²⁵ Goertz, Christine M. and Weeks, William B.; Cross-Sectional Analysis of Per Capita Supply of Doctors of Chiropractic and Opioid Use in Younger Medicare Beneficiaries; Journal of Manipulative and Physiological Therapeutics; <u>http://dx.doi.org/10.1016/j.jmpt.2016.02.016</u>; accessed April 28, 2016.
- ²⁶ Bonsell J, Bonte B, Campbell R, Goertz M, Haake B, Johnson K, Kramer C, Mueller B, Peterson S, Setterlund L, Thorson D, Timming R. Adult acute and subacute low back pain. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2012 Nov. Retrieved from <u>http://www.qualitymeasures.ahrq.gov/content.aspx-?id=36749</u>.
- ²⁷ United States Bone and Joint Initiative; "The Impact of Musculoskeletal Disorders on Americans: Opportunities for Action"; http://www.usbji.org/; accessed April 13, 2016.
- ²⁸ Daniel C. Cherkin, Robert D. Mootz; Chiropractic in the United States: Training, Practice, and Research, 2010.
 "Chiropractic in the United States: Training, Practice, and Research"; accessed April 15, 2016.
- ²⁹ PAINS; Never Only Opioids; Fall 2014, Issue 5; <u>http://www.painsproject.org/wp/wp-content/up-loads/2014/09/pain-policy-issue-5.pdf</u>
- ³⁰ Timothy S. Carey, M.D., M.P.H., Joanne Garrett, Ph.D., Anne Jackman, M.S.W., Curtis McLaughlin, D.B.A., John Fryer, Ph.D., Douglas R. Smucker, M.D., M.P.H., and the North Carolina Back Pain Project. N Engl J Med 1995; 333:913-917. <u>http://www.nejm.org/doi/full/10.1056/NEJM199510053331406#t=articleBackground</u>
- ³¹ Bishop, Paul B., DC, MD, PhD; Fisher, Charles G., MD, MHSc, FRCSC; Dvorak, Marcel F.S., MD, FRCSC; Quon, Jeffrey A., DC, PhD, FCCSC. (December 2010). The Chiropractic Hospital-based Interventions Research Outcomes (CHIRO) Study. Spine, Volume 10, Issue 12. Retrieved from <u>http://www.sciencedirect.com/science/article/pii/S1529943010011149</u>; accessed April 14, 2016.
- ³² Haas DC., M., & Sharma PhD., R., Miron PhD., S. Cost-Effectiveness of Medical and Chiropractic Care for Acute and Chronic Low Back Pain. Journal of Manipulative and Physiological Therapeutics, 28 (8), pp. 555-563. Retrieved from http://www.jmptonline.org/article/S0161-4754(05)00227-7/abstract.
- ³³ McCrory DC, Penzien DB, Hasselblad V, Gray RN. (2001). Evidence Report: Behavioral and Physical Treatments for Tension-type and Cervicogenic Headache. Duke University Evidence-based Practice Center for Clinical Health Policy Research.
- ³⁴ Keeney, B. J., Fulton-Kehoe, D., Turner, J. A., Wickizer, T. M., Chan, K. C., & Franklin, G. M. (2013). Early Predictors of Lumbar Spine Surgery After Occupational Back Injury. Spine, 38(11), 953-964. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/23238486.
- ³⁵ Liliedahl, R. L., Finch, M. D., Axene, D. V., & Goertz, C. M. (2010). Cost of Care for Common Back Pain Conditions Initiated With Chiropractic Doctor vs Medical Doctor/Doctor of Osteopathy as First Physician: Experience of One Tennessee-Based General Health Insurer. Journal of Manipulative and Physiological Therapeutics, 33(9), 640-643. <u>http://www.ncbi.nlm.nih.gov/pubmed/?term=Liliedahl%20et%20al%20(2010)%2C%20</u> Journal%20of%20Manipulative%20and%20Physiological%20Therapeutics.
- ³⁶ Choudhry, Niteesh MD, PhD, and Milstein, Arnold, MD; Chiropractic Services Improve Value of Health Benefits Plans, 2009; <u>http://www.f4cp.com/files/white-papers/do-chiro-services-improve-value-of-health-benefitplans.pdf</u>
- ³⁷ Green et al. Integration of Chiropractic Services in Military and Veteran Health Care Facilities: A Systematic Review of the Literature. Journal of Evidence-Based Complementary & Alternative Medicine 2016. Vol. 21(2), 115-130.
- ³⁸ Meeker, DC. MPH, W. C., and Haldeman, DC, PhD, MD, FRCP(C) S. (2002). Chiropractic: A Profession at the Crossroads of Mainstream and Alternative Medicine. Annals of Internal Medicine, 136 (3) pp. 216-227. http://www.ncbi.nlm.nih.gov/pubmed/11827498. Accessed April 15, 2016.
- ³⁹ Gallup-Palmer College of Chiropractic Inaugural Report: Americans' Perceptions of Chiropractic, 2015. <u>http://www.palmer.edu/uploadedfiles/pages/alumni/gallop-report-palmer-college.pdf</u>; accessed September 18, 2016.
- ⁴⁰ American Society of Interventional Pain Physicians; <u>https://www.asipp.org/documents/ASIPPFact-Sheet101111.pdf</u>; accessed May 9, 2016.



FOUNDATION FOR CHIROPRACTIC PROGRESS BOARD OF DIRECTORS

Kent S. Greenawalt, CEO, Foot Levelers; Chairman of the Board of Directors, F4CP

Mickey G. Burt, DC, Executive Director of Alumni and Development, Palmer College of Chiropractic

Gerard W. Clum, DC, President Emeritus, Life Chiropractic College West and Director, The Octagon, Life University

Lance H. Cohen, DC, Clinic Director, Cohen Chiropractic Clinic, San Diego County District President, California Chiropractic Association

Marshall Dahneke, CEO, Performance Health

Kristine L. Dowell, Executive Director, Michigan Association of Chiropractors

Joe Doyle, Publisher, Chiropractic Economics

Charles C. DuBois, President/CEO, Standard Process Inc.

J. Michael Flynn, DC

R. A. Foxworth, DC, FICC, MCS-P, President, ChiroHealthUSA

Arlan W. Fuhr, Chairman/Founder, Activator Methods International Ltd.

Greg Harris, Vice President for University Advancement, Life University

Kray Kibler, CEO, ScripHessco

Thomas M. Klapp, DC, COCSA Representative

Carol Ann Malizia, DC, CAM Integrative Consulting

Fabrizio Mancini, DC, President Emeritus, Parker University

Brian McAulay, DC, PhD

William Meeker, DC, MPH, President, Palmer College of Chiropractic - San Jose Campus

Robert Moberg, CEO, ChiroTouch

Donald M. Petersen, Jr., Publisher, MPA Media

Mark Sanna, DC, FICC, ACRB, Level II, President, Breakthrough Coaching



A not-for-profit organization and the leading voice of the chiropractic profession, the Foundation for Chiropractic Progress (F4CP) informs and educates the general public about the value of chiropractic care. Visit www.f4cp.com or call 866-901-F4CP (3427).

