

<b>Subject: Chiropractic Spinal Manipulation in Children</b>		<b>Original Effective Date:</b> 6/12/14
<b>Guidance Number:</b> MCG-174	<b>Revision Date(s):</b>	
<b>Medical Coverage Guidance Approval Date:</b> 6/25/14		

**PREFACE**

*This Medical Guidance is intended to facilitate the Utilization Management process. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (i.e., will be paid for by Molina) for a particular member. The member's benefit plan determines coverage. Each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their providers will need to consult the member's benefit plan to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid members. CMS's Coverage Database can be found on the following website: <http://www.cms.hhs.gov/center/coverage.asp>.*

**FDA INDICATIONS**

Chiropractic spinal manipulation in children is a procedure and, therefore, not subject to FDA regulation. However any medical devices, drugs, biologics, or tests used as a part of this procedure may be subject to FDA regulation.

**CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)**

*The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this Molina medical coverage guidance (MCG) document and provide the directive for all Medicare members. The directives from this MCG document may be followed if there are no available NCD or LCD documents available and outlined below.*

No CMS National Coverage Determination (NCD) for chiropractic spinal manipulation in children was found. There are various Local Coverage Determinations (LCD's) on the topic of chiropractic services.<sup>2</sup>

**INITIAL COVERAGE CRITERIA**

Chiropractic manipulation in children who are ≤ age 12 years is considered unproven and not medically necessary as a treatment for any diagnosis as there is insufficient published evidence to assess the safety and/or impact on health outcomes in the pediatric population.

**CONTINUATION OF THERAPY**

N/A

**COVERAGE EXCLUSIONS**

Chiropractic manipulation in children who are < age 12 years is considered unproven and not medically necessary as a treatment for any diagnosis as there is insufficient published evidence to assess the safety and/or impact on health outcomes in the pediatric population.

**DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL**

According to the ACA, chiropractic is a health care profession that focuses on disorders of the musculoskeletal system and the nervous system, and the effects of these disorders on general health. Chiropractic care is used most often to treat neuromusculoskeletal complaints, including back pain, neck pain, and pain in the joints of the arms or legs, and headaches.<sup>11</sup>

Chiropractic treatment attempts to relieve symptoms of neuromusculoskeletal complaints by correcting the position of misaligned, or subluxated, vertebra and joints with a series of high-velocity, low-amplitude, manually delivered thrusts. Chiropractic care includes spinal manipulation, spinal-adjusting techniques (e.g., mobilization), spinal manipulation or adjustment in conjunction with the application of physical modalities such as applications of heat or cold therapy, ultrasound (US), and electrical muscle stimulation (EMS), instruction in strengthening and flexibility exercises, and instruction in proper back care.<sup>11</sup>

Spinal manipulation is defined by chiropractors as “a specific form of direct articular manipulation utilizing a short lever and characterized by a dynamic, forceful, high velocity thrust of controlled amplitude”. Manual manipulation of the spine is composed of four elements: patient positioning, location of applied load, and peak velocity of the load that is achieved, and peak load developed. The purpose of manipulation is to restore joint mobility by manually applying a controlled force into joints that have become restricted in their movement as a result of a tissue injury. Tissue injury can be caused by a single traumatic event, such as incorrect lifting of a heavy object, or through recurring stresses, such as sitting in an awkward position with poor spinal posture for an extended period of time. In either case, injured tissues undergo physical and chemical changes that can cause inflammation, pain, and diminished function. Manipulation, or adjustment of the affected joint and tissues, restores mobility, thereby relieving pain and muscle tightness, and allowing tissues to heal.<sup>11</sup>

**GENERAL INFORMATION**Summary of Medical Evidence

One multicenter randomized placebo-controlled trial (n=52), one prospective cohort study (n=54), one retrospective case series (n=781), one report of best practices for chiropractic care for infants and children, and three systematic reviews have evaluated chiropractic manipulation in children as a treatment for subluxation.<sup>3-8</sup>  
<sup>13</sup> Efficacy of cervical spine manipulation in 52 children and adolescents was not shown in children and adolescents with cervicogenic headache.<sup>3</sup> A systematic review done in 2009 of randomised clinical trials failed to demonstrate the effectiveness of spinal manipulation is an effective treatment for infant colic.<sup>7</sup> Another systematic review indicated that serious adverse events may be associated with pediatric spinal manipulation

but neither causation nor incidence rates can be inferred from observational data. Prospective population-based active surveillance studies are required to properly assess the possibility of rare, yet serious, adverse events as a result of spinal manipulation on pediatric patients.<sup>8</sup> In 2008 a systematic review was done to determine the extent of new evidence related to the therapeutic application of manipulation for pediatric health conditions. This review found that there has been no substantive shift in this body of knowledge and that the health claims made by chiropractors with respect to the application of manipulation as a health care intervention for pediatric health conditions continue to be supported by only low levels of scientific evidence.<sup>13</sup>

#### Hayes, Cochrane, UpToDate

A *Cochrane review* (2012) evaluated the results of studies designed to address efficacy or effectiveness of manipulative therapies (specifically, chiropractic, osteopathy and cranial manipulation) for infantile colic in infants less than six months of age. Six studies were included in the review representing a total of 325 infants. Analysis of data from three studies that measured 'full recovery' from colic as reported by parents found that manipulative therapies did not result in significantly higher proportions of parents reporting recovery. The studies included in this meta-analysis were generally small and methodologically prone to bias, which makes it impossible to arrive at a definitive conclusion about the effectiveness of manipulative therapies for infantile colic. The majority of the included trials appeared to indicate that the parents of infants receiving manipulative therapies reported fewer hours crying per day than parents whose infants did not, based on contemporaneous crying diaries, and this difference was statistically significant. When combining only those trials with a low risk of such performance bias, the results did not reach statistical significance. Further research is required where those assessing the treatment outcomes do not know whether or not the infant has received a manipulative therapy. The review concluded that there are inadequate data to reach any definitive conclusions about the safety of these interventions.<sup>15</sup>

Another *Cochrane Review* evaluated the evidence for the effects of manual therapies for treatment of patients with bronchial asthma. Trials were included if they: (1) were randomised; (2) included asthmatic children or adults; (3) examined one or more types of manual therapy; and (4) included clinical outcomes with observation periods of at least two weeks. Three RCTs (156 patients) were suitable for inclusion. The review concluded that there is insufficient evidence to support the use of manual therapies for patients with asthma. There is a need to conduct adequately-sized RCTs that examine the effects of manual therapies on clinically relevant outcomes. Future trials should maintain observer blinding for outcome assessments, and report on the costs of care and adverse events. Currently, there is insufficient evidence to support or refute the use of manual therapy for patients with asthma.<sup>16</sup>

Hayes published a search & summary report in 2013 that states “There is insufficient published evidence to assess the safety and/or impact on health outcomes of chiropractic spinal manipulation in children for the treatment of subluxation.”<sup>1</sup>

A review article in *UpToDate* indicates that many chiropractors claim to treat otitis media, asthma, allergies, infantile colic, and enuresis. A few randomized trials have evaluated the chiropractic treatment of these acute

conditions. No well-designed prospective double-blind randomized studies have shown that chiropractic care is as effective as or more effective than mainstream care for these conditions, nor have studies demonstrated the effectiveness of chiropractic care in preventing mild or serious pediatric disorders.<sup>14</sup>

### Professional Organizations

American Academy of Pediatrics (AAP) [website]. Information from the AAP indicates that “vigorous spinal manipulation in a young person who may already have a hypermobile or “loose” spine must be done with caution, if it is done at all. Any child with back pain should be examined by a medical doctor prior to chiropractic treatment. There may be other important aspects of diagnosis and treatment, including the evaluation for underlying medical conditions, use of specialized radiology studies, use of therapeutic exercise, and use of prescription medicines, which require the involvement of other specialists.”<sup>12</sup>

American Chiropractic Association (ACA) has published a Spinal Manipulation Policy Statement (2003). This statement does not address chiropractic manipulation in children.<sup>10</sup> The ACA has stated in the public policy section of the website that chiropractic care for children is appropriate for many musculoskeletal as well as non-musculoskeletal conditions of childhood.<sup>11</sup>

The Council on Chiropractic Practice has published guidelines for Chiropractic Care of Children (2013). These guidelines indicate that “Since subluxation may affect individuals at any age, chiropractic care may be indicated at any time after birth. As with any age group, however, care must be taken to select adjustment methods most appropriate to the patient's stage of development and overall spinal integrity. Parental education by the subluxation-centered chiropractor concerning the importance of evaluating children for the presence of subluxation is encouraged”. This recommendation is based on low level of evidence consisting of expert opinion based on clinical experience, basic science rationale, and/or individual case studies, reliability and validity studies, observational studies, "pre-post" studies, and/or multiple case studies.<sup>9</sup>

**CODING INFORMATION:** THE CODES LISTED IN THIS POLICY ARE FOR REFERENCE PURPOSES ONLY. LISTING OF A SERVICE OR DEVICE CODE IN THIS POLICY DOES NOT IMPLY THAT THE SERVICE DESCRIBED BY THIS CODE IS A COVERED OR NON-COVERED. COVERAGE IS DETERMINED BY THE BENEFIT DOCUMENT. THIS LIST OF CODES MAY NOT BE ALL INCLUSIVE.

CPT	Description
98940	Chiropractic manipulative treatment (CMT); spinal, 1-2 regions
98941	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions
98942	Chiropractic manipulative treatment (CMT); spinal, 5 regions
98943	Chiropractic manipulative treatment (CMT); extraspinal, 1 or more regions

HCPCS	Description
	N/A

ICD-9	Description
N/A	All Diagnoses

ICD-10	Description
N/A	All Diagnoses

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