

COMMONWEALTH OF MASSACHUSETTS

MANDATED BENEFIT REVIEW

**REVIEW AND EVALUATION OF PROPOSED LEGISLATION
TO MANDATE COVERAGE FOR CHIROPRACTIC SERVICES:**

SENATE BILL 907 AND HOUSE BILL 2076

**PROVIDED FOR:
THE JOINT COMMITTEE ON INSURANCE**

**DIVISION OF HEALTH CARE FINANCE AND POLICY
COMMONWEALTH OF MASSACHUSETTS
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EXECUTIVE SUMMARY

This report was prepared by the Division of Health Care Finance and Policy (DHCFP) pursuant to the provisions of M.G.L. c. 3, § 38C. This section requires the Division to evaluate the impact of a mandated benefit bill referred by legislative committee for review and to report back to the referring committee.

Proposed bills S. 907 and H. 2076 would require all Health Maintenance Organizations (HMOs) in Massachusetts to cover the cost of chiropractic services. All Blue Cross Blue Shield plans sold in Massachusetts are already mandated to offer chiropractic coverage. Commercial insurers are required not to discriminate against chiropractors by disallowing services they perform that would be covered if performed by other covered providers, such as physicians or physical therapists. The bills did not state, nor was clarification available, whether insurers would be allowed to impose an annual limit on chiropractic visits or whether virtually unlimited visits were intended. This is a significant question given that chiropractors tend to treat patients over many visits.

One of the four surveyed HMOs, as well as Blue Cross Blue Shield, currently offer chiropractic care as a standard benefit to its members, with a maximum of 12 to 20 visits per enrollee per year. The other three HMOs surveyed provide employers with the option of adding chiropractic services at an additional cost per member per month. One plan estimated that its chiropractic rider adds 1% to the cost of its standard health insurance premium for a benefit of no more than 12 chiropractic visits a year. Another insurer estimated that its chiropractic coverage added between \$1 and \$4 per month to the cost of its premium, depending on the extent of chiropractic coverage chosen by the client.

Because of the already existing widespread availability of chiropractic coverage, DHCFP did not contract with an actuary to price out the cost that would accrue from the passage of this mandate proposal. In essence, even those insurers that are offering chiropractic coverage as a rider to their standard policies (as opposed to including it in their standard premium price) *are* offering chiropractic coverage. Employers may not purchase it, but insurers are making it available. In addition, because at least two plans stated what they currently charge for (limited) chiropractic coverage, it was deemed redundant to obtain an independent actuary's estimate of what this mandate would cost.

A review of the scientific literature revealed some uncertainty about the quality of clinical trials designed to test the effectiveness of chiropractic services. Nonetheless, some trials provided "moderate" evidence of chiropractors' efficacy in treating uncomplicated low-back pain. In comparison to other treatments for back pain, chiropractic care appears to provide similar results, as well as high patient satisfaction. However, its efficacy in treating other conditions is uncertain at present.

INTRODUCTION

Chiropractic is a large and well-established health care profession in the United States. Conditions commonly treated by chiropractors include back pain, neck pain, headaches, sports injuries, strains, and arthritis.

Half of the patients seeking chiropractic care have chronic conditions.¹ Children and adolescents account for 10 to 15 percent of chiropractic visits. The results of a national survey published in the *Journal of American Medical Association* indicate that approximately 11 percent of the population received chiropractic care in 1997, averaging 9.8 visits per user.² Visits to a chiropractor are predominantly self-referred. In a 2000 Medical Expenditure Panel Survey (MEPS) sponsored by the Agency of Healthcare Research and Quality, only nine percent of visits to chiropractors' offices were referred by physicians. The most common reason for a visit to a chiropractor has been a neuromusculoskeletal diagnosis, principally low-back pain or neck pain.³

Although chiropractors treat a range of conditions, at this point, scientific research has only evaluated their efficacy in treating conditions such as back pain and neck pain. The profession's efficacy in treating other conditions has not been definitively proven.

OVERVIEW OF PROPOSED LEGISLATION

The Joint Committee on Insurance referred proposed companion bills S. 907 and H. 2076 to the Division of Health Care Finance and Policy for a review and evaluation.

Proposed companion bills S. 907 and H. 2076, respectively entitled, "An Act Relative to Insurance Benefits for Chiropractic Services" and "An Act Further Regulating Insurance Benefits," would both mandate that HMOs provide chiropractic services to its members. H. 2076 would apply to group HMO contracts only. S. 907 would prohibit HMOs from placing restrictions on chiropractic methods of diagnosing and treating patients.

Under current law, Blue Cross Blue Shield is required to provide coverage for chiropractic services in all its plans, but HMOs are not. Commercial insurers are required not to discriminate against chiropractors by disallowing services they perform that would be covered if performed by other covered providers, such as physicians or physical therapists.

BACKGROUND

The Massachusetts Board of Chiropractic Licensing defines chiropractic as the science of locating and removing interference with the transmission of nerve force in the human body. Chiropractors devote careful attention to the structure and function of the spine, its effects on the musculoskeletal and neurological systems, and the role played by the proper function of these systems in the preservation and restoration of health.

Spinal manipulation is a form of manual therapy used by chiropractors, physical therapists, orthopedists, sports medicine doctors, and massage therapists. Studies estimate that 70 to 90 percent of chiropractic patients receive spinal manipulation. However, many chiropractors use

other forms of treatments in conjunction with spinal manipulation. “Physical therapies such as heat, cold, electrical stimulation, ultrasound, and rehabilitation methods are common. Chiropractors usually suggest therapeutic exercises and general fitness to most patients, provide counseling services, and give advice to patients about nutrition, vitamins, weight loss, smoking cessation, and relaxation techniques.”⁴ Some chiropractors also offer other complementary therapies like acupuncture, homeopathy, and magnetic therapy.

Chiropractic practice requires at least four years of professional education in diagnosing and treating medical problems within their scope of practice, and at least one year of clinical experience. At least three years of preparatory college work are required for admission to chiropractic school. Some schools offer postgraduate training including two- to three-year postgraduate residency programs in radiology, orthopedics, neurology, sports medicine, rehabilitation, and pediatrics.

The Massachusetts Board of Registration of Chiropractors licenses chiropractors to practice in the state with annual renewal of their licenses. As of July 2004, 1,875 active chiropractors were licensed to practice in Massachusetts; this is a 3.1 percent decrease since 2000. In Massachusetts, chiropractors are excluded from operative surgery, prescribing or using drugs or medications, treating infectious diseases, and performing internal examinations. However, X-ray and analytical instruments are permitted for examination.

MEDICAL EFFICACY

The Division of Health Care Finance and Policy is charged with reporting: 1) the results of any research demonstrating the medical efficacy of the treatment or service compared to alternative treatments or services, or to not providing the treatment or service, and 2) the expected impact of the benefit on the quality of patient care and the health status of the population.

The medical efficacy of chiropractic spinal manipulation has been debated in the medical literature (see Table 1). In three randomized clinical trials (RCT) between 1995 and 2002, chiropractic spinal manipulation compared with other therapies was equally helpful in managing low-back pain (see Table 1) and marginally better than providing an educational booklet.⁵ However, after reviewing scientific literature, Ernst and Sran cast doubt on the quality of RCTs in chiropractic care and concluded that the effectiveness of spinal manipulation for back pain was still uncertain.

In another review of clinical trials, Cooper and McKee questioned the quality of research trials in chiropractic care. Regarding the use of chiropractic spinal manipulation therapy to relieve chronic back pain, they concluded that the strongest evidence favored exercise therapy, back schools, and behavioral therapy. They found “moderate” evidence favoring manipulation (more persuasive evidence for passive than for spinal manipulation).

Similar doubts on the quality of clinical trials were raised in a 2003 research publication by the National Center for Complementary and Alternative Medicine (NCCAM). Although researchers acknowledged some efficacy from chiropractic care for treating low-back pain, they were not able to draw firm conclusions about the relative value of chiropractic treatment for other clinical conditions, including childhood disorders.⁶

In addition to medical efficacy, chiropractic complications are another often-debated subject. According to NCCAM there have been no organized prospective studies on the number of serious complications; the risk of complications from adjustments to the lower back appears to be very low, but the risk from adjustments of the neck appears to be high.

Despite the controversies around the efficacy and safety of chiropractic care, studies have found high patient satisfaction for conditions treated by chiropractors, largely due to the strength of the patient-provider relationship.⁷

TABLE 1: SUMMARY OF RESEARCH FINDINGS ON THE MEDICAL EFFICACY OF CHIROPRACTIC THERAPIES

Randomized Controlled Study	Condition	Kind of Therapies Compared	Key Finding
Hurwitz et al., 2002 ⁸	Acute, sub-acute, or chronic low-back pain	Compared chiropractic spinal manipulation or other spinal-adjustment technique, medical care only, medical care with physical therapy, and chiropractic care with physical modalities (heat or cold, ultrasound, and electrical muscle stimulation)	“medical and chiropractic care yielded <u>similar improvements</u> in pain severity and disability after six-month follow-up”
Hsieh et al., 2002 ⁹	Subacute low-back pain	Compared chiropractic joint manipulation, “back to school” (counseling & exercise), myofascial therapy, ^a and joint manipulation plus myofascial therapy	“ <u>no significant differences</u> were found between chiropractic joint manipulation, “back to school” (counseling & exercise), myofascial therapy, and joint manipulations plus myofascial therapy in three weeks of follow-up”
Cherkin et al., 1998	Low-back pain	Compared chiropractic spinal manipulation, McKenzie approach of physical therapy, and an educational booklet	“patients who received chiropractic manipulation have a small, <u>marginally significant improvement</u> in symptoms at four weeks compared with patients who received no therapy other than an educational booklet”
Carey et al., 1995	Acute low-back pain	Compared outcomes of primary care physicians, chiropractors, and orthopedic surgeons	“ <u>outcomes and recovery time were similar</u> whether [patients] received care from primary care physicians, chiropractors, or orthopedic surgeons”
Balon et al., 1998 ¹⁰ Balon and Mior 2004 ¹¹	Asthma or allergy	Chiropractic spinal manipulation	“in children with mild or moderate asthma, the <u>addition of chiropractic spinal manipulation</u> to usual medical care provided <u>no benefit</u> ”
Hurwitz et al., 2003 ¹²	Neck pain	Compared chiropractic manipulation of the upper back or shoulder area, and mobilization ^b	Spinal manipulation may be <u>effective</u> for some patients with neck pain, but does not compare its efficacy to other therapies

^a A type of physical therapy that uses stretches and massage

^b A type of chiropractic technique where a joint is passively moved using less force than manipulation

Reviews (Meta-analysis)	Condition	Kind of Therapies Compared	Key Findings
Assendelft et al., 2003 (comprehensive review of all RCTs on spinal manipulation)	Acute or chronic low-back pain	Spinal manipulation by all health care providers (chiropractors included)	“there is no evidence that spinal manipulation therapy is superior to other standard treatments including analgesics, physical therapy, exercises and back schools” “spinal manipulation therapy is <u>one of several options</u> of only modest effectiveness for patients with low-back pain”
Ernst and Sran, 2003 ¹³	Back pain	Spinal manipulation	“effectiveness of spinal manipulation for back pain is <u>uncertain</u> ”
Assendelft et al., 1996 ¹⁴	Acute or chronic low-back pain	Outcomes evaluated	“ <u>no convincing evidence</u> of the effectiveness of chiropractic for acute or chronic low-back pain”
Hurwitz et al., 1996 ¹⁵	Neck pain and headaches	Chiropractic manipulation of the upper back or shoulder area, and mobilization	Mobilization and manipulation of the neck provides at least <u>short-term benefits</u> for some patients with neck pain and headaches. Though complications are small, potential for adverse outcomes should be evaluated.

ORGANIZATIONS THAT SUBMITTED INFORMATION TO DHC FP

DHCFP surveyed the Massachusetts Association of Health Plans (MAHP) and Blue Cross Blue Shield regarding their current HMO coverage of chiropractic services.¹⁶ Five health insurers in Massachusetts responded to our inquiries. Two of the five plans already cover chiropractic care in their standard benefit package, one of whom, Blue Cross Blue Shield, is mandated to do so. The remaining three plans who responded provide chiropractic coverage as an optional benefit to their employer clients. Table 2 summarizes the plans’ policies.

CURRENT COVERAGE LEVELS AND COST OF CHIROPRACTIC SERVICES

One of the four plans and Blue Cross Blue Shield^c already cover chiropractic coverage in their standard benefit package. The remaining three plans who responded to DHCFP’s inquiries provide such coverage as an optional benefit to their HMO employer clients at an additional cost per member per month (PMPM).

The cost per session of chiropractic care depends on the service provided and can range from \$23 to \$55.63. The average number of sessions per member (*not* per chiropractic user) in 2003 ranged from 1 to 12.

^c Under current law, Blue Cross Blue Shield is mandated to offer chiropractic coverage even to its HMO members.

TABLE 2: HEALTH PLAN RESPONSES ON COVERAGE LEVELS AND COST OF CHIROPRACTIC SERVICES

Survey Questions	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5
Offered in HMO's standard benefit package	Optional	Optional	Optional	Yes	Yes
PMPM add-on cost	1% of total group rate	\$1 - \$4	N/A	N/A	N/A
# of sessions in 2003	154,110	5,681	19,670	303	446,334
# of members who used service in 2003	27,364	4,939	3,524	66	37,866
Average # of visits per member in 2003	5.6	1.1	5.6	4.6	11.8
Out-of-pocket payment per visit	Co-pay: \$0-50; Deductible: *	Co-pay:\$10; Deductible: \$40	Co-pay: \$5-\$15; Deductible: N/A	N/A	Co-pay: varies; Deductible: N/A
Maximum sessions	12 visits per year	Depends on coverage; range in coverage \$350- \$1,000 per year - variable # of visits vs. consecutive day coverage	20 visits per year	20 visits per year	12 visits for members 16 years of age and older
Cost per session	\$32 for manual manipulation	\$28.47- \$55.63	\$23-\$26	\$25.40 average	\$27.67 - \$53.22
Length of a session	Initial visit: 30 minutes; subsequent visits: 10-15 minutes	Does not determine length of sessions. Services are billed by date of service, not time	30 minutes	N/A	Varies based on service

* The health plan offers a range of deductibles from \$0-\$2,000 and a 0-40% coinsurance depending on what plan is chosen and whether a physician authorizes the service.

FINANCIAL IMPACT OF MANDATE

DHCFP is required by Section 3 of Chapter 300 of the Acts of 2002 to answer the following questions:

- 1. To what extent will the proposed insurance coverage increase or decrease the cost of treatment or service over the next five years?*

It is not known how many additional enrollees would have chiropractic coverage than do now if this mandate passes, because we do not know how many fully insured employers purchase

this rider currently from insurers who don't include it in their standard HMO coverage. Blue Cross Blue Shield, even in its HMO, is mandated to offer it. Nevertheless, two HMOs already cover it, while the remaining ones offer it as a rider. Of the five insurers that answered our inquires, the number of their enrollees who used chiropractic in 2003 ranged from 66 to 37,866; one of the plans that offer it as a rider reported that 27,364 enrollees used this service in 2003.

Studies have shown that people seek chiropractic services irrespective of whether the service is reimbursed by their insurance. Once these individuals receive coverage, there is evidence that suggests that they tend to use more of the service. Hence, one might expect that if this mandate passes, visits made to chiropractors by enrollees who do not currently have this coverage would increase. However, restrictions in the form of cost sharing and a fixed number of visits per enrollee per year could provide some control on demand.

The cost of treating a person's symptoms would largely depend on whether he or she uses chiropractic care as a substitute for or to supplement other methods of treatment. In the case of low-back pain, if a patient uses chiropractic treatment as a substitute for expensive surgery, then the proposed coverage would decrease the cost of treatment. However, it appears that the majority of patients use chiropractic care as a substitute for some types of medical care but not surgery or physical therapy. Though a session of chiropractic care may be inexpensive, the tendency to have a higher number of visits per episode of care, may cause a course of chiropractic treatment to be more expensive than medical care or physical therapy, without necessarily being more effective.

2. To what extent will the proposed coverage increase the appropriate or inappropriate use of the treatment or service over the next five years?

Many studies have questioned the long-term benefits of using chiropractic care. In the past, improvements in chiropractic outcomes were observed within about three weeks. In one study, improvements in low-back pain were observed after three weeks of therapy, but no significant improvements were observed six months after treatment.

Patients have consistently reported more satisfaction from using chiropractic services than from all other substitutable treatments (i.e., medical care, physical therapy, massage therapy, etc.), and they return to chiropractic services when symptoms recur, especially for those stemming from chronic conditions. They value elements of treatment such as touch, empathy, effective communication, and 'sensitivity to patients as individuals', and report gaining motivating and coping skills which are part of the chiropractic encounter.¹⁷ Hence, despite the uncertainty surrounding the clinical value of chiropractic treatment, and regardless of whether coverage is mandated, patients will still seek chiropractic care, albeit within their ability to pay and the terms of their specific insurance plan. Sufficient evidence has not yet been produced that indicates whether *any* use of chiropractic is appropriate or inappropriate.

3. To what extent will insurance coverage affect the number and types of providers of the mandated treatment or service over the next five years?

Currently, there are 1,875 chiropractors licensed to practice in Massachusetts. The enactment of S. 907 and H. 2076 could result in a marginal increase in the number of chiropractors licensed to practice in Massachusetts. This increase could be due to the following: 1) chiropractors might find it more lucrative to practice in Massachusetts; 2) current chiropractic

patients may increase demand, and 3) patients shifting from uncovered to covered complementary and alternative therapies may increase demand.

4. To what extent will the mandated treatment or service serve as an alternative for more expensive or less expensive treatments or services?

The extent to which chiropractic treatment can serve as an alternative for more expensive or less expensive treatments largely depends on whether a patient uses such care as an alternative therapy or as a complementary therapy. In the case of low-back pain, if a patient uses chiropractic services a substitute for expensive surgery, then the proposed coverage would decrease the cost of treatment. However, if a patient chooses to use chiropractic in addition to other therapies, this could increase the cost of treatment.

While the cost per session might be less expensive than other treatments, the high number of visits per episode could cause chiropractic treatment to cost more than other types of treatments (except those provided by orthopedic surgeons). In a study on back pain, the outcomes of primary care practitioners, chiropractors, and orthopedic surgeons were similar, but the total estimated outpatient charge was highest for orthopedic surgeons and chiropractors and lowest for primary care physicians.¹⁸

5. What are the effects of the mandated benefit on the cost of health care, particularly the premium, administrative expenses, and indirect costs of large and small employers, employees, and non-group purchasers?

Under current law, employers have the flexibility to include chiropractic care in the standard package they offer their employees unless they offer a plan from the two insurers that already provide chiropractic services as a standard benefit. Insurers report that they charge 1% of average premium price to include limited chiropractic visits in their coverage or \$1-4 per employee per month.

6. What are the potential benefits and savings to large and small employers, employees, and non-group purchasers?

One mid-size HMO in addition to Blue Cross Blue Shield provides chiropractic services as a standard benefit. The remaining three HMOs, which represent the majority of commercially insured individuals, offer chiropractic services as an option with an added cost now so this mandate proposal doesn't appear to hold any potential benefits or savings to employers. It may produce benefits and savings to employees of firms who have chosen not to purchase a chiropractic rider if such employees currently purchase chiropractic treatment out of pocket. This bill does not apply to non-group purchasers of an HMO.

7. What is the effect of the proposed mandate on cost-shifting between private and public payers of health care coverage?

MassHealth does not offer chiropractic service to its members. The proposed mandate applies to HMO plans only. It is not expected that this would result in any cost shifting between public and private payers.

8. What is the cost to health care consumers of not mandating the benefit in terms of out-of-pocket costs for treatment or delayed treatment?

The percent of employers offering coverage of chiropractic services is unknown. Patients seeking chiropractic care who are not covered for this service would need to, and currently do, pay the entire cost of the service. Presumably, a person not covered for chiropractic services, who was in need of treatment for a spinal condition, would either pay for such care out-of-pocket or access treatment from a physician or physical therapist.

9. What is the effect on the overall cost of the health care delivery system in the Commonwealth?

For the reasons stated previously, DHCFP did not obtain an independent actuarial assessment for this mandate proposal.

LEGISLATIVE ACTIVITY IN OTHER STATES

According to the Blue Cross Blue Shield Association, forty-four states currently mandate some form of coverage for chiropractic services, and three states are mandated to offer chiropractic as an add-on service. While a few states mandate HMOs to provide chiropractic coverage, the exact number is not known.

STATEMENT ON ACTUARIAL ANALYSIS

The Division of Health Care Finance and Policy concluded that an independent actuarial analysis of this mandate proposal was not necessary because of the already existing widespread availability of chiropractic coverage and because at least two plans stated what they currently charge for (limited) chiropractic coverage. It was assumed that the price reported by these insurers accurately reflected what this coverage would cost if extended on a mandatory basis in all policies.

ENDNOTES

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- ¹² Hurwitz EL, et al. 2003. A randomized trial of chiropractic manipulation and mobilization for patients with neck pain: clinical outcomes from the UCLA neck-pain study. *The American Journal of Public Health*. 92(10):1634-1641.
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- ¹⁴ Assendelft, WJJ, et al. 1996. The effectiveness of chiropractic for treatment of low back pain: an update and attempt at statistical pooling. *Journal of Manipulation and Physical Therapy* 19:499-507.
- ¹⁵ Hurwitz EL, et al. 1996. Manipulation and mobilization of the cervical spine- a systematic review of the literature. *Spine* 21(15):1746.
- ¹⁶ MAHP requested its member organizations to complete and return the survey to MAHP who, in turn, submitted four completed surveys to the DHCFP. Blue Cross Blue Shield submitted its completed survey separately.
- ¹⁷ Cooper and McKee. 2003. Chiropractic in the United States: treads and issues. *The Milbank Quarterly*, 81(1).
- ¹⁸ Carey et al. 1995. The outcomes and cost of care for acute low back pain among patients seen by primary care physicians, chiropractors, and orthopedic surgeons. *The New England Journal of Medicine* 333(14):913.