

Chiropractic History: a Primer

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The NCMIC Insurance Company is proud to make this primer of chiropractic history possible through a grant to the Association for the History of Chiropractic. NCMIC recognizes the importance of preserving the rich history of our profession. This primer will hopefully stimulate your interest in this saga, help you to understand the trials and tribulations our pioneers endured, and give you a sense of pride and identity.

Lee Iacocca, in his book about LIBERTY said:

I know that liberty brings with it some obligations. I know we have it today because others fought for it, nourished it, protected it, and then passed it on to us. That is a debt we owe. We owe it to our parents, if they are alive, and to their memory if they are not. But mostly we have an obligation to our own kids. An obligation to pass on this incredible gift to them. This is how civilization works... whatever debt you owe to those who came before you, you pay to those who follow.

That is essentially the same responsibility each of us has to preserve and protect the extraordinary history of this great profession. We share this primer with you, and hope that you in turn will do your part for the good of the order. Enjoy.

Louis Sportelli, D.C.

A handwritten signature in black ink that reads "Louis Sportelli, D.C." with a stylized flourish at the end.

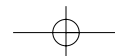
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The mission of the Association for the History of Chiropractic is to gather, preserve, and disseminate the creditable history of the chiropractic profession.

*Chiropractic History: a Primer***WHY CHIROPRACTIC HISTORY?**

With all the study demands to learn the basic sciences which weigh upon the new chiropractic student, you may well wonder where you will find the time to learn the history of your chosen profession. After all, it's all behind us now! And yet, if we wish to understand philosophy in chiropractic, it will help to know how the cherished concepts of doctors of chiropractic (DCs) emerged and blossomed over time. If we wish to appreciate chiropractic theory and technique in all its rich diversity and myriad forms, knowing how techniques developed, the one from the other and sometimes in oppositional reaction to each other, history can make all the difference. If you expect to earn a diploma, obtain a license and succeed in the business of clinical practice, understanding how these possibilities came about may make the difference between a rocky road vs. smooth sailing. Chiropractic did not spring into existence fully grown, but has been evolving and unfolding for more than a century. And though history can offer no blueprint for the future, it can aid us to see options and strategies that might otherwise remain obscure.

Perhaps more importantly, history shapes identity. Like the adolescent who seeks to define her/himself in comparison with the peer group (other teenagers), professions also tend to define themselves in part by comparison with each other. Now, after more than 100 years of service to the public, we in chiropractic have reached a more mature stage, and we must appreciate and define ourselves from a more adult and longitudinal perspective. Our place in society, both as individuals and as a profession, is significantly shaped by the paths we've taken. We are not merely the "un-medicine," but also the sum of all the experiences we have come through.



Lyndon McCash, DC, in jail in Oakland, Calif., in 1920, one of hundreds of California chiropractors incarcerated for unlicensed practice prior to passage of the Chiropractic Act in 1922.



Patients protest outside the Ohio jail where their doctor, Herbert R. Reaver, D.C., was imprisoned.

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And so the Association for the History of Chiropractic (AHC) offers this brief introduction to chiropractic history. We hope this primer will tickle your history bone as we briefly explore the triumphs and tragedies, wonders and warts, passion and determination, the funny, the sad and the bizarre in the saga of chiropractic. It's been a heck of a ride, and now it's part of your heritage, too. Welcome aboard!

PRE-CHIROPRACTIC: NINETEENTH CENTURY MEDICINE AND ALTERNATIVE HEALING

Chiropractic emerged in the final years of the 19th century, a time of great change and growing public awareness of the incredible possibilities inherent in science, technology and social organization. The 1800s saw the dawn of the machine age, and ushered in such marvels as the steamboat, the railroad, telegraphy, and mass production via the assembly line. The century was also a time of great upheaval in America, and the Civil War tore the nation and families apart. Wounds were left, both physical and psychic, that no doctor could heal. Spiritualism and séances grew in popularity as people yearned to make contact with their departed loved ones.

Health care in the 19th century was a smorgasbord of competing theories, practitioners, potions and schemes (see Table 1). Except in urban centers, doctors were scarce, and most health care was provided in the home by family members. Hospitals were even scarcer than doctors, and were seen as places of doom where the terminally ill went to die. In a nation dominated by self-reliant farmers who had liberated themselves from the British crown, populist sentiments ran strong, and physicians were often seen as elitist pretenders to authority. By mid-century, most of the early statutes regulating the practice of medicine had been repealed at the insistence of the electorate (Starr 1982). Alarmed at the loss of its quasi-monopoly, the dominant medical sect organized the American Medical Association in an effort to re-establish its authority.

Table 1: Several health care options available to Americans in the 19th century

bonesetting	herbalism	Native American remedies	Physical Culture
Christian Science	heroic medicine	naturopathy	phrenomagnetism
eclectic medicine	homeopathy	osteopathy	Thomsonianism
electro-medicine	magnetic healing	patent medicines	



Benjamin Rush, MD

Heroic medicine was the most prevalent form of “orthodox” practice in the first half of the 19th century. Championed by Benjamin Rush, M.D., a signer of the Declaration of Independence (Starr 1982, p. 83), heroic practice involved the notion that the harshness of the doctor’s remedies should be in proportion to the severity of the patient’s disease. This meant that the sickest patients were at risk of iatrogenesis (illness caused by treatment), since heroic doctors’ black bags were filled with strong emetics and cathartics comprised of alcohol, mercury and other toxins, as well as the physician’s notorious lancet. George Washington, it might be noted, died from blood-letting at the hands of his doctors who sought to remove impurities

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from his circulation. Although heroic medicine was in decline by 1850 (Starr 1982, p. 56), its use continued through the rest of the century (Joachims 1982).

Against this backdrop of heroic medicine, the Native American and Thompsonian traditions of herbal and other botanical remedies grew popular, and were joined in the early

part of the 19th century by the infinitesimal doses of homeopathic medicine (promoted by Samuel Hahnemann, M.D., of Germany) and the magnetic healing methods of Franz Anton Mesmer, M.D. Mesmer's doctoral dissertation at the University of Vienna in 1776 had introduced "animal magnetism" as a vital and transferable force in living things. Although the French Academy of Sciences, including prominent member Benjamin Franklin, repudiated Mesmer's ideas as little more than suggestion (Armstrong and Armstrong 1991,



Dr. Franz Anton Mesmer, 1734-1815



19th c. caricature of the magnetic practitioner

pp. 186-8), magnetic methods were imported to the New World in the 1830s where they grew to be as popular as in Europe. As well, magnetic healing concepts and practices would influence the founders of several other alternative health care schools, including Mary Baker Eddy, founder of Christian Science; Andrew Taylor Still, founder of osteopathy (Gevitz 1982); and D.D. Palmer, father of chiropractic (Gielow 1981; Keating 1997a).

Political medicine had much to be humble about, but instead behaved in rather aggressive and arrogant fashion towards its competitors. Organized medicine wrapped itself in a cloak of science, and worked to convince governments and a sizable portion of the populace that it alone had the knowledge to justify licensure. Although medical statutes were rarely enforced in the 19th century, they laid the groundwork for allopathic dominance in years to come. Medical doctors became the nearly exclusive source of advice to lawmakers, and the sole arbiters of health care within the embryonic government hospitals and health

Table 2: Reintroduction of medical statutes in America, 1873-1899
(Wilder 1901, pp. 775-835)(courtesy of Robert B. Jackson, D.C., N.D.)

1873: Arizona Territorial Act	1890: Tennessee	South Carolina, Utah,
1874: Missouri	1890: Florida, Washington	Virginia
1875: Nevada	1891: Alabama, Nebraska, North	1895: Arkansas, Delaware,
1875-6: California	Dakota	Indiana, Maine, Minnesota,
1876: Vermont	1892: Maryland, Mississippi	Montana, Oregon, Rhode
1878: Cherokee and Choctow	1893: Connecticut, Kentucky,	Island, New York amended
Nations in Indian Territory	New York, Pennsylvania,	1896: District of Columbia, Ohio
1879: Kansas, Texas	South Dakota	1897: New Hampshire,
1881: Colorado	1894: Georgia, Louisiana,	Wisconsin
1886: Iowa	Massachusetts, Maryland	1899: Illinois, Michigan
1889: Idaho, North Carolina,	amended, New Jersey,	n.d. Wyoming

services (e.g., Mullan 1989). These early political advances shaped health care in American ever after (e.g., Wilk 1996; Wolinsky & Brune 1994).

THE PALMERS AND THE BIRTH OF CHIROPRACTIC

In 1886, when Daniel David (“D.D.”) Palmer first hung his shingle as a magnetic practitioner in Burlington, Iowa (Gielow 1981, pp. 43, 105), the licensing of doctors was still a novelty in the Hawkeye State. Encouraged by the belief that he had a personal excess of vital magnetic energy, he offered his services to the many patients who were wary of orthodox medicine. As was the custom of the day, Palmer adopted the title “Doctor,” and conducted his clinic with little concern about interference from his allopathic competitors. Had he practiced quietly in Burlington and later in Davenport, Iowa (where he relocated in 1887), his destiny might have been much different. But Dr. Palmer was a man of strong convictions and irrepressibly sharp tongue, and he broadcast his views on the horrors and abominations of mainstream medicine by means of a newspaper-sized advertiser (successively known as *The Educator*, *The Magnetic Cure*, and *The Chiropractic*) which reached thousands in Davenport and surrounding communities. D.D. Palmer was a lightning rod for controversy.

D.D. was born on 7 March 1845 in rural Ontario, just west of Toronto (Palmer 1910, pp. 17-8). His parents and siblings relocated to the Mississippi River valley in the waning days of the Civil War. Here the young man occupied himself as a farmer, grocer, bee keeper, and school teacher before taking up the healing art (Gielow 1981; Palmer 1908, p. 14). His formal education did not extend past the sixth grade, but he was an avid reader in a variety of subjects, including spiritualism, vitalism and the mechanical and biological sciences of his day. Surviving records from his businesses and career as schoolmaster reveal a very well organized mind; Palmer attended to detail and sought to understand the complexities of his world. These qualities extended into his work as a “magnetic,” and his curiosity led him to search for explanations for the beneficial effects his patients reported.



This photo from the 1880s or early 1890s shows, seated (l-r): D.D. Palmer and his father Thomas. Standing are younger brothers Thomas J. and Bart.

After nine years of clinical experience and theorizing, D.D. had decided that inflammation was the essential characteristic of all disease. With his sensitive fingers, Palmer sought to locate inflammation in his patients. His magnetic treatment involved pouring his personal, excess vital magnetic energy into the site of inflammation so as to cool it off. By not later than 1895, D.D. had decided that the cause of inflammations, and hence of all or most “dis-ease,” were displacements of anatomic structures. In the 1896 issue of his advertiser, *The Magnetic*, a homeopathic physician offered a testimonial concerning Palmer’s work which spoke to the anatomical specificity of D.D.’s orientation:

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He heals the sick, the halt, the lame, and those paralyzed, through the medium of his potent magnetic fingers placed upon the organ or organs diseased and not by rubbing or stroking, as other 'magnetic curers' do... Dr. Palmer seeks out the cause, the diseased organ upon which the disease depends, and treats that organ. Magnetics generally treat all cases alike, by general stroking, passes or rubbing. I think Dr. Palmer's plan is much more rational, and should be the most successful" (Livezey, cited in Palmer 1896).

The same issue of *The Magnetic* included Palmer's thoughts about treatment of the internal organs:

I strengthen the weakened parts by magnetic treatment. It is a specific for their relaxed and debilitated condition. It imparts to the female a life giving force, a healthy tone, a healthy stimulus, which is much better than using the knife or supporters. This treatment quickly relieves any inflammation of the ovaries (Palmer 1896).

By late 1895 or early 1896, Palmer's theorizing had progressed even further. Based on the premise that inflammation occurred when displaced anatomic structures rubbed against one another, causing friction and heat, he sought to manually reposition the parts of the body so as to prevent friction and the development of inflamed tissue. The first recipient of this new strategy was a janitor in the building where Palmer operated his 40-room facility. Patient Harvey Lillard reported in the January 1897 issue of *The Chiropractic* that:



Mr. Harvey
Lillard, c. 1906

I was deaf 17 years and I expected to always remain so, for I had doctored a great deal without any benefit. I had long ago made up my mind to not take any more ear treatments, for it did me no good.

Last January Dr. Palmer told me that my deafness came from an injury in my spine. This was new to me; but it is a fact that my back was injured at the time I went deaf. Dr. Palmer treated me on the spine; in two treatments I could hear quite well. That was eight months ago. My hearing remains good.

Harvey Lillard, 320 W.
Eleventh St., Davenport, Iowa
(Palmer 1897)



Reverend Samuel Weed

Delighted with this first informal experiment, Palmer extended his new work as a “magnetic manipulator” (Palmer 1897) to patients with a variety of other health problems, with reportedly good results. In the summer of 1896 he sought and obtained a charter for the Palmer School of Magnetic Cure, wherein he would teach his new method (Wiese 1896). With the assistance of his friend and patient, Reverend Samuel Weed, D.D. adopted Greek terms to form the word “chiropractic,” meaning done by hand. His school became known informally as Palmer’s School of Chiropractic (PSC), and he trained a few students, several of whom were allopathic and osteopathic doctors.

In the spring of 1902, perhaps in response to threat of prosecution, Old Dad Chiro departed Davenport and settled in Pasadena, California. Left to manage the Palmer School and to cope with a sizable debt (approximately \$8,000) was young Dr. B.J. Palmer, newly graduated from his father’s institution. Only 20 years of age, the young man proved remarkably resourceful in assuming his father’s role. He secured financing from the local banks, grew a beard to appear older, and established his own clientele of patients and students. While his father taught and practiced as an itinerant healer along the California coastline, B.J. restored the Palmer School and infirmary to financial health.

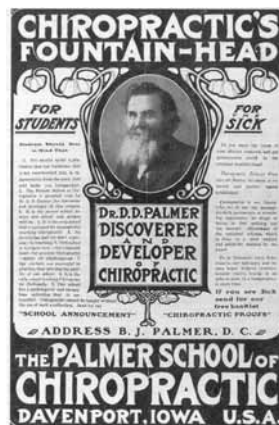
D.D. returned to Davenport late in 1904, and the two Palmers operated the school together. However, theirs had always been a stormy relationship, and circumstances would strain their patience to its limits. Among the challenges they confronted was competition from former graduates, most notably the American School of Chiropractic and Nature Cure in Cedar Rapids, Iowa, which was owned by 1901 Palmer graduate Solon M. Langworthy. In addition to the competition for students, the father of chiropractic was incensed by Dr. Langworthy’s introduction of naturopathic remedies (e.g., stretching machines, herbal remedies) in the curriculum; it was the beginning of the feud within the profession between “straights” and “mixers.” When Langworthy and associates succeeded in having a chiropractic licensing bill passed by both houses of the Minnesota legislature in 1905, the Palmers (with a bit of help from the medical community) persuaded the governor to veto the legislation (Gibbons 1993).

The pages of the Palmers’ house organ, *The*

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B.J. Palmer, Christmas 1900



Advertisement for the Palmer School, c. 1904



Drs. Alva Gregory and D.D. Palmer in Oklahoma City, c. 1907

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Chiropractor, filled with anti-mixing rhetoric. And D.D.'s continuing diatribe against allopathy and his use of testimonial advertising prompted his arrest for practicing medicine without a license late in 1905. Tried, convicted and sentenced in 1906 to 105 days in Scott County jail or a fine of \$350, Old Chiro went to jail for principle, insisting that he was not practicing medicine when he practiced chiropractic. B.J. featured his father as a "Martyr to His Science" in the pages of *The Chiropractor*, but when the elder Palmer finally paid the fine and was released after several weeks behind bars, the friction between father and son reached a pinnacle. They negotiated a settlement of their shared property, and the elder headed for Medford, Oklahoma, where his brother Thomas was in business. For a while, the father of chiropractic once again operated a grocery store, but by 1907 had established yet another school, this time in partnership with Alva Gregory, M.D., D.C. The school survived for several years, but D.D. Palmer again found it difficult to share leadership, and left the Palmer-Gregory College of Chiropractic for greener pastures. In November 1908, he established the D.D. Palmer College of Chiropractic in Portland, Oregon. It was here that he authored his classic, thousand-page volume, *The Chiropractor's Adjuster: the Science, Art and Philosophy of Chiropractic* (Palmer 1910). It was apparently in Portland as well that his third and final theory of chiropractic (Palmer 1914) emerged.

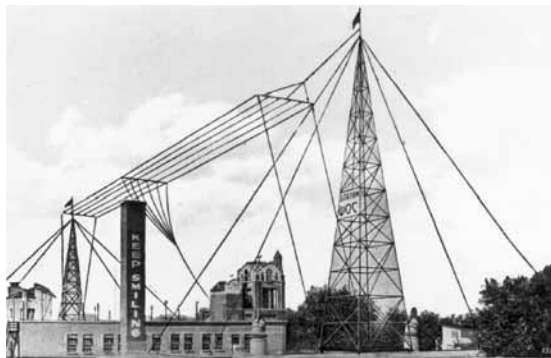
B.J. Palmer, meanwhile, continued the growth of the PSC, expanding enrollments and developing extensive marketing programs for the school and its graduates. He was a curious soul; B.J. engaged in some of the earliest research in the profession and greatly expanded the osteological collection his father had established. He hired a succession of MDs for his faculty, who provided a degree of legal protection from prosecution (Iowa did not pass a chiropractic law until 1921). In 1908 the PSC commenced publication of a series of volumes on the chiropractic art that would be known as the "green books," and in 1910 B.J. introduced x-ray technology to the profession.



B.J. (center) and the Palmer osteological collection, c. 1915

Old Dad Chiro died of typhoid fever in Los Angeles in 1913. Father and son had vied with one another for recognition as the "developer of chiropractic" for several years, and there was unresolved bitterness. Several of the elder's followers campaigned to have B.J. prosecuted for injuring his father during a chiropractic parade down Davenport's Brady Street hill (home of the PSC) earlier that year, but three grand juries refused to indict him (Gibbons 1994; Keating 1997a). Nevertheless, B.J. would be haunted by unjustified claims of patricide for the rest of his life. It was a bitter pill, and perhaps one that explains some of his ferocity in challenging his political opponents within the profession in later years.

From 1913, when his father passed away, until his 1924 introduction of the neu-



Broadcasting towers above the PSC campus in the 1920s

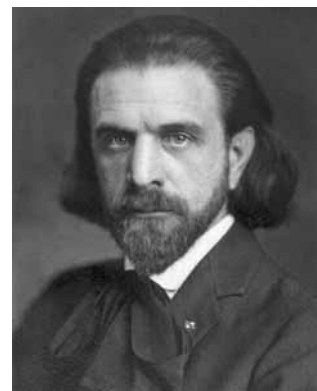
expanded by his investment in the burgeoning field of radio (Keating 1995a). Radio station WOC in Davenport, and later sister station WHO in Des Moines, became the western relay for the National Broadcasting Company (NBC), and brought Palmer and his message of chiropractic healing to millions in the “unseen audience.” B.J., the former vaudeville showman, became a genuine national celebrity as the broadcast media grew in popularity throughout the 1920s and 1930s.



Dr. Dossa D. Evins



Early model of the neurocalometer



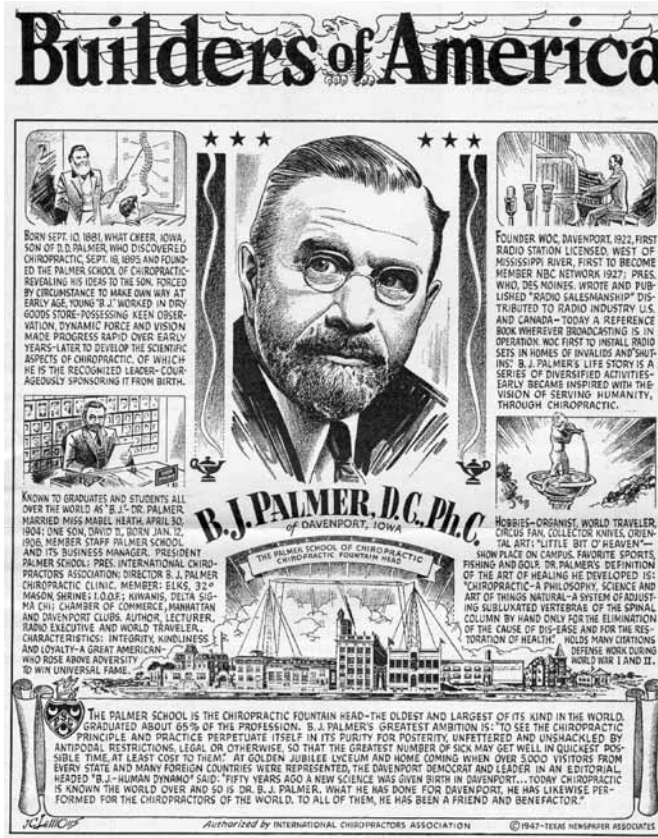
Dr. B.J. Palmer, c. 1920

A significant turning point in B.J.’s career and in the course of the profession came in 1924 with the official inauguration of Palmer’s “BACK-TO-CHIROPRACTIC” program at the PSC’s lyceum (homecoming) (Palmer 1924b). The NCM, a two-pronged spinal-heat sensing instrument, was heralded as the only scientifically valid method of detecting spinal subluxations, and henceforth, the “Developer” announced, practice without the device would be considered unethical (Keating 1991 1997). Invented by engineer-chiropractor

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rocalometer (NCM), B.J. Palmer was the clear majority leader of the chiropractic profession (Keating 1997a). Much of this time was spent in building the legal apparatus to defend the many thousands of chiropractors who were arrested for practicing medicine without a license. The PSC expanded phenomenally, its student body supported by veterans benefits following World War I (Keating 1994), and reached a record 3,000 students in the early 1920s. B.J. Palmer became a wealthy man, his fortune eventually

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Poster prepared by the International Chiropractors Association in 1947.

the profession had already begun to wane, owing to his campaigns to purge “mixers” from state chiropractic societies (Keating 1996a), but now many of his previously loyal, straight chiropractic followers also fell away (Quigley 1995). The American Chiropractic Association (ACA), organized in 1922 in opposition to Palmer’s Universal Chiropractors’ Association (UCA), swelled in membership as Palmer loyalists joined its ranks. Undaunted, Palmer persuaded the UCA to require an NCM lease as a condition of membership in the society (Quigley 1995). However, in 1925, B.J. resigned as secretary of the UCA, and failed in his re-election bid. Shortly thereafter, the Chiropractic Health Bureau (forerunner of today’s International Chiropractors Association/ICA) was established by Palmer and those who remained faithful to his brand of chiropractic. B.J. served as president of the ICA until his death in 1961, but never again would he enjoy the support of a majority of the profession.

In the final three decades of his career, B.J. Palmer continued the theoretical and technique innovations that had marked his earlier career. In the mid-1930s he committed his school to strict adherence to a restricted form of intervention limited to the upper cervical

Dossa Evins, the instrument was presumably reliable as a thermometer, but B.J.’s claims for its validity as a subluxation-detection methods were difficult for many in the profession to accept. “[It was] the most valuable invention of the age because it picks, proves and locates the cause of all dis-eases of the human race,” he insisted (Palmer 1924a). What was more, the NCM was not available for purchase, but could only be acquired through a ten-year lease costing more than \$2,000, an exorbitant sum. As well, B.J. filled the pages of his *Fountain Head News* (weekly newspaper) with threats to prosecute anyone who infringed upon his patents on the device.

Palmer’s authority in

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(atlas and axis) spinal adjusting only. This “Hole-in-One” (HIO) technique became firmly rooted within the Palmer camp; generations of PSC students would have to seek additional, off-campus training in adjusting in order to pass the practical examinations offered by some of the state boards of chiropractic examiners. And well into the 1950s, the PSC would persist in limiting its curriculum to the 18-month course established in the 1920s; the PSC resisted many of the expansions and improvements in chiropractic education offered at other chiropractic colleges.

EARLY CHIROPRACTIC SCHOOLS



Dr. John F.A. Howard founded the National School of Chiropractic in 1906.



Dr. T.F. Ratledge founded the Ratledge System of Chiropractic Schools, Los Angeles, in 1911.



Dr. Charles Cale founded the Los Angeles College of Chiropractic in 1911.



Attorney-chiropractor Willard Carver founded his first school in Oklahoma City in 1906.

Early chiropractic education resemble the training offered to allopathic students in the nineteenth century: a few months of classroom instruction in the basic sciences, and a little bit of supervised clinical practicum. Also like most of their allopathic forerunners, early chiropractic schools were almost all proprietary, that is, operated for profit by their owners. There was strong incentive to emphasize quantity (of students) over quality (of instruction). High school graduation was not usually required, and laboratory facilities were few and far between. Some justification for this meager preparation can be found in the need to turn out a volume of doctors in order to establish the profession. However, the largest of chiropractic institutions, the PSC, set an example by insisting for decades that no more than 18 months were needed to train a competent chiropractor. B.J. Palmer, president of the PSC, paradoxically claimed that education “constipates the mind.” He would rather train plumbers in chiropractic rather

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Advertisement for American University (Rehm 1992)

*Chiropractic History: a Primer***Table 3:** Several early schools of chiropractic, 1896-1922

Founding Date	Institutional Name	Location	Founder
1896	Palmer School of Magnetic Cure	Davenport, Iowa	DD Palmer
1903	American School of Chiropractic & Nature Cure	Cedar Rapids, Iowa	Solon Massey Langworthy, DC
1904	Marsh School of Chiropractic	Portland, Oregon	John E. Marsh, DC
1904	Pacific School of Chiro-Practic	Oakland, California	Harry D. Reynard, DC
1905	American School of Chiropractic	New York City	Benedict Lust, MD, ND, DC
1905	Parker School of Chiropractic	Ottumwa, Iowa	Charles Ray Parker, DC
1906	Carver-Denny School of Chiropractic	Oklahoma City	Willard Carver, LLB, DC & Lee L. Denny, DC
1906	National School of Chiropractic	Davenport, Iowa	John FA Howard, DC
1907	Palmer-Gregory College of Chiropractic	Oklahoma City	DD Palmer & Alva Gregory, MD, DC
1908	D.D. Palmer College of Chiropractic	Portland, Oregon	DD Palmer & LM Gordon DC
1908	Texas Chiropractic College	San Antonio, Texas	JN Stone, MD, DC
1908	Michigan College of Chiropractic	Grand Rapids, Michigan	NC Ross, DC
1908	Ratledge System of Chiropractic Schools	Guthrie, Oklahoma	TF Ratledge, DC
1908	Minnesota Chiropractic College	Minneapolis, Minnesota	Robert Ramsay, DC
1909	Wichita College of Kiropractic	Wichita, Kansas	JG Wilson, DC
1909	Robbins Chiropractic Institute	Sault Ste. Marie, Ontario	WJ Robbins, MD
1909	Pacific College of Chiropractic	Portland, Oregon	William O Powell, DC
1910	Universal Chiropractic College	Davenport, Iowa	Joy M Loban DC
1910	New Jersey College of Chiropractic and Naturopathy	Newark, New Jersey	Frederick W Collins, DO, DC
1910	San Diego School of Chiropractic	San Diego, California	FBC Eilersficken, DC
1911	Ratledge System of Chiropractic Schools	Los Angeles, California	TF Ratledge, DC
1911	Los Angeles College of Chiropractic	Los Angeles, California	Charles A Cale, DC
1911	Oregon Peerless College of Chiropractic and Neuropathy	Portland, Oregon	John E LaValley, DC
1911	Bullis and Davis School of Neuropathy, Ophthalmology and Chiropractic	Los Angeles, California	Benson Bullis, DC & Andrew P Davis, MD, DO, DC
1913	California Chiropractic College	Los Angeles, California	Albert W Richardson, DC
1914	Canadian Chiropractic College	Hamilton, Ontario	Ernst DuVal, DC
1918	Eastern College of Chiropractic	Newark, New Jersey	Craig M Kightlinger, MA, DC
1919	Columbia Institute of Chiropractic	New York City	Frank E Dean, MB, DC
1920	Missouri Chiropractic College	St. Louis, Missouri	Henry C Harring, DC, Robert Colyer, DC & Oscar Schulte DC
1922	Cleveland (Central) Chiropractic College	Kansas City, Missouri	Carl S Cleveland, Sr., DC, Ruth R Cleveland, DC & Perle B Griffin, DC



Dr. Ernst Duval



Dr. Craig Kightlinger



Adjusting class at Cleveland Kansas City, c. 1925

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than university graduates, for the latter reputedly had no room for the simple truths Palmer wished to impart.

Chiropractic schools proliferated in the first few decades of the profession (see Table 3). Spurred by federal funding for vocational training of veterans following World War I, the



Dr. Albert W. Richardson founded the California Chiropractic College in 1913



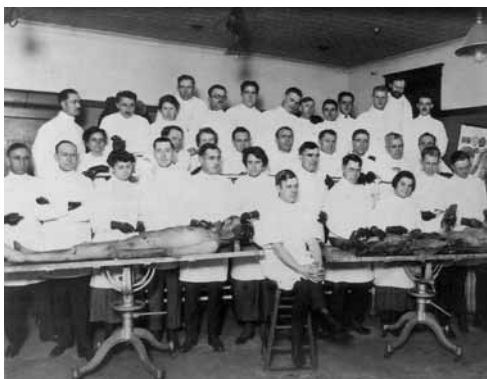
Dr. N.C. Ross founded the Michigan College of Chiropractic in 1908

number of chiropractic schools spurted to more than 80 in the first half of the 1920s (Ferguson & Wiese 1988), and the PSC boasted an enrollment of more than 3,000 students. However, when veterans' benefits expired, most of these schools evaporated, and the surviving institutions imploded. By decade's end, the PSC student body declined by as much as 90% (Schools 1928). Unfortunately, among the survivors were several correspondence schools, which purported to prepare doctors through mail-order instruction (Rehm 1992). Among the most notorious of these was the American University in Chicago (American 1919), which may have continued in operation until the mid-1930s. These sham schools, and a few of the more serious educational enterprises which also briefly offered partial correspondence training, left a black mark upon the profession that lingered for decades.

Concern for the need to upgrade and standardize chiropractic training was in evidence in the 1920s, and brought efforts by national organizations to try to implement such changes. The National College in Chicago and the Metropolitan College of Chiropractic in Cleveland, Ohio, took the initiative in introducing curricula which exceeded the 18-month limit insisted upon by B.J. Palmer. As well, innovations in chiropractic education included enhanced diagnostic training and a few examples of hospital-based instruction; for a few years, students at the National College were granted observation privileges at Cook County Hospital. These privileges were lost when students interrupted surgeries with cries of "Have you



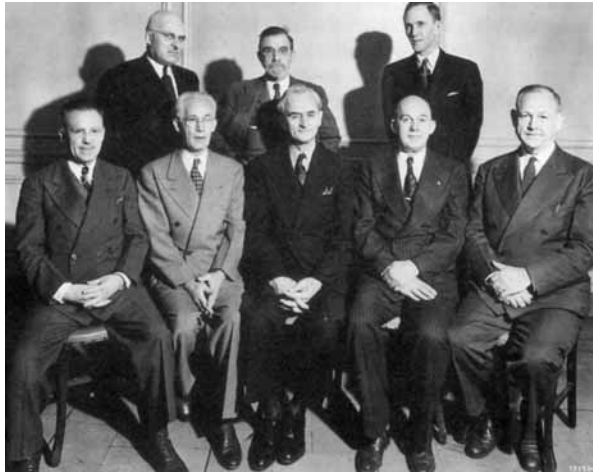
Dr. B.J. Palmer demonstrates to a large group at the PSC in the early 1920s.



Dissection class at the National College of Chiropractic, 1920s

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tried chiropractic?" In lieu of the hospital, National established its Chicago General Health Service, which still functions on an out-patient basis today.



Several chiropractic college leaders, c. 1939; standing (l-r): Drs. Carl S. Cleveland, Sr.; B.J. Palmer; Homer G. Beatty. Seated: Drs. George O'Neil; Hugh B. Logan; T.F. Ratledge; Henry C. Harring; James R. Drain



C.O. Watkins, DC, established the first NCA Committee on Education in 1935; he later made repeated calls for research by chiropractors



Dr. John J. Nugent was appointed NCA Director of Education in 1941, and organized the NCA Council on Education in 1947

By the mid-1930s an educational reform campaign, launched by the National Chiropractic Association (NCA, predecessor of today's ACA), had begun in earnest. This initiative stimulated great feuds within the profession. The NCA camp pressed for non-profit schools and a four-year curriculum with significant improvements in diagnostic and basic science instruction. Followers of B.J. Palmer, organized as the International Chiropractors Association (ICA), viewed the NCA's reforms as an effort to "medicalize" the profession, and predicted dire consequences, including a significant decline in enrollments and capitulation to organized medicine.



The Logan Lancers, c. 1956, were typical of chiropractic colleges' participation in sports.

The NCA was not deterred by this dissent, and in 1947 the society's director of education, 1922 Palmer graduate John J. Nugent, established the NCA Council on Education, forerunner of today's Council on Chiropractic Education-USA (CCE-USA). Many in the profession were outraged by Nugent's efforts to combine small, proprietary schools into

larger, non-profit colleges of chiropractic. B.J. Palmer referred to Nugent as the “anti-Christ of chiropractic” (Gibbons 1985). However, with student enrollments swelling due to the G.I. Bill following World War II, Nugent was largely successful in his consolidation efforts, especially in New York and California (Keating 1996b; Keating and Phillips 2001). His efforts continued until his retirement in 1959; a new generation of chiropractic educators would carry on the quest for higher educational standards and federally recognized accreditation.

PROSECUTION AND LEGISLATION

The earliest known prosecution of a chiropractor for unlicensed practice dates to 1905 in Wisconsin, although earlier incidents may have occurred. D.D. Palmer was tried and convicted of practicing medicine without a license in Davenport in 1906; he served 23 days in Scott County jail. The legal basis for his conviction was an advertisement in his school magazine in which he claimed to cure various diseases. This trickle of early cases would become a torrent, and by 1931 it was estimated the DCs had collectively undergone 15,000 prosecutions (Turner 1931), although there were probably no more than 12,000 chiropractors in practice in that era.



Dr. Shegataro Morikubo

B.J. and several other Palmer grads organized the Universal Chiropractors' Association (UCA) in 1906 to provide legal services to chiropractors when arrested. Their first test case came the following year in La Crosse, Wisconsin, when Palmer alumnus Shegataro Morikubo was arrested for practicing medicine, surgery and osteopathy (Rehm 1986). Palmer hired former district attorney and state senator Tom Morris to defend the doctor, and Morris persuaded district attorney Otto Bosshard to drop the charges of unlicensed practice of medicine and surgery on the grounds that Morikubo had only used his hands in treating his patients. The trial proceeded on the charge of practicing osteopathy without a license.

To make the point that chiropractic and osteopathy were “separate and distinct” health care approaches, Morris called to the stand several chiropractor-osteopaths, who testified that the theory and practice of the two schools were different. Osteopathy, it was argued, was based on the “rule of the artery,” and DOs were not interested in the nervous system. Chiropractic, they asserted, was based on the “supremacy of the nervous system,” and DCs were not interested in the influence of the circulation upon health and illness. Morris also entered into evidence the first text on chiropractic, written by Smith, Paxson and Langworthy of



Otto Bosshard, district attorney for LaCrosse, Wisconsin, 1907



Senator Tom Morris

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Dr. Herb Reaver, Sr., was arrested repeatedly in Ohio for “practicing medicine without a license.”



Dr. Courtney adjusting in the Los Angeles County jail, 1922



Dr. Eckols and Irish in the San Diego County jail, 1921

the American School of Chiropractic.

The book suggested that chiropractors’ philosophy and practice were “separate and distinct” from any other profession. On this basis, the jury required only 23 minutes to acquit Dr. Morikubo. “Philosophy” became a very significant term for chiropractors, and soon thereafter the Palmer School began to award the “Philosopher of Chiropractic” (Ph.C.) degree. Morris was named chief legal counsel for the UCA, a post he held until his death in 1928.



North Dakota’s first Board of Chiropractors, 1915. Standing l-r: George Newsalt, DC, of Fargo, Guy G. Wood, DC, of Minot and S.A. Danford, DC of Bismarck; seated l-r: A.O. Henderson, DC, of Mandan and S.A. Reed, DC, of Valley City



Anna M. Foy, DC, received license #1 in Kansas and served for many years on the state’s Board of Chiropractic Examiners

Morris and his law partners were very busy in the next few years. Prosecutions of chiropractors grew increasingly common, often instigated by state medical boards that were determined to crush all challengers to their authority. Although Morris and his team won an estimated 75% of the cases they handled (especially when the verdict was rendered by a jury rather than by a magistrate), it was a harrowing ordeal for the chiropractors. Police officers

Table 4: Early chiropractic acts in the United States, based on Wardwell (1992, 110-111)

Dates of Enactment and Jurisdictions					
1913	Kansas	1921	New Hampshire	1929	District of Columbia
1913	North Dakota	1921	Oklahoma	1929	Maryland
1915	Arkansas	1921	South Dakota	1929	Wyoming
1915	Ohio	1921	New Mexico	1932	South Carolina
1915	Oregon	1922	California	1933	Colorado
1916	Nebraska*	1923	Illinois	1933	Michigan*
1917	Connecticut	1923	Nevada	1937	Delaware
1917	North Carolina	1923	Rhode Island	1939	Alaska
1918	Montana	1923	Tennessee	1944	Virginia
1919	Florida	1923	Utah	1949	Texas*
1919	Idaho	1924	Maine	1951	Pennsylvania
1919	Minnesota	1925	Hawaii	1953	New Jersey*
1919	Vermont	1925	West Virginia	1959	Alabama
1919	Washington	1925	Wisconsin*	1963	New York
1921	Arizona	1927	Indiana*	1966	Massachusetts
1921	Georgia	1927	Missouri	1973	Mississippi
1921	Iowa	1928	Kentucky	1974	Louisiana

*Addenda to Wardwell's list:

ILLINOIS: chiropractors were licensed in Illinois as "other practitioners" as early as 1905; a chiropractic statute may have been passed in 1917 (American, 1927), the medical practice act was declared unconstitutional on grounds that the provisions for licensing chiropractors were "unreasonable and discriminatory" (Graduate, 1921).

INDIANA: the 1927 amendment to the medical statute "grandfathered" a number of chiropractors (McIlroy, 1928), but prevented licensure of additional chiropractors for decades (James Firth, D.C., quoted in Wardwell, 1992, p. 114).

MICHIGAN: Some form of chiropractic legislation may have been enacted in 1913 (American, 1927).

NEBRASKA: the first chiropractic statute and BCE were created in 1915 (New, 1915; Palmer, 1922, p. 7).

NEW JERSEY: a chiropractic statute providing for a Board of Chiropractic Examiners (BCE) was enacted in 1920, but the law was repealed and the BCE abolished the following year (Dye, 1939, pp. 95-6; Reynolds, 1921; Vernon, 2003).

TEXAS: an earlier chiropractic statute, signed by Governor Coke Stevenson in 1943 (Advertisement, 1943; Watkins, unpublished, p. 37), was ruled unconstitutional.

WISCONSIN: a 1915 Wisconsin law did not license chiropractors, but permitted them to practice if the DC hung a sign indicating the absence of licensure (American, 1927). This was known in chiropractic circles as the "Wisconsin Idea."

were repeatedly sent in plainclothes to pose as patients and gather evidence for political medicine. Patients rarely agreed to testify against chiropractors, and often had to be subpoenaed to testify in court as hostile witnesses for the prosecution. In some jurisdictions, massive sweeps were made to round up chiropractors for trial, and DCs learned to dread the unknown knock at the door.

These mounting pressures prompted strenuous, grass roots, political campaigns by DCs to secure "separate and distinct" licensing laws and boards of chiropractic examiners as a means of staying out of jail. Ironically, they often found that going to jail, instead of paying a fine when convicted of unlicensed practice, was an excellent strategy for securing chiropractic statutes. Doctors who chose jail instead of paying fines created a martyr image for public consumption, and deprived state medical boards of money that could be used to harass additional chiropractors. Palmer and attorney Morris initially opposed the introduction of separate licensing for chiropractors (Keating 1997a), but eventually acquiesced to the overwhelming sentiment in the profession. The first state to pass a chiropractic statute was Kansas, but the governor refused to appoint a board of chiropractic examiners, on the

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Louisiana was the final American state to pass a chiropractic statute; the signing ceremony in 1974 is pictured here. Chiropractic Association of Louisiana President John Flynn, DC, is second from left; Harwell Morris, DC, is third from left; Governor Edwin Edwards is at the microphone; and Jimmy Parker, DC, is at far right. Two chiropractors, E.J. Nosser and B.D. Mooring, served time in jail even after the law was passed when they violated a judge's injunction not to practice following their arrest for practicing medicine without a license.

grounds that all the DCs in the state had practiced illegally prior to the law's passage, and were therefore ineligible to serve. North Dakota awarded the first chiropractic licenses in 1915, and several other states soon followed suit (see Table 4). However, six more decades were required to secure chiropractic statutes in all 50 states.

By 1924 more than two dozen jurisdictions had authorized the practice of chiropractic by statute. Alarmed at this encroachment on what had been a near monopoly, political medicine devised new strategies to contain the

chiropractic profession in those states where they had failed to block licensure. Basic science statutes were first introduced in Connecticut and Wisconsin in 1925, and eventually spread to 24 American jurisdictions (Gevitz 1988). Basic science laws created independent basic science boards of examiners who were charged with testing applicants for licensure in several disciplines (chiropractic, medicine, naturopathy, osteopathy) in such subjects as anatomy, bacteriology, physiology, and public health. These basic science examinations must be passed before the applicant could sit for testing by her/his respective licensing board.

Chiropractors cried foul, noting that the explicit purpose of basic science boards was to prevent non-MDs from securing licenses. As well, they argued, the tests administered by boards were often biased in favor of medical practitioners. The boards were often comprised of medical school



This 1936 cartoon from the NCA's journal shows chiropractic being held up by organized allopathic medicine with the aid of politics. The payoff is the right to practice.

faculty members, and though the basic science examiners were not supposed to know the professional identities of those they tested, this confidential information was often available to them, thereby introducing bias in the scoring of the tests. The basic science statutes had



Emblem of the Federation of Chiropractic Licensing Boards

their intended effect; in Nebraska, for example, no new chiropractic licenses were issued during 1929-1950 because no chiropractor succeeded in passing the state's basic science tests (Metz 1965).

Basic science statutes had other effects on the profession. Although detested by most DCs at first, they later came to be seen by chiropractic reformers as a source of motivation for needed improvements in the training of chiropractors. As well, the introduction of basic science laws in 1925 probably stimulated the formation of the International Congress of Chiropractic Examining Boards (ICCEB) the following year. [The ICCEB was reorganized in 1934 as the Council of State Chiropractic Examining Boards (COSCEB), which was renamed the Federation of Chiropractic Licensing Boards (FCLB) in 1972.] This council encouraged improvements in chiropractic education and federal

recognition for the chiropractic colleges, assisted in securing legislation in additional states, and served as a relatively neutral forum for discussion of the profession's problems over the years. The National Board of Chiropractic Examiners (NBCE) was established by the FCLB in 1962-63 as a means of eliminating basic science examinations for chiropractors.

Basic science laws were eventually repealed, largely at the insistence of the medical profession, who found that its graduates were experiencing difficulty in passing the tests, and because the basic science boards limited licensing reciprocity among states for MDs as well as other practitioners (Gevitz 1988). The last states to strike these laws were Texas, Utah and Washington in 1979. By this time, many states had accepted the test results of the NBCE in lieu of basic science exams for chiropractors.

Owing partly to the conflicting viewpoints among chiropractors about scope of practice, as well as to the influence of political medicine, licensing laws vary from state to state, sometimes rather greatly. Chiropractors in Washington, for example, have a fairly "straight" statute which primarily permits subluxation-detection and correction by adjustment. Just

south in Oregon, on the other hand, the legal scope of practice is broader, even permitting minor surgery and obstetrics. These variations in legal authority (Gatterman and Vear 1992; Lamm and Pfannenschmidt 1999) can be a source of confusion not only to patients, but to chiropractors themselves. However, the challenge of changing dozens of states' laws in order to simplify and standardize chiropractic licensing is a daunting task, and any effort to change statutes opens up the possibility of tampering by political medicine. Chiropractors are likely to live with this legal



Gordon L. Holman, DC, member of the COSCEB and co-founder of the NBCE



Edward M. Saunders, DC, member of the COSCEB and co-founder of the NBCE

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diversity for some time to come.

EVOLUTION OF THEORY, TECHNIQUE AND INSTRUMENTATION

D.D. Palmer's chiropractic theory and practice evolved from his work as a magnetic healer. During his 17-year chiropractic career, his ideas about the nature of disease and the mechanisms of his healing art underwent metamorphosis (see Table 5). However, his central concern was always the inflammation he detected in his patients, and which he believed disrupted the healthy tone of cells and tissues in the body. Palmer's first theory suggested that inflammation was a consequence of displaced anatomy: arteries, veins, nerves, muscles, bones, ligaments, joints or any anatomic structure which was out of its normal position. Palmer, who initially designated himself a "magnetic manipulator," used his hands to reposition these parts, or as he would say, he manipulated in order to adjust them to their proper position.



D.D. Palmer adjusting Shegetaro Morikubo, 1906

In 1903, while teaching and practicing in Santa Barbara, California, Palmer reduced the focus of his theory from any displaced anatomical part to exclusively the joints of the body, especially those of the backbone. He came to believe that when these joints became misaligned (subluxated), they could pinch the nerve roots of the spine as the nerves exited through the vertebral foramina (Keating 1995b). Slight pressure on nerves, it was hypothesized, caused excessive neural impulse to reach end-organs, causing them to become

Table 5: D.D. Palmer's concepts during three periods of publications (from Keating 1993)

Concept:	<i>The Chiropractic</i> ^a (1897-1902)	<i>The Chiropractor</i> ^b (1904-1906)	<i>The Chiropractor Adjuster</i> ^c ; <i>The Chiropractor's Adjuster</i> (1908-1910)
circulatory obstruction?	Yes	No	No
nerve pinching?	Yes	Yes	No
foraminal occlusion?	?	Yes	No
nerve vibration?	?	?	Yes
therapeusis?	Yes	No	No
method of intervention?	manipulation	adjustment	adjustment
innate/educated?	absent	nerves: Intelligence	Intelligence
religious plank?	absent	absent	optional?
machine metaphor?	Yes	Yes	Yes & No
tone?	(vital)	absent	Yes

^a*The Chiropractic* was the title of D.D. Palmer's journal during the early years of his practice in Davenport, Iowa

^b*The Chiropractor* was published by D.D. and B.J. beginning in December 1904 from the Palmer School in Davenport

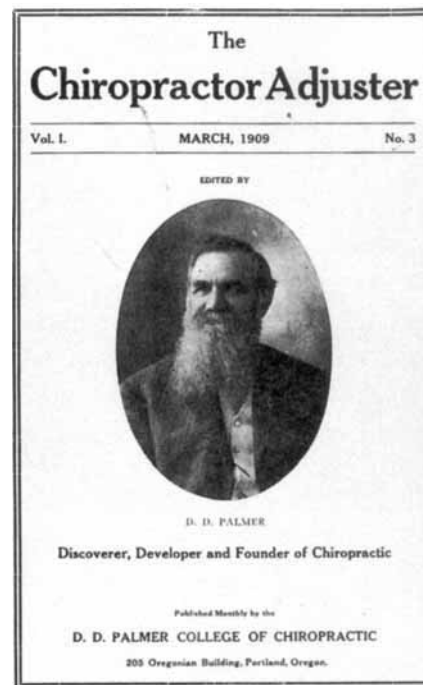
^c*The Chiropractor Adjuster* was D.D. Palmer's journal published in Portland by the D.D. Palmer College of Chiropractic, while *The Chiropractor's Adjuster* was the title of his book.

inflamed. Greater pressure was thought to interrupt the nerve messages. Old Dad Chiro (as D.D. liked to refer to himself) may have had political reasons for this change of theory, for he was by then experiencing mounting criticisms from the followers of Andrew T. Still for having “stolen osteopathy” and re-packaged it as chiropractic. Whatever the reasons for his theoretical development, it was this second theory of chiropractic that D.D. taught his son, and which B.J. Palmer would accept as his father’s original chiropractic concept. B.J. promoted this notion of subluxation as the “foot-on-the-hose” theory.

The transition from first to second theory of chiropractic also saw a change from the mechanistic model of disease to a vitalistic premise. D.D. introduced the concept of Innate Intelligence circa 1904. Innate, he believed, was an intelligent entity which directed all the functions of the body, and used the nervous system to exert its influence. Old Dad Chiro eventually came to see Innate Intelligence as an individual manifestation of Universal Intelligence, or God (Donahue 1986, 1987).

Although father and son parted company in 1906, this was not the end to D.D.’s theoretical evolution. By 1908, when he opened the D.D. Palmer College of Chiropractic in Portland, Oregon, Old Dad Chiro had rejected his earlier notion that subluxations caused nerves to be pinched in the spinal foramina (Keating 1993). Instead, he argued, nerves were impinged when joints subluxated, causing them to become too tense or too slack. Given D.D.’s belief that neural impulses were vibrational in nature, this meant that excess vibration would cause inflammation in end organs. A slackened nerve, on the other hand, would deliver too little nerve impulse to tissues, causing “under functioning” and/or cold, hard tumors. Despite the book he authored while in Portland (Palmer 1910), whose content was drawn from his college periodical, chiropractors down through the ages have generally been unaware of Old Dad Chiro’s final theoretical formulations.

The Palmers are both considered “segmentalists,” in that they held to a view which suggested that individual joints of the spine subluxate independently of one another. Indeed, D.D. insisted that he only adjusted a single joint in a patient at any given treatment session. This segmental orientation is epitomized by the “Meric” charts that relate individual spinal segments to specific organs of the body. Old Dad Chiro posited that there were three causes of subluxations: toxins, physical trauma and auto-suggestion; most chiropractors have carried forward these etiological ideas. B.J. Palmer later claimed that the NCM he marketed to the profession was the only valid means of identifying these subluxated spinal joints.



Cover of D.D. Palmer’s school magazine, *The Chiropractor Adjuster*, for March 1909

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In the mid-1930s he further proposed that the only adjustment-worthy subluxations occurred in the upper cervical spine, and heavily promoted his “Hole-In-One” (HIO) method of upper cervical adjusting. At this point, although B.J. was still fundamentally a segmentalist, the NCM and its derivative, the neurocalograph (an NCM with a kymographic strip chart) were used to monitor patterns of subluxations before and after HIO interventions.



B.J. Palmer, DC, c.1924



Mortimer Levine, DC, c.1957

Willard Carver, LLB, DC,
c.1943 (NCA photo collection)

Attorney-chiropractor Willard Carver offered an alternative view of spinal dysfunction in which the behavior of the backbone is seen as a coordinated system. Termed the “structural approach” to chiropractic, Carver’s theories involved the idea of distortion patterns involving multiple segments, compensatory (secondary) subluxations, and the relentless influence of gravity upon these structures (Cooperstein 1990; Levine 1964; Montgomery and Nelson 1985; Rosenthal 1981). Carver’s ideas were perpetuated by his many students (e.g., T.F. Ratledge, D.C.) and others theorists and technique developers, such as Hugh B. Logan, D.C. (of the Logan Basic Technique), Mortimer Levine, D.C., and Carver’s brother Fred, founder of the “Postural Method” of chiropractic (Carver 1938).

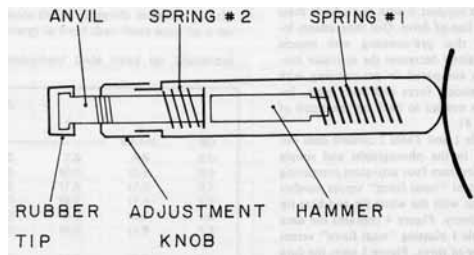
Logan Basic Technique involved the perspective that the sacrum provided a platform upon which the vertebral segments rested, and was therefore a determiner (the “centrum of the body” in Logan’s terminology) of subluxation patterns in the spine. The Logan technique directed much attention to



Hugh B. Logan, DC



Arlan W. Fuhr, DC



Schematic of mechanism of an early Activator instrument

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adjustments that would establish a level sacrum. These ideas were taken up by 1961 Logan College graduate Arlan W. Fuhr, D.C., co-inventor of the Activator instrument and developer of the Activator Methods Chiropractic Technique (Fuhr et al. 1997). This technique involves repeated inspections of relative leg lengths to identify spinal and extra-spinal joints thought to be adjustment-worthy; Fuhr proposes that functional leg length inequalities depend

upon distortion patterns especially in the pelvic and sacral structures. The Activator instrument has become one of the most common of devices employed by chiropractors.

Chiropractic instrumentation had its earliest known innovations in the work of Thomas H. Storey, D.C., one of D.D.'s early (1901) graduates in Davenport. Storey is remembered not only as one of the first instrument adjusters (he made use of a wooden chisel and mallet to tap spinous and transverse processes), but also as the inventor of the "bifid table," or nose hole in chiropractic couches.



"Plexor and pleximeter employed for eliciting the vertebral reflexes" (from Abrams 1910)

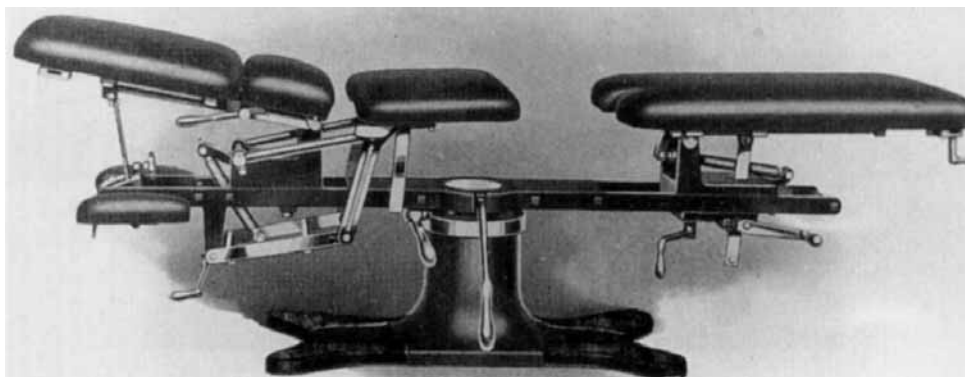


Joe Shelby Riley, DO, DC, graduate of Palmer-Gregory College of Chiropractic, employed a spinal concussor to adjust his patients (from Riley 1919)

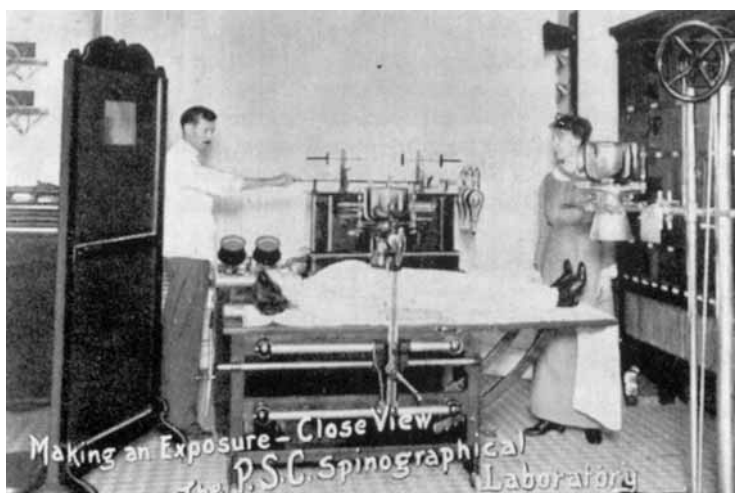
B.J. Palmer introduced the profession to x-ray equipment in 1910, and promoted the term "spinography" to refer to his unique application of these devices: subluxation-detection. Although many were reluctant to invest in the new technology, some even branding B.J. a "mixer" for deviating from the original meaning of chiropractic ("done by hand"), radiology became a standard assessment method for most DCs. Inspired by Logan Basic Technique, Warren L. Sausser, D.C. of New York expanded the DC's radiologic repertoire in the early 1930s with his development of 14x36 inch, full-spine, weight-bearing x-rays. Palmer's emphasis on x-ray analysis may have distracted chiropractors from



An early "Hy-Lo" adjusting table, which lowered the patient from the vertical to horizontal position for examination and treatment.

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The McManis table was first patented in 1909 by osteopath-chiropractor J.V. McManis who served on the faculties of the American School of Osteopathy in Kirksville, Missouri, and the National College of Chiropractic in Chicago. The McManis table is a precursor to chiropractor James Cox's contemporary flexion-distraction table.



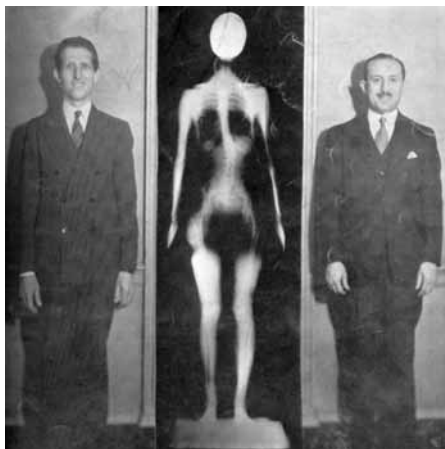
James Franklin McGinnis, D.C., one of the earliest chiropractic radiologists, at work at the Palmer School in 1912

their earlier focus on the nervous system. However, his introduction of the NCM in 1924 gave a renewed importance to neural function. Although Palmer initially threatened to sue anyone infringing on his patents, the NCM spawned a variety of spinal heat-sensing devices (see Table 6). Generally reliable as thermometers, these instruments have not been validated for the purpose of subluxation detection.

Table 6: Several devices used for subluxation detection

Accolade III	Dermathermoscribe	Neurocalograph	Neuropyrometer
Analagraph	Electroencephaloneuromentimpograph	Neurocalometer	Synchrotherme
Analyte	Ellis Mycrodynameter	Neurometer	Vasotonometer
Chirometer	Nervometer	Neurophonometer	Visual Nerve Tracer
Dermathermograph	Nervoscope (Temposcope)	Neurothermometer	

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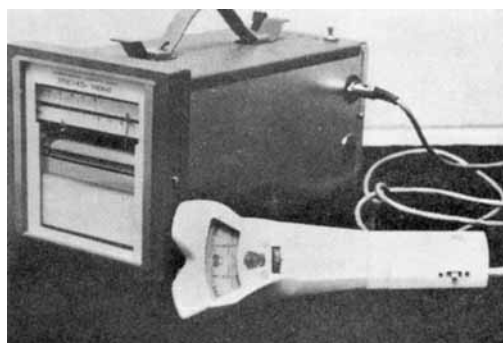
Drs. Warren Sausser and Sol Goldschmidt with a full-body radiograph; from the NCA's *Journal*, February 1935



Dr. C. O. Watkins of Sidney, Montana, demonstrates chiropractic use of fluoroscopy, c. 1935



LACC president Charles Wood, DC, ND (right), demonstrates his neuropyrometer, c. 1930



The Syncrotherme was developed and marketed by the Canadian Memorial Chiropractic College in the late 1960s and early 1970s

*Chiropractic History: a Primer***Table 7:** Some of the many brand name techniques of chiropractic

Activator Methods	Directional Non-Force Technique (D.N.F.T.)	Palmer Full Spine Diversified
Anatomical Adjustive Technique	Endo-Nasal Technique	Parker System
Applied Chiropractic Distortion Analysis	Gonstead Technique	Pettibon Technique
Applied Kinesiology	Gravel Integrated Chiropractic Method	Pierce-Stillwagon Technique
Applied Spinal Biomechanical Engineering	Grostick Technique	Postural Method of Adjusting
Aquarian Age Healing	Harrison Dynamic Visualization Procedure (CBP)	Ratlidge Technique
Arnholdt Muscle Adjusting	Howard System of Chiropractic	Receptor-Tonus Technique
Atlas Orthogonality	Herring Cervical Technique	Reflex Techniques
Atlas Specific	Hole-In-One (H.I.O.)	Reflexology
BioEnergetic Synchronization Technique (B.E.S.T.)	Inverse Myotatic Technique	RESULTS System
Bloodless Surgery	Keck System	Sacro-Occipital Technique (SOT)
Buxton's Painless Chiropractic	Life Upper Cervical Adjusting Technique	Soft Tissue Orthopedics (STO/SOT)
Carver Body Drop	Logan Basic Technique	Spinal Balance
Chiropractic Biophysics (CBP)	Mears Technique	Spinal Touch Technique
Chiropractic Manipulative Reflex Technique	Meric System	Spinology
Clinical Kinesiology	Micro-Manipulation	Spondylotherapy
Concept Therapy	Motion Palpation	Stressology
Cox Flexion-Distraction	Neural Organization Technique (N.O.T.)	Thompson Technique (drop-piece table)
Craniopathy/Cranial Therapy	Neural-Vascular Dynamics (NVD)	Toftness Technique
Derefield Leg Analysis	Neuropathy	Total Body Modification (TBM)
	Orthodynamics	Touch for Health
	Painless Adjusting Technique	Truscott Technique
		Vector Point Cranial Therapy
		Zone Therapy



Dr. Joseph Janse, president of National College of Chiropractic and member of the NCA/ACA Council on Education



Dr. George Haynes, administrative dean of the LACC and chairman of the NCA/ACA Council of Education

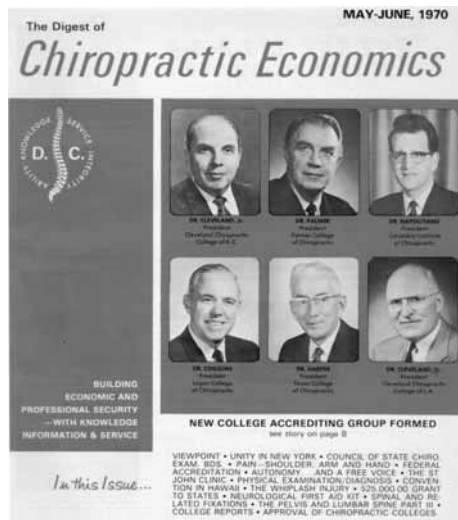


Dr. Rex Wright of Kansas, president of the Council of State Chiropractic Examining Boards and a strong supporter of the CCE



Attorney-chiropractor Orval Hidde of Wisconsin, chairman of the CCE's Commission on Accreditation, 1975

Chiropractors' ingenuity in devising assessment and adjusting strategies has been phenomenal, and today dozens of brand-name and "generic" techniques (see Table 7) are taught at chiropractic schools (e.g., Gleberzon 2002) and practiced within the profession (Bergman et al. 1993). Clear favorites are apparent (National 2000), but none has yet received the scientific investigation that can justify claims for effectiveness or superiority. However, a specific procedure, side-posture lumbar manipulation, has enjoyed considerable success in clinical trials for patients with low back pain and is highly regarded by expert

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College presidents who organized the Association of Chiropractic Colleges were featured on the cover of the *Digest of Chiropractic Economics* in May 1970. Pictured are Drs. Carl Cleveland Jr., David D. Palmer, Ernest Napolitano, William Coggins, William Harper and Carl Cleveland Sr.

reviewers (Cooperstein et al., 2001; Gatterman et al., 2001).

LEGITIMIZING CHIROPRACTIC EDUCATION AND BEYOND

When veterans' educational benefits expired in the mid-1950s, chiropractic schools once again saw dramatic declines in students and tuition revenues. Nevertheless, the NCA and its successor, today's ACA, continued to press for higher educational standards, including one or two years of liberal arts college education as an admission requirement for chiropractic training. By the mid-1960s, the ACA Council on Education's quest for federal recognition of chiropractic education was in full swing. Alarmed by this, several straight chiropractic college leaders organized the Association of Chiropractic Colleges (ACC; no relation to today's organization of the same name), and competed with the NCA/ACA Council on Education (which was independently chartered as the CCE/Council on

Chiropractic Education in 1971) for recognition by the U.S. Office of Education (USOE).

The ACC's concerns about the activities of the CCE were several. The push for higher admissions requirements threatened to diminish student enrollments, thereby diminishing the number of new members of the profession. As well, for the impoverished and heavily tuition-dependent schools, a decrease in students meant even more difficult economic struggles, and could threaten the survival of some small schools. Moreover, most ACC college leaders perceived that the CCE's broad-scope mandate would require graduates to fulfill a role and scope of practice well beyond what straight chiropractors thought were legitimate. And at least one of ACC's accredited institutions was still a for-profit, private business, which alone probably rendered it ineligible for recognition by a USOE-recognized accrediting agency.



In 1975, CCE president Leonard Fay, DC (right), congratulates LACC president George Hynes, DC, who headed the CCE committee which negotiated with USOE for recognition as an accrediting body for chiropractic education

Meanwhile, the USOE contended that it could only recognize one accrediting agency for any single profession; so long as chiropractors could not make a unified petition for educational accreditation, the federal agency would ignore applications from either ACC or CCE. The

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Council of State Chiropractic Examining Boards (COSCEB); now renamed Federation of Chiropractic Licensing Boards) sought to bring the two agencies together by creating a General Committee of the Profession on Education (GCPE). This forum did produce some agreement on curricular content, transfer of credits among schools, and reporting by colleges to boards of licensure. However, the GCPE became less important as the CCE and its



Dr. Thom Gelardi, c.
1980



Dr. Reggie Gold, founder
of ADIO, in 1977

schools grew closer to meeting most of the criteria for accreditation set forth by USOE. The COSCEB, recognizing the continuing gulf between ACC and CCE, prevailed upon each to accept binding arbitration of their differences, so as to make a single petition to USOE. However, before the arbitration was completed, the CCE's application for recognition as an accrediting body for chiropractic education was approved by USOE on 26 August 1974 (Keating et al. 1998a).

The CCE's success in garnering federal recognition for its Commission on Accreditation brought about a revolution in licensure for chiropractors, as many boards of chiropractic examiners henceforth required applicants to be graduates of schools accredited by the CCE or by a regional accrediting agency of higher educational institutions. All of the schools that had formerly comprised the ACC sought and eventually received accreditation from the CCE.

This might have been the end of the decades-long feud among institutions.

Table 8: Chronology of the formation and renaming of chiropractic colleges in North America, 1973-2002 (based on Keating et al. 1998a; Musick 1979; Strauss 1994; Peterson and Wiese 1995)

1973 (Jan 11): Sherman College of Chiropractic chartered in South Carolina; later renamed Sherman College of Straight Chiropractic	1980 (Sept 18): Northern California College of Chiropractic renamed Palmer College of Chiropractic West
1973 (Jan 31): International College of Chiropractic Neurovertebrology chartered in California (later renamed University of Pasadena, College of Chiropractic; Southern California College of Chiropractic; Quantum University	1981: Pacific States College of Chiropractic renamed Life Chiropractic College-West
1974 (Sep 12): Life Chiropractic College formed in Georgia; later renamed Life University	1984: ADIO renamed Pennsylvania College of Straight Chiropractic
1976 (Nov 9): Pacific States Chiropractic College chartered in California	1991 (May): Palmer West and Palmer combine as Palmer Chiropractic University
1977 (Jul): ADIO Institute of Straight Chiropractic chartered in Pennsylvania	1991: University of Bridgeport College of Chiropractic formed in Connecticut
1978 (Aug 3): Northern California College of Chiropractic chartered in California	1992: Chiropractic program announced at the University of Quebec, Trois Rivières campus (UQTR)
1978 (Mar 8): Parker College of Chiropractic chartered in Texas	1993: UQTR enrolls first class
	2001: Colorado College of Chiropractic opens and closes
	2002 (Oct): Palmer College of Chiropractic Florida enrolls first class

However, the mid-1970s saw the emergence of several new chiropractic schools (see Table 8), most importantly the Sherman College of Straight Chiropractic (SCSC), founded in Spartanburg, South Carolina, by Palmer graduate Thom Gelardi, D.C. The SCSC offered non-diagnostic, adjustment-only training in chiropractic; its application to CCE in 1974 was rejected the following year (Keating et al. 1998a, pp. 165-9; Strauss 1994). During the next 20 years, SCSC was involved in a number of lawsuits challenging the CCE and various boards of chiropractic examiners. As well, SCSC sparked the formation of the Straight Chiropractic Academic Standards Association (SCASA), which briefly held status with USOE as an accreditor of straight chiropractic educational institutions. Among SCASA's constituent schools was the Above-Down-Inside-Out (ADIO) Institute (later Pennsylvania College of Straight Chiropractic) and the Pasadena College of Chiropractic. Sherman College reapplied for CCE accreditation, which was granted in 1995; ADIO and Pasadena College have been closed.

IN MORAL DEFIANCE

In 1963 New York became the 47th state to authorize the practice of chiropractic by statute. Only in Massachusetts, Mississippi and Louisiana were chiropractors still struggling for legal recognition; these last few hold-out states would see chiropractic legislative victories in 1966, 1973 and 1974, respectively. Political medicine's long campaign to prevent the legalization of the chiropractic profession seemed to be coming to an end. However, in November 1963 a new element was added to the fracas between chiropractors and organized medicine when the American Medical Association's (AMA's) board of trustees established its Committee on Quackery. The explicit purpose of the committee was "first the containment of chiropractic and, ultimately, the elimination of chiropractic" (Trevor 1972). To this end, the AMA's extensive resources were committed to an anti-chiropractic campaign which enlisted state medical societies and included:

Table 9: Original co-defendants in the Wilk et al. anti-trust lawsuit, 1976 (Wardwell 1992, p.168)

American Academy of Orthopedic Surgeons
American Academy of Physical Medicine and Rehabilitation
American College of Physicians
American College of Radiology
American College of Surgeons
American Hospital Association
American Medical Association
American Osteopathic Association
Chicago Medical Society
Illinois State Medical Society
Joint Commission on Accreditation of Hospitals
Medical Society of Cook County
H. Thomas Ballantine, M.D.
Joseph A. Sabatier, M.D.
James H. Sammon, M.D.
H. Doyl Taylor

...suppressing research favorable to chiropractic; undermining chiropractic colleges and postgraduate education programs; using new ethical rulings to prevent cooperation between MDs and chiropractors in education, research and practice; subverting a 1967 United States government inquiry into the merits of chiropractic; and basing an extensive misinformation campaign against chiropractic on the calculating portrayal of chiropractors as "unscientific," "cultist," and having a philosophy incompatible with western scientific medicine (Chapman-Smith 1989).

Although chiropractors had achieved legal recognition in all states by 1974, there were several other arenas in which legitimacy and formal status were pursued. The USOE's delibera-

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Attorney George McAndrews,
c.1981



Dr. Chester A. Wilk, c. 1990



Walter Wardwell, Ph.D.,
c.1995



Michael D. Pedigo, DC (left), president of the ICA and co-plaintiff in the Wilk case, confers with Kenneth Luedtke, DC, president of the ACA, during a visit to Palmer College of Chiropractic West in Sunnyvale, California, in 1986



Dr. Jerome McAndrews, future president of Palmer College of Chiropractic, c.1972

tions over recognition of a chiropractic accrediting agency was one arena in which political medicine sought to influence government (Accreditation 1973; Wardwell 1992, p. 163); a similar exercising of political muscle took place in New York State when the National College of Chiropractic sought regional accreditation through the state's education department (Beideman 1995). And when the Medicare program was introduced by Congress in the 1960s, chiropractors were initially excluded.

Wilbur J. Cohen, secretary of the U.S. Department of Health, Education and Welfare (DHEW), was directed by Congress in 1967 to prepare a report on the inclusion of chiropractic and other non-allopathic, independent health care providers in the Medicare health care reimbursement program. Sociologist Walter Wardwell, Ph.D., was a participant in the sham investigation conducted by the surgeon general of the U.S. Public Health Service (USPHS), a division of DHEW. Early on, Dr. Wardwell recognized that the 22-member committee of scholars, professionals and businessmen assembled by the federal agency would have no actual voice in the final report, which had already been prepared by staff members of the USPHS (Wardwell 1992, p. 165). Secretary Cohen's 1968 report, *Independent Practitioners Under Medicare*, dealt a serious blow to chiropractors, who were excluded from the Medicare program until 1973.



U.S. District Judge Susan
Getzendanner

In the meanwhile, a revealing book was published that offered a glimpse behind closed doors at AMA's headquarters in Chicago. William Trever's (1972) *In the Public Interest* reproduced scores of internal documents that had been surreptitiously photocopied from the trade association's files, files which detailed political medicine's program to destroy the chiropractic profession. Armed with this information, Chester Wilk, D.C., of Illinois and five co-plaintiffs brought suit against the AMA and several co-defendants (see Table 9, previous page).

Representing the chiropractors' claim that AMA et al. had violated the Sherman Anti-Trust laws was attorney George McAndrews, brother of Jerry McAndrews, D.C., executive vice president of the ICA (McAndrews 1979). Mr. McAndrews spent the next 14 years pursuing this case, which involved two trials (one by jury and one by magistrate) and innumerable appeals. And while McAndrews pressed in federal court on behalf of plaintiff chiropractors, the attorney general for New York filed a similar suit in federal court against 13 medical organizations on behalf of the citizens of the Empire State. Soon additional cases were brought to judicial attention in other states (Wardwell 1992, p. 170).

Wilk et al. vs. AMA et al. was not the first time that the AMA had been tried for federal anti-trust violations (e.g., Dintenfuss 1938; Rogers 1943), but the trade association had not learned its lesson. Before the case ended, many co-defendants had settled out of court, and the AMA rescinded its "ethical" ban on professional collaboration between MDs and doctors of chiropractic (Gevitz 1989; Wardwell 1992, p. 171). When federal Judge Susan Getzendanner ruled in favor of the chiropractors in August 1987 at the conclusion of the second trial, she noted that:

...Although the conspiracy ended in 1980, there are lingering effects of the illegal boycott and conspiracy which require an injunction. Some medical physicians' individual decisions on whether or not to professionally associate with chiropractors are still affected by the boycott. The injury to chiropractors' reputations which resulted from the boycott have not been repaired. Chiropractors suffer current economic injury as a result of the boycott. The AMA has never affirmatively acknowledged that there are and should be no collective impediments to professional association and cooperation between chiropractors and medical physicians, except as provided by law. Instead, the AMA has consistently argued that its conduct has not violated the antitrust laws...

An injunction is necessary to assure that the AMA does not interfere with the right of a physician, hospital, or other institution to make an individual decision on the question of professional association... (Getzendanner 1988).

Published in the pages of the AMA's journal, the judge's findings and injunctions against the national medical trade association were forcefully brought to the medical pro-

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fession's attention. Although various appeals were filed, Getzendanner's findings still stand.

THE RESEARCH ENTERPRISE (1975 TO PRESENT)

Although research in chiropractic legitimately claims its roots in the various theories and clinical techniques propounded throughout the chiropractic century, little more than sporadic efforts at meaningful data collection in the profession's first 50 years are apparent (Keating et al. 1995). Gitelman (1984) suggested that the modern era, involving sustained scientific investigation of the chiropractic healing art, may be dated to the 1975 conference on spinal manipulative therapy (SMT) hosted by the National Institute of Neurologic and Communicative Diseases and Stroke (NINCDS) in Bethesda, Maryland, with funding provided by the U.S. Congress. The published proceedings of this meeting (Goldstein 1975), which brought together chiropractors, osteopaths, manual medicine practitioners and researchers, revealed the state of knowledge about SMT at that time. The consensus reached was that the clinical value of SMT was unproved, but merited serious investigation.



Clarence W. Weiant, DC, PhD, was appointed director of research for the NCA in 1943 and later served a similar role for the Chiropractic Research Foundation, forerunner of today's FCER.



Cover of the *New England Journal of Chiropractic* for Spring 1975 featured the NIH site of the first federally sponsored conference on the research status of spinal manipulative therapy.



Drs. Andries M. Kleynhans and Joseph Janse, director of research and president, respectively, of the National College of Chiropractic, 1975; they nurtured the infant research enterprise.

Although the first few randomized, controlled clinical trials (RCTs) of SMT were just getting underway in this period, chiropractic contributions to this scholarly literature were slow in coming. Not until 1978 did the National College of Chiropractic launch the profession's most scholarly and enduring periodical, the *Journal of Manipulative and Physiological Therapeutics (JMPT)*, and not until 1986 was the first RCT of chiropractic adjusting published (Waagen et al. 1986). However, if the content of *JMPT* is any guide (e.g., Keating et al. 1998b), there has been a slow but steady expansion of clinical and basic research within the profession. By 1994, the volume of trials related to the benefits of SMT for patients with low back pain, including studies by researchers and clinicians in several disciplines, prompted the federal Agency for Health Care Policy and Research to issue clinical practice guidelines which included manual therapies as one of a few recommended means of helping low back pain patients in the acute stage of their disorder.

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Dr. Roy Hildebrandt, founding editor in 1978 of *JMPT*

The development of scientific inquiry in the profession has proceeded on several fronts (see Table 10), and in the 1990s investigators at several chiropractic colleges saw the first few millions of federal dollars for chiropractic studies. Still a paltry sum in comparison with the billions of dollars in government grants received annually by medical schools in the United States, this money has been a welcome addition to the more modest funds available within the profession, most especially from the Foundation for Chiropractic Education and Research (FCER). The past decade has also seen the formation of the Office of Alternative Medicine (OAM), a division of the National Institutes of Health (NIH), which has funded a consortial research center at the Palmer College of Chiropractic in Davenport, Iowa. Collaboration with OAM and other NIH agencies bodes well for continuing expansion of scholarship within the profession. As well, the proliferation of state-university-based chiropractic colleges in several nations (e.g.,

Table 10: Several categories of research and scholarship appearing in the *Journal of Manipulative and Physiological Therapeutics*, 1989-1996 (adapted from Keating et al., 1998b)

Data Reports

controlled clinical trials
measurement evaluations
clinical analogue studies
clinical series

Data Reports

normative, survey and actuarial
report
case reports
basic science studies
historical research

Non-data Reports

reviews of the literature
technical reports
editorials and commentaries
letters to the editor



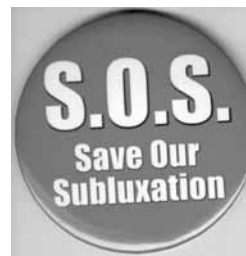
Researchers and college administrators gather at Logan College of Chiropractic in 1977 for a seminar jointly sponsored by the Foundation for Chiropractic Education and Research and the Springwall Education and Research Trust (Springwall 1977)

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Australia, Canada, Denmark, Great Britain, South Africa) suggests increased public funding for training and research. However, training in the philosophy of science and in the methods of clinical research for chiropractors is still embryonic (Keating 1992).

Chiropractic research to date has helped to establish the benefit of SMT for a limited number of musculoskeletal ("Type M") problems, most especially low back pain (Bronfort 1999) and, to a lesser extent, headaches and neck disorders (Coulter et al. 1996). However, the mechanism(s) of this benefit remain uncertain (Haldeman 2000), as do the etiologies of these conditions. The scientific literature bearing on the possible benefit of manipulation for a broader range of health problems (termed "Type O" for organic or visceral diseases) remains very limited, although not completely unexplored (Budgell 1999; Masarsky and Todres-Masarsky 2001). The scientific data base has also facilitated efforts to establish guidelines for clinical practice and for encouraging greater quality in the clinical services rendered by chiropractors (Haldeman et al. 1993; Henderson et al. 1994; Vear 1992).

A significant and continuing barrier to scientific progress within chiropractic are the anti-scientific and pseudo-scientific ideas (Keating 1997b) which have sustained the profession throughout a century of intense struggle with political medicine. Chiropractors' tendency to assert the meaningfulness of various theories and methods as a counterpoint to allopathic charges of quackery has created a defensiveness which can make critical examination of chiropractic concepts difficult (Keating and Mootz 1989). One example of this conundrum is the continuing controversy about the presumptive target of DCs' adjustive interventions: subluxation (Gatterman 1995; Leach 1994). While some in the profession question the meaningfulness of the traditional chiropractic lesion (e.g., Nelson 1997), others proclaim its significance routinely in marketing materials distributed to the public (Grod et al. 2001).



Button proclaims popular slogan among some chiropractors in 2003



Dr. Alan Breen of the Anglo-European College of Chiropractic



Drs. Silvano Mior (left) and Howard Vernon, researchers at CMCC, accept awards for their distinguished service in 1993



Dr. John Triano, c. 1995

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The nearly three decades since the NINCDS conference in Bethesda have seen pockets of scientific expertise develop at several chiropractic institutions. Some chiropractic colleges in the United States, although microcosms of the ideological diversity within the profession, have nonetheless garnered some of the skills, equipment and resources to push a research agenda forward. They have been aided in this by a number of talented people whose commitment and contributions to a genuine science of chiropractic has been unrelenting. In 1997, the Palmer Center for Chiropractic Research became the headquarters for the federally funded Consortial Center for Chiropractic Research, a group of five chiropractic colleges and two state universities committed to advancing studies into chiropractic health care.

The future of chiropractic research is promising, and will probably involve expanded efforts to elucidate the mechanism(s) of benefit for SMT, expanded trials to evaluate the breadth of problems for which SMT may provide benefit, and the risks and costs involved in manual and related modes of intervention. If greater numbers of chiropractors can be enticed to devote their careers to this enterprise, and if the financial resources are developed to support their activities, a much brighter future for the profession is possible. This metamorphosis will also require the adoption of a more critical attitude toward chiropractic phenomena throughout the profession.



Dr. Scott Haldeman, c. 1980; this third-generation chiropractor has been a consistent contributor to scientific development in the profession



Dr. William Meeker, 2002, Vice President of Palmer Chiropractic University and head of the Consortial Center for Chiropractic Research

THE STRAIGHT/MIXER CONTROVERSY

To Teach and to Practice.

D.D. Palmer's earliest graduates received diplomas authorizing them to "go forth to teach and practice chiropractic" (Gibbons 1981), and to the founder's dismay, many competing schools were established in the first decade of the 20th century. One of the earliest rival schools of chiropractic was the American School of Chiropractic and Nature Cure (circa 1902) and was founded by 1901 Palmer graduate Solon M. Langworthy, in Cedar Rapids, Iowa (Zarbus 1988c). Langworthy, who also earned a diploma from the American College of Manual Therapeutics in Kansas City and who was at that time teaching "chiropractic and osteopathy," met with B.J. Palmer, son of the profession's founder, to propose partnering in the school business, and to encourage an expansion of the Palmer curriculum to include "nature cure" methods (Zarbus 1988c). With Palmer's refusal of Langworthy's offer of amalgamation and his rejection of such naturopathic procedures as "mixing," the classic feud within the profession between broad-scope and traditional, purist practitioners was underway.

The founder's opposition to the first chiropractic legislation in Minnesota in 1905 (Gibbons 1993) was based largely on Palmer's objection to Langworthy's lengthier and broad-scope curriculum. Although the disagreements within the profession regarding the appropriateness of adjunct procedures, the role of diagnosis, and the duration and depth of

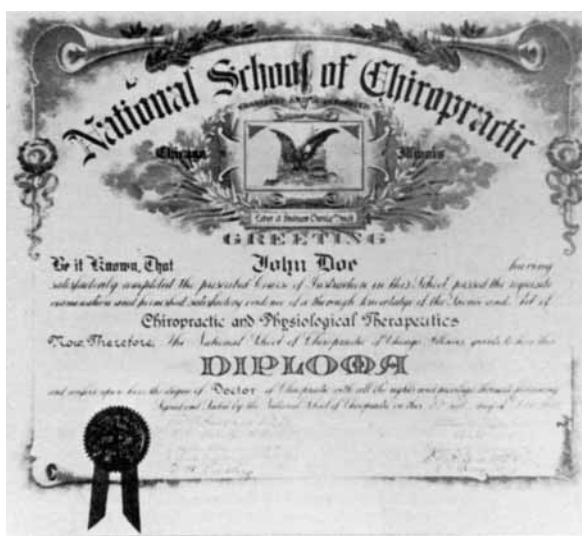
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the chiropractic curriculum continues today as complex and varied, many of these subsequent schisms among professional associations and the schools may be seen as a variation on this first dispute over scope of practice and length of training.

Many of the early 20th century schools were not just new institutions, but new “schools” in the broader sense, based on creative and alternate interpretations of what was considered the most appropriate and efficient application of the ideas first expressed by D.D. Palmer a few years earlier. Among the early competing educational enterprises was the broad-scope National School of Chiropractic (later National College of Chiropractic and now National University of Health Sciences), founded in 1906 by Palmer graduate J.F. Alan Howard, and located just blocks from the Palmer School. The National School relocated to Chicago in 1908.



First campus of the National School of Chiropractic in Davenport, Iowa, in 1906. Located in the Ryan Building at 2nd and Brady.



By not later than 1918, the National School of Chiropractic offered a degree in Chiropractic and Physiological Therapeutics

From this environment of creativity and controversy emerged various factions and viewpoints within the chiropractic community that still exist today. The key elements of division are the following:

- *What should appropriately be included and applied in the scope of chiropractic practice;
- *The likely effects of chiropractic care for the patient;
- *The clinical value of subluxation correction;
- *The appropriate language with which to describe chiropractic methods and their effects; and
- *How to interact with other health care practitioners and professions, especially allopathic doctors.

Scope and Application of Chiropractic Services.

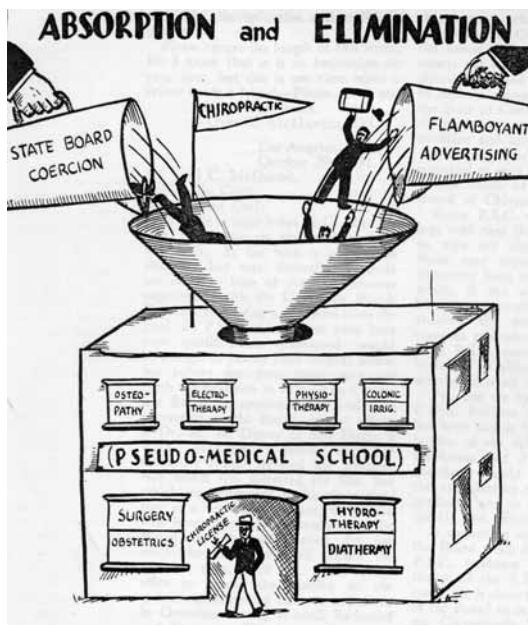
Differences of opinion as to the range of services that should be provided by chiropractors led early in the profession's history to the development of the terms "straight" and "mixer." Straights, or the traditional purists, sought to have chiropractors focus almost exclusively on the core of chiropractic - the vertebral subluxation and its adjustment. In contrast, mixers sought to combine other clinical approaches with the adjustment of the spine. Depending on state law and individual preference, such additional natural therapies have included, but are not limited to, physiotherapy, dietary counseling and nutritional supplementation, herbal and botanical treatments, acupuncture, massage, and colonic irrigation.

Further distinction between so-called "straight" and "mixer" chiropractors can be made by examining their approaches to diagnosis, because the most traditional of "straight" chiropractors limit their assessment focus to the vertebral subluxation. "Mixer" chiropractors, on the other hand, offer broader services, including general health promotion and disease prevention, which may require additional examination and diagnostic procedures. It is important to note that all North American chiropractors, regardless of their philosophical allegiances, are qualified as portal of entry providers who have the responsibility to determine whether or not a patient will benefit from chiropractic care, as well as whether or not a patient should be referred for other care from a non-chiropractic health practitioner.

Value of the Adjustment, Range of its Clinical Effects

The clinical value of chiropractic care was viewed by many trained in the Palmer tradition to be a panacea or near-panacea for all ills of the human body. The correction of the vertebral subluxation was understood to be all that patients needed, and once this was accomplished there was little else to consider or to do, other than to ensure that no new subluxations developed. Others viewed the adjustment as one among many natural approaches to bring aid and comfort to patients.

The range of clinical value of the chiropractic adjustment/manipulation and the correction of subluxation or joint dysfunction continues to be debated today by chiropractors as well as some outside the profession. To define the central question: is the chiropractic adjustment the key to all the ills of humankind, or is it only helpful for certain muscu-



This cartoon suggests straight chiropractors' view of mixer chiropractic education in California: from the *California Chiropractic Association Bulletin*, November 1931

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loskeletal complaints? While the vast majority of chiropractors hold positions in the broad middle ground between these extremes, the question of how to resolve conflicts among scientific evidence, belief, and tradition remains unanswered. An additional element of inquiry relative to the chiropractic paradigm is the influence of routine and/or maintenance spinal adjustive care and its effect on sustaining health and wellness. At this time, many issues cannot be resolved based on firm evidence. Nevertheless, the way the profession ultimately addresses the inevitable conflicts between newly emerging evidence and traditional beliefs will undoubtedly shape its future.

Language for Describing Chiropractic

The words used to describe the principles and practices of chiropractic continue to stir emotion and controversy even today. To some chiropractors, the issue is purely semantic; to others, it is a matter of principle in which the choice of terminology is a strong indicator of one's stance on major issues confronting the profession. Should the chiropractor's primary manual intervention be called "adjustment" or "manipulation"? Is chiropractic care a form of "treatment" or does this term indicate something strictly allopathic? Similarly, is the chiropractic adjustment/manipulation a "therapy," with "therapeutic effects," or is it better termed an "intervention" or "procedure"? Chiropractors have argued over these and related matters for almost the entire history of the profession. The scope of this debate cannot be resolved within this booklet, but the key issues can be framed in a non-adversarial context, so that entry-level students and other readers can understand the major points of view.

To a great extent, controversy regarding choice of language in chiropractic derives from a concern on the part of traditionalist straight chiropractors that adopting the language used by the medical and osteopathic professions (i.e., manipulation, treatment or therapy, and lesion or somatic dysfunction rather than adjustment and subluxation) represents an unacceptable compromise for the sake of acceptance within the mainstream health care system. A parallel concern on the part of broad-scope, mixer chiropractors is that failing to adopt the terminology in widespread use throughout the health professions will contribute to the continued marginalization of chiropractic.

It must be acknowledged that B.J. Palmer's early strategy and use of terminology in defining chiropractic as the antithesis of medicine carried important implications for the fate of the profession at that time. The ruling by the Massachusetts Supreme court in the Zimmerman case in 1915 (Wardwell 1978) reflected the basic legal interpretation of the medical practice acts of the day. The practice of chiropractic was legally interpreted as the practice of medicine, and not just in the context of prescribing pharmaceuticals but to include the therapeutic regimes of the diagnosis and treatment of disease. The unlicensed chiropractor engaging in clinical practice was therefore held to be practicing medicine without license and was in violation of state law.

As a survival strategy, the younger Palmer and his chief



An image of a subluxated vertebra (courtesy of Cleveland Chiropractic College)

attorney, Tom Morris, argued that chiropractic was “separate and distinct” from medicine and should not be subject to medical statutes. To support his arguments, Palmer invented a new vocabulary, which asserted that: chiropractors don’t “diagnose” but rather “analyze” the patient’s spine; they study “symptomatology” rather than “pathology,” they “adjust” subluxation rather than “treat” disease. B.J. Palmer insisted that the International Chiropractors’ Association, which he dominated, follow political and legal policies which would champion chiropractic’s position separate from medicine (Wardwell 1978). Wardwell proposes that without B.J. Palmer, chiropractic would almost certainly not have survived as a “separate and distinct” profession from osteopathy, naturopathy, and medicine. In Palmer’s view, osteopathy was the practice of medicine, especially in that osteopathic practitioners prescribed drugs. Such too was the case for naturopathy, because prescribing herbs, botanicals and dietary supplements, even though considered “natural” substances, was quite different from removal of spinal subluxations. Palmer also considered the use of physiotherapy modalities such as heat, cold, water and electricity to be the practice

of medicine. The profession of chiropractic became licensed as an exception to the medical practice acts and as limited license practitioners. Since 1974, the profession is licensed in all 50 states.



Symbol of the ICA, 1950s

Interprofessional Relations.

Historically, relations among doctors of chiropractic and doctors of medicine have been marked by acrimony and competition, although this has begun to diminish in recent years. Having been disparaged by most medical physicians since the profession’s inception, many chiropractors have understandably been cautious in seeking alliances with medical physicians or integration into the mainstream medical delivery system. While some chiropractors have always wanted to ally and integrate with the medical profession, others have staunchly opposed such moves. Ironically, the decision to integrate did not belong to the chiropractors; chiropractors remained outside of mainstream health care. Change is finally occurring, but progress remains quite slow.

As a profession matures, its relations with other professions must mature as well. Healthy interprofessional relations must be based on mutual respect and understanding. A key question for chiropractic’s future is how can chiropractors be integrated into the mainstream health care delivery system so that chiropractic services are readily available to all who can benefit from them? And, of equal significance, how can such integration be achieved without diluting the uniqueness of chiropractic to the point where it is unrecognizable?

There is probably no single answer to these questions. The future shape of the profession will likely be worked out, step by step, in numerous pilot projects in a wide range of settings - in private chiropractic and medical practices where interprofessional referral in both directions becomes the norm; in interdisciplinary (including joint chiropractic-medical) practices where practitioners work out the best ways to cooperate for the benefit of their patients; and in larger-scale enterprises such as the health care systems serving veterans and the active duty military, where chiropractic inclusion is now in its early stages. In

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each of these situations, it is important not to mistake uncertain beginnings for failures. Inevitably, as new relationships are developed and tested, there will be both successes and difficulties. Creating positive, sustainable interprofessional relations depends on willingness by all involved parties to build on their successes and learn from their mistakes.

Contemporary Expressions of the Chiropractic Paradigm

Various authors have summarized a core chiropractic paradigm that includes the following:

1. The body is a self-regulating and self-healing organism.
2. The nervous system is the master system that regulates and controls all other organs and tissues and relates the individual to his/her environment.
3. Spinal biomechanical dysfunction in the form of vertebral subluxation complex may adversely affect the nervous system's ability to regulate function.
4. The central focus of the doctor of chiropractic is to correct, manage or minimize vertebral subluxation through the chiropractic spinal adjustment.

For many chiropractors, these four points constitute the foundation of traditional chiropractic, but also reflect elements compatible with broad-scope perspective that expands beyond these concepts in terms of scope of practice and patient assessment. Moreover, these elements convey this essence without metaphysical terminology. Chiropractors comfortable with the term innate intelligence will recognize this in the first component. Likewise, those chiropractors who prefer to think of self-regulation and healing in terms of homeostasis and normal physiological function are accommodated. Notably, the relationship between structure and function as mediated by the nervous system is given prominence here. This is the essence, the distinctive feature, of chiropractic thought and practice.

A contemporary perspective demonstrating the end ranges of the broad-scope/mixer and purist/straight controversy is reflected in the published documents of two diversely contrasted chiropractic educational institutions - the National University of Health Sciences' college of chiropractic, and that of Sherman College of Straight Chiropractic (SCSC).

National University of Health Sciences (NUHS)

Excerpted from the "President's Message":

The practice of chiropractic medicine, as taught by our College of Professional Studies is "the treatment of human ailments without the use of prescription drugs or operative surgery,"... NUHS has always promoted a broad scope education and practice for its students and graduates... considering the patient as an integrated being-body, mind, and spirit.

In our doctor of chiropractic (D.C.) program, we teach our students to strongly emphasize the diagnostic skills first through the use of our problem-based curriculum...capable of diagnosing their patient's concerns as would any family practitioner from the allopathic (M.D.) profession.

While spinal manipulation is the centerpiece of chiropractic therapeutics, it is... supported and under-girded by ..."natural" therapies such as the application of nutrition, diet, supplementation, botanical remedies, physical therapy, therapeutic exercise, acupuncture, and others (National 2003).

Continuing under the heading "Profile of Chiropractic Medicine," the NUHS para-

digm asserts that “Chiropractic practice embodies:... homeopathic remedies, emotional support, and stress management...”

Sherman College of Straight Chiropractic (SCSC)

SCSC Health Center, Terms of Acceptance

...Chiropractic has only one goal...

...Patients usually want to get rid of whatever ailments or conditions that are bothering them. However, worthy such a goal may be, it is not the goal of a chiropractor. Straight chiropractors do not engage in the medical practice of diagnosing and treating disease.

...The chiropractor's one goal is to periodically examine the patient's spine and should subluxation be detected, correct it by means of a chiropractic adjustment...The single goal of the chiropractor is to correct subluxation for the purposing of removing...interference to the proper transmission of brain messages over nerve pathways...of the body... The adjustment is not meant to be a panacea for all disease or a specific treatment for any particular disease.

...The chiropractic examination and adjustment are not substitutes for other types of health care, just as other types of care do not take the place of chiropractic.

...In some cases where disease and symptoms have been present, the removal of this form of interference renders the body sufficiently able to bring about a restoration of health very quickly. In others, the process is slower and in some cases it is only partial or not at all. Regardless of what the disease is called, the chiropractor does not offer to diagnose, heal or treat it, nor does the chiropractor offer advice regarding the treatment of disease. The only goal of the chiropractor is to correct subluxations, this very damaging form of interference to the body's natural function. The chiropractor promises no cure from, and offers no treatment of disease (Sherman, n.d.).



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INTEGRATION AND THE FUTURE OF THE PROFESSION

If the chiropractic profession could be distilled to its basics, three strengths emerge. Each makes a unique and important contribution to health care delivery, public health, and healing. The first, and most important strength is our concern to maximize the body's inherent healing and recovery mechanisms, a perspective known as a host-orientation. A second strength of chiropractic involves conservative interventions before drugs and surgeries. A third strength is an excellent working knowledge of the human spine, spinal column, and nervous system (Menke 2003). As any medical physician will tell you, the spine is a mysterious system vital to human function, but difficult to fix when injured (Carragee 2001).

The chiropractic world-view is Hygeian, referring to the goddess of health: find and treat the cause of disease. Causes may be dietary, environmental, psychological, spiritual, family, or community. On the other hand, allopathic thought follows Aesculapius, the father of medicine: treat disease directly by disrupting its progression. Too often, the Hygeian and the Aesculapian perspectives have been at odds, though they are actually two sides of the same coin, and quite complementary. Both perspectives have a contribution to make, depending on disease type and progression. This is the foundation of Integrative Medicine (Weil 2000).

The chiropractic profession has come to a crossroads (Meeker and Haldeman 2002). Shortly after the profession became more broadly eligible for reimbursement by health

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insurance in the 1970s, the health care environment again changed dramatically with the arrival of managed care in the 1980s and 1990s. Managed care was designed to control costs by forcing physicians to share financial risk. Though the concept may not survive the very forces it set in motion, managed care has certainly changed the face of health care.

With the managed care revolution came a new cost consciousness. Chiropractors felt the crunch of financial constraints and increased work. At the professional level, chiropractic was confronted with increasing demands to justify their expense with clinical outcomes and economic sense, or face being cut out of the reimbursement plans they had fought so hard to get into just two decades before. Fortunately, chiropractic research programs were well underway when the managed care storm struck. Some clinical studies demonstrated the efficacy and popularity of chiropractors' services to patients. Unfortunately, the profession had not demonstrated a cost advantage over standard medical care for any condition. Chiropractors' essential strengths (musculoskeletal treatment, high patient satisfaction, and advocacy of the patient's innate healing ability) had set it apart from other health care professions, but for only 4% to 12% of Americans (Rafferty et al., 2002; Burge and Albright, 2002; McFarland et al., 2002).

As chiropractic moves into the post-managed care era, it may split into two principal forms of delivery: one track as an "alternative medicine" practitioner, another track as a fully integrated team member in conventional health care delivery. The former is "apart from" the rest of health care, the latter is "a part of" health care. This will probably not involve separate licensure for each type of chiropractor, since the legal maneuvers that would be required for such division are staggering. In any case, the consensus needed for a more unified profession, involving a shared vision of a more homogeneous role for the chiropractor, is not on the horizon. Among the many natural fits for integrative chiropractors are sports medicine, spine care, pain care, hospital emergency medicine, orthopedics, and physical medicine. They may practice along with orthopedists, internal medicine specialists, neurologists, acupuncturists and physical therapists.

In the foreseeable future, some chiropractors will take postgraduate rounds and residencies in emergency medicine, integrated spine care, pain medicine, and primary care. Others will graduate and set up solo and group practices and provide primary care to the many underserved regions in the United States. Chiropractic education will evolve to produce doctors of chiropractic ready for the evidentiary health demands of the 21st century, and less on the "alternative medicine" principles of chiropractic's past. Even so, chiropractic's fundamental perspective of respect for the body's ability to heal itself will be preserved. Chiropractic research will continue, and will emphasize clinical outcomes and relative cost savings. The creation of this expanded knowledge base will aid in creating cultural authority; chiropractic will be considered an essential form of health care.

Chiropractors have long abided by the principle of restoring health through restoring life balance. In the US, 50% of all deaths are due to poor lifestyle choices. Health problems due to poor lifestyle produce the most chronic, debilitating, and medically untreatable diseases of our day. The 21st century chiropractor will be vigilant for the manifestations of a stressful and often unhealthy lifestyle. The chiropractor of the future will address subluxations beyond the spine – to nutrition, sleep, stress, family, and community. Recognizing that alcohol and drug abuse, depression, and suicide may be symptoms of deeper "diseases

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of meaning,” chiropractors may play a greater role in community health, health education and disease prevention. By encouraging healthy behaviors, the 21st century chiropractor could play a role in decreasing over-reliance on expensive and risky technological medicine.

Just 20 years ago there was little scientific justification for chiropractic treatment. Today, there are at least 100 clinical studies that relate directly or indirectly to chiropractic and its role in back pain, neck pain, headaches, and a few other conditions. A watershed event occurred in 1994 when the Agency for Health Care Policy and Research publication (Bigos 1994) reviewed over 12,000 studies and a key chiropractic treatment, spinal manipulation, was designated one of only three recommended treatments for back pain. Future chiropractic research will focus more on cost savings and better outcomes. Chiropractic’s potential will be more fully realized, and the profession will add its essential value to health care.

To be accepted as a valued member of the health care team, interprofessional communication skills will need to be learned. Patients want chiropractors to work together with other doctors for their welfare (Teitelbaum 2000). Eventually, even insurers must take notice if emergency room chiropractors save \$10,000, \$50,000 or perhaps \$200,000 per month in unnecessary procedures and risky medications. The rest of the world, including conventional medicine, has never been more receptive to chiropractic than they are today. They are listening for answers from chiropractors and how we can help address the expensive problems of acute and chronic suffering in our technological health care crisis.



Cover of the clinical practice guidelines for low back pain issued by the U.S. Agency for Health Care Policy and Research, 1994

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