

**Chiropractic Child
Care**

Chapter Outline

- I. Overview
- II. List of Subtopics
- III. Recommendations
- IV. Comments
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OVERVIEW

This section of the ICA protocols and guidelines was compiled by a special committee of the International Chiropractors Association's Council on Chiropractic Pediatrics. This committee consisted of a corp of specially trained and skilled individuals, all of whom have earned diplomate status through years of postgraduate study in chiropractic child care through the ICA Council.

The following protocols and guidelines are a reflection of the growing consensus within the chiropractic profession on the general parameters of chiropractic science and practice as it pertains to the care of the pediatric population. Pediatrics being defined as the time from conception through adolescence. These guidelines are also offered to the profession and the public in the context of the recent Statement on the Chiropractic Paradigm referenced earlier in the general text of the ICA protocols. The Council on Chiropractic Pediatrics of the International Chiropractors Association has developed this component of the general protocols and guidelines to provide the chiropractic practitioner with specific advice and support in addressing the needs of a very special segment of the chiropractic patient population, children.

All laws governing the authority and responsibilities of doctors of chiropractic provide for full access to and responsibility for the care of children, as they do for patients of all ages. While recognizing that differences in approach and manner may be necessary in addressing the needs of various age groups, the ICA understands that the basic principles of chiropractic apply to patients of all ages and that chiropractic intervention through the adjustment of the spine to restore normal nerve function is an appropriate, responsible and highly effective means of clinical care for even the smallest of children, when clinically indicated by objective findings and other standard chiropractic clinical procedures.

A growing body of clinical research, comprised of case studies, trials, observations, outcome assessments, etc. coupled with existing insurance underwriting experience has demonstrated that regardless of methodology, chiropractic has been demonstrated to be safe and effective for children.

As has been previously noted, to obtain a license to practice chiropractic in any of the 50 states requires the degree of doctor of chiropractic from an accredited chiropractic educational institution recognized by the US Department of Education. This education consists of four or more years of full-time, in-residence study is required in human anatomy, physiology, biomechanics, chiropractic diagnosis/analysis, adjective techniques, public health issues and chiropractic philosophy. Chiropractic Education fully encompasses the field of pediatrics.

Chiropractic students are thoroughly trained in the appropriate use of currently accepted diagnostic technology including imaging procedures such as x-ray, thermography, video-fluoroscopy, magnetic resonance imaging and other investigative technologies and procedures as it pertains to use with children. The capacity to evaluate the health care needs of the pediatric patient, including appropriate referrals to other health professionals when necessary, is an important objective of chiropractic education.

The status of the doctor of chiropractic, as established by statute, training and experience, includes the ability and authority to evaluate the general health status of an individual for certification purposes, in the context of a required physical for school, employment, sports

and, as federally authorized, approval to operate heavy transportation machinery. The U.S. Department of Transportation authorizes DC's to perform physical examinations for long-distance truck drivers, etc.

Such physicals are a routine part of chiropractic practice. The clinical competence to perform such evaluations and through standard health status measures such as blood pressure, heart rate, etc., make a statement about the general health of an individual does not necessarily include an obligation or authority to develop a full-body medical diagnosis or to perform procedures outside the recognized scope of chiropractic. In the presence of abnormal findings in the course of routine physical examinations for specific purposes, such as those cited above, the DC follows the standard chiropractic care pathways (including referral) as are clinically indicated on an individual basis.

Doctors of chiropractic are also obligated to perform certain public health functions that are common to all primary contact, doctor level health care professionals. Many state laws obligate the doctor of chiropractic to report child abuse, spouse abuse, certain communicable diseases and other findings to public health authorities. Likewise, the doctor of chiropractic may have responsibilities under state laws and regulations to take action in the presence of substance abuse.

State laws have established chiropractic as a separate and distinct professional endeavor and detail the parameters of chiropractic practice. No state of the United States has limited in any fashion, either expressly or by implication, the practice of chiropractic to exclude any age group.

The doctor of chiropractic is a primary care provider, who serves as a portal-of-entry into the health care system. The ICA Council on Chiropractic Pediatrics recognizes that the term primary care provider to be defined as: Any health care provider capable of providing first level contact and intake into the health delivery system, and any health care provider licensed to receive patient contact in the absence of physician referral. All laws and regulations in the United States allow any citizen to seek the services of the doctor of chiropractic without referral from any other provider. The Council further recognizes that the doctor of chiropractic is also a primary care provider for the care of the pediatric patient. Only the doctor of chiropractic is professionally competent to evaluate the chiropractic needs of the pediatric patient and to determine the level of service appropriate to meet those needs.

Chiropractic intervention is indicated in all instances where the objective and/or subjective presence of subluxation can be demonstrated. Patient needs must be individually determined on the basis of recognized procedures, but the issue of clinical necessity of providing adjustive care shall be based on the presence of the vertebral subluxation complex, regardless of the presence of subjective symptomatology.

The International Chiropractors Association's Council on Chiropractic Pediatric recognizes the vertebral subluxation complex as an acceptable primary diagnosis for the pediatric patient.

Pediatric Patient Evaluation and Care Pathway in Chiropractic Practice

The evaluation process for a pediatric patient is based on the doctor of chiropractic's physical examination, health history and assessment of the immediate needs of the patient. Additional information might also be obtained from the parents or other individuals in immediate contact with a child patient, especially in circumstances where a pediatric patient is unable to communicate the details of their complaint or situation. The appropriateness of chiropractic care and/or the need for referral to other provider(s) for urgent care, or for additional diagnostic evaluation is initially determined. In the absence of the necessity for immediate referral the doctor of chiropractic can determine the appropriateness of the following:

- 1) Chiropractic care
- 2) Chiropractic care and further non-urgent diagnostic evaluation
- 3) Chiropractic care and further non-urgent diagnostic evaluation in the context of another branch of the healing arts
- 4) Chiropractic care and concurrent care
- 5) Referral to other providers (such as special educators, and social service providers)

Referral is a professional obligation that is present throughout all phases and aspects of the chiropractic practice. The primary obligation of Doctors of Chiropractic is to provide the highest quality of care to each patient within the confines of their education and their legal authority. It is the position of the International Chiropractors Association's Council on Chiropractic Pediatrics that this primary obligation includes recognizing when the limits of skill and authority are reached. . This interchange of professional referrals should include, all professionals who work with children, including but not limited to pediatricians, secondary medical professionals such as gastroenterologists, hematologists, and oprthopedists, osteopathic doctors, speech therapists, occupational therapists, physical therapists, special educators,

Doctors of Chiropractic are also obligated to accept referrals from other professionals, applying to those patients the same considerations for quality and appropriateness of care as with any other patients.

VERTEBRAL SUBLUXATION COMPLEX AND THE CHILD

A. Definition of Subluxation

The subluxation complex includes any alteration of the biomechanical and physiological dynamics of contiguous spinal structures which can cause neuronal disturbances, complication of functional and/or structural and/or pathological articular changes that compromise neural integrity and may influence organ system function and general health. Subluxation is evaluated and managed through the application of chiropractic procedures based on the best empirical evidence and clinical experience.

The VSC is postulated to be comprised of the following components:

- 1) Kinesiopathology - alteration in biomechanics
- 2) Myopathology- alteration in muscle form or function
- 3) Histopathology- alterations in cellular form or function
- 4) Neuropathophysiology - alternation in nerve form or function
- 5) Pathophysiology- alteration in organ system function, and loss of cellular homeostasis

The chiropractic literature specifically addresses the means of objectively identifying the presence of vertebral subluxation(s), apart from subjective patient complaints and/or symptoms. Such reproducible, reliable procedures are the cornerstone of chiropractic practice. A detailed review of instrumentation, imaging, and other procedures is presented in later chapters.

Objective procedures have emerged and such procedures have been incorporated into chiropractic education, authorizing legislation and routine chiropractic practice. Those procedures are:

- a. Palpation (static and motion).
- b. Postural analysis.
- c. Orthopedic and neurological examination.
- d. X-ray spinography.
- e. Video fluoroscopy.
- f. Computed tomography.
- g. Magnetic resonance imaging.
- h. Skin temperature differential analysis, including thermography.
- i. Paraspinal EMG scanning.

B. Possible Causes of Subluxation

The causative factors of subluxation in the pediatric population are numerous and varied. Their occurrence may begin in utero. Chiropractic science has always held that physical, chemical and emotional trauma exists at the root of the subluxation. With the growing body of information in the fields of psychoneuroimmunology, molecular genetics, and environmental toxicology, the tenets of chiropractic continue to be validated. The following have been proposed to be contributing factors in the formation of the vertebral subluxation complex:

- 1) In utero constraint
- 2) Birth malposition
- 3) Birth malpresentation
- 4) Birth complications
- 5) Pre-natal complications
- 6) Congenital malformations
- 7) Neonatal injury
- 8) Developmental delay
- 9) Routine falls
- 10) Accidents

- 11) Sports injury
- 12) Emotional stress
- 13) Toxic exposure
- 14) Repetitive motion

C. The Progressive Nature of Spinal Subluxation

Behavior such as physical and emotional stress, tension, chemical/environmental stressors, repetitive motion activity patterns, over-extension of spinal tissues and/or characteristics such as posture, weight, or even footwear can establish patterns of progressive subluxation that lead to the degeneration of spinal segments. Spinal degeneration and its reversibility has been the subject of considerable scientific study. O.J. Ressel, based on a comprehensive review of 329 published references and a series of detailed case studies concluded that chiropractic intervention not only halted spinal osteoarthritis, but also reversed the deterioration process by measurable levels.

Phase I and Phase II subluxations as outlined elsewhere in these guidelines are the more commonly encountered types in the pediatric population. Based on lack of time and chronicity, incidences of Phase III and Phase IV subluxation is rarely seen in the pediatric population.

D. Early Detection, Early Intervention and "Wellness"

Enhanced public awareness of environmental, psychosocial, and physiological issues through education and community action has forced early detection/early intervention into the public health agenda as a significant new priority. Many states already have early intervention programs for the pediatric population, as well as federally mandated insurance coverage for all children. A vital measure in early intervention programs which has been neglected is the inclusion of conservative chiropractic spinal health care and education. Most effectively introduced at birth all children should be monitored for the presence of subluxation.

In the child with developmental delay who are often enrolled in state early intervention programs it is imperative that the child have routine chiropractic evaluations in addition to the multidisciplinary care that early intervention provides.

Subluxation(s) have been demonstrated to be present in persons of all ages, from the newborn infant to the most senior citizens. Likewise, authorizing laws and regulations empower doctors of chiropractic to care for patients of all ages with no exceptions, and chiropractic education instructs professionals in training in the proper procedures and techniques necessary to address the spinal needs of all patients, including infants and the elderly. The Council on Chiropractic Education (CCE) the agency recognized by the United States Department of Education for the accreditation of chiropractic professional programs recognizes no exceptions or limitations on the appropriateness of chiropractic procedures because of age. The International Chiropractors Association recognizes the utility and appropriateness of chiropractic procedures for all persons regardless of age, and views efforts to restrict the access of any age group to chiropractic services as profoundly discriminatory, contrary to the laws of the several states and unsupported by the scientific literature.

CHECK-UPS, EXAMINATIONS, & WELLNESS

The practice of chiropractic includes chiropractic examination and analysis to provide for prevention, acute chiropractic intervention, chronic case management, and long-term care plans. This section focuses on wellness and preventive care (designed to reduce the future incidence of illness or impairment) and health promotion (based upon optimal function).

Some confusion arises from the use of various terms to describe such care-including supportive care, maintenance care and preventive care. In this section, it is called Check-ups Prevention and Wellness care.

Long-term ongoing health management has been a significant component of the chiropractic model of health care. Surrounding this is a wellness paradigm that recognizes related influences on health, emphasizes drugless, non-surgical management, and takes a positive dynamic view of health. In addition to periodic routine checkups, the model looks to the whole individual and requires active patient participation.

Prevention efforts emphasize patient responsibility and may include exercise programs, weight loss, dietary counseling, life style modifications, education on body postures and mechanics, mental attitude, coordination training, safety habits, ergonomics, spinal hygiene, modification of life stressors, etc.

Routine check-ups provide an ongoing basis for such patient education efforts as well as early detection of subluxation. These routine check-ups form the basis for wellness care for children. As states elsewhere in these pages, the progressive nature of the subluxation, and the ubiquitous nature by which it can be present in the child, necessitates, that chiropractic care become a routine part of all care for children. Children who not have routine chiropractic check-ups, may be at risk of developing progressive spinal degeneration as a result of trauma, and other degenerative causes.

Emerging evidence from both the molecular genetics field as well as from clinical studies such as the recent one done on colic, give credence to the evidentiary presence of illness or disease as a result of the presence of subluxation.

It is the position of the Council on Pediatrics that all children regardless of age, be checked on a routine basis for subluxations.

This type of health care management program, which combines health promotion, routine checkups prevention services, and patient participation, is gaining much more widespread understanding and acceptance in today's more health conscious society.

In recent years, cost containment of health care has become a regional and national priority. It is certainly a concern of responsible health care providers and consumers, as well as health care insurers.

A major chiropractic premise is that the inherent recuperative power of the body aids restoration and maintenance of health. These assumptions comprise a wellness paradigm embraced by the great majority of the chiropractic profession. The vertebral subluxation, along with other factors such as poor nutrition, trauma, heredity, congenital weaknesses, fatigue, mental and environmental stressors and sedentary lifestyles, are viewed as lowering resistance

and creating physical disharmony. The chiropractic model requires active patient participation. In the case of the child, this participation is required both of the child and the parent or guardian.

It is Recommended with respect to the care of children that:

I Doctors of chiropractic provide a unique body services. They do not duplicate the services of other health care providers.

Recommendation:

1. Doctors of chiropractic may restrict themselves to procedures necessary for the detection, analysis, control, reduction and correction of vertebral subluxations so as to non-duplicate services available from other health care providers.
2. Wherever possible, a doctor of chiropractic should avoid duplication of services by using the results of tests which may have already been performed by other providers.

It is self evident that unreasonable and unnecessary analytical procedures drive up health care costs. Therefore, the doctor of chiropractic should utilize the optimal number and types of analytical procedures, specific to the individual patient, necessary to obtain the pertinent data for the detection, analysis, control, reduction and correction of vertebral subluxations.

II. The Doctor refrain from over-utilization of chiropractic services.

Recommendation:

1. Reassessments should be performed to adequately assess frequency of visits therefore providing the highest quality care in the most cost effective manner.

III Patient Education

Once educated about the benefits of chiropractic care, the patient should assume the role of becoming responsible for his/her own health as it relates to chiropractic care. A patient / parent that understands the benefits of chiropractic care will utilize these services as a preventative type measure, thus assisting in the cost containment of the overall health care system.

Recommendation:

The doctor of chiropractic should assume the responsibility of educating the patient as to the benefits of vertebral subluxation correction and prevention and how it relates to their overall health and the health of everyone in the community.

IV Patient Responsibility

In the interest of reducing health care costs, the doctors of chiropractic should always try to instill in the patient the following concepts of patient responsibility:

1. The patient should assume responsibility for their own health and that of their family where applicable and take appropriate care of them.
2. Compliance with the chiropractors recommendations, leading to reduction of visit frequency as soon as possible.
3. The more responsible each patient is for their own fees the less burden they will be on the nation's health system.
4. The patient, as well as the chiropractor, should accept the responsibility to avoid over utilization.

V. Routine Check-ups/Prevention Services

1. Disclosure:

Routine check-ups and prevention services are an integral part of the patients overall health care. It is necessary for the practitioner to clearly understand the type and nature of this care they are being given and to give proper patient disclosure by the D.C.

2. Use of Chiropractic Adjustments

The clinical experience of the profession developed over a period of more than 100 years suggests that the use of chiropractic adjustments in a regimen of routine check-ups/prevention services has merit.

3. Health Screening

The importance of health preventive strategies is widely recognized. These services may have value in identifying early or potential manifestations of a health problem.

4. Health Promotion:

Preventive orientation to health through health promotion is well established. Health promotion provides the opportunity for chiropractic practitioners to promote health through assessment, education, and counseling on topics such as nutrition, exercise, stress reduction, life style patterns, mental attitude, spinal hygiene, weight reduction, smoking cessation, and ergonomics, among others.

5. Wellness Care:

Chiropractic is the largest, most established and widely licensed of the wellness oriented health professions. Wellness and the conscientious management of lifestyle strategies have gained popularity and acceptance. Chiropractic practitioners may choose to expand their practices to include those services that may influence a person's attainment of optimum performance and behavior, and in so doing, improve health status. This kind of care is performance specific (i.e., quality of life) rather than condition (e.g., symptom) specific and is not intended to duplicate or invade the realms of other health care disciplines.

COLLABORATIVE CARE

All patients of all health care providers have the right to expect health care services at the highest level of quality. The preservation of patient trust and confidence depends on this. When the needs of the patient demand the inclusion of other providers or institutions in the program of care, extra caution and extra effort are required to ensure that no gaps in service or conflicts will be allowed to jeopardize the quality of care. The chiropractic practitioner should be aware of programs of cooperation and/or collaboration, which can assist the patient.

Relationships between health care professionals can only become more complex, and possibly more contentious as we presently enter an era of great change and instability in health care. Concepts such as "managed care," "preferred provider" and "gatekeeper physician" are becoming the new currency of health care policy. As efforts to control health care costs center more and more on the managed care theory of cost and utilization containment, a credible protocol for interaction becomes an urgent necessity.

To ensure that all requirements for patient care can truly be addressed, this new model must consider cooperative relationships in all settings, including institutional settings such as the hospital, nursing home, and hospice, and among all health care professionals. The model to be devised must be comprehensive, clear to all parties involved, and flexible and dynamic enough to adapt to the daily realities of practice.

The special needs of children demand that in all situations, the chiropractic profession take steps to ensure that relationships with other providers are governed by the needs of the patient. Likewise, doctors of chiropractic must carefully safeguard the rights of chiropractic patients and ensure that other providers are conscious of the need to conduct patient care in a totally objective and professional manner. When professions interact in the delivery of health care services, economic and social factors as well as professional territorialism should never be allowed to override the fundamental obligation to the patient. There is no place for such distractions in the delivery of quality health care.

II. LIST OF SUBTOPICS

Reasonable Patient Expectations in the Cooperative and Collaborative Care Setting

- A. The Patient and the Primary Care Provider
- B. Freedom of Choice and Informed Consent

- C. Professional Knowledge and Understanding
- D. Referrals
- E. Exchange of Information and Records between Providers
- F. Professional Interaction in the Hospital or Other Institutional Setting.
- G. Economic Considerations

Collaboration can be defined as the reciprocal inter-professional interaction of two or more health care providers. Collaborative care involves this interaction in the management of the patient's current health status. Collaborative care, therefore, includes care in a private practitioner's office, where interaction exists on a daily basis between the practitioner and his/her assistants, as well as care within a complex institutional setting such as a medical specialty ward in a hospital and care within a managed care setting. Various specialty fields exist within chiropractic and are available as a resource.

Hospitals and other institutional inpatient settings represent to some degree a new frontier for chiropractic. Chiropractic has an enormous impact to make in this context. As well, hospitals are of great social, political and economic importance in North America. It is here that the largest publicly supported concentration of leading-edge diagnostic equipment is to be found. Hospitals are also the scene of the vast majority of clinical information gathering and research.

Collaborative care is neither new nor unique to this generation of providers, though cooperative relationships between the medical and chiropractic professions have been less frequent in the past. The federal court judgment in 1987 in *Wilk et al. vs. AMA et al.*, which effectively eliminated formal barriers previously established to the collaboration of the chiropractic and medical professions, has been a key factor in increasing cooperation. However, as greater emphasis is now being placed on the concept of nominating one primary care doctor as a "gatekeeper" whose function is to ensure appropriate care yet contain specialist and other costs, new effort is required to understand the appropriate role of different health disciplines. This is a difficult task for a number of reasons.

Firstly, from an organizational viewpoint, much of modern medicine is based on a "problem-oriented model" rather than one based either on the management of chronic illness or disease prevention. The problem-oriented model is less conducive to an interdisciplinary team approach than a "goal-oriented model" where the patient's achievement of highest possible level of health is the goal of all concerned.

When incorporating chiropractic care into patient care guidelines, it is always understood that the role of the doctor of chiropractic is separate from other health disciplines and should be presented as such. Whatever the unique needs of the individual patient, the objective of chiropractic remains the same. The correction of vertebral subluxations is the goal of chiropractic regardless of whether any other disease or condition is presented.

As the doctor of chiropractic participates more and more in other patient care settings, the importance of keeping the body free from subluxation is paramount to promoting a return to the patient's full health potential. Through greater understanding of the chiropractic objective by both the patient and collaborating professional, the pursuit of cooperation and quality patient care can be enhanced.

Clarity of roles is vital. This clarity is dependent to some extent on the probability of a successful care outcome and to some extent upon the provider chosen. This should be

understood when clinical policies and guidelines are made on decision-making in patient management. Dixon has noted that while policies can be helpful in simplifying complex clinical dilemmas, they have at times been adopted without evidence of benefit and that research studies using appropriate clinical methodology should be encouraged in order to prevent useless or even dangerous algorithms of care.

The development of wise patient care guidelines, incorporating the many approaches available in health care today, should provide for the most effective balance of resources for the patient's needs. Determining the role of each profession in the various algorithms for patient management should reflect the varying and unique needs of each individual patient. Developing such algorithms, which are currently not in place nationwide, may reasonably be expected to have a significant impact on health outcomes in general, as well as on the difficult inter-professional issue of cost-containment. To that end, for example, Wenneberg has stated that patients' understanding of their care options is anticipated to be a major contributing factor in their care selection. He noted that health care allocation by patient preference is likely to be cost-effective because patients prefer and select less invasive, less expensive treatments. It is in the best interest, therefore, of all concerned that the health care system have all its professional resources, and ready information on them, available to all patients.

Initially, as the chiropractic profession explores the arena of collaborative care more fully, documents generated by practitioners engaging in this work and setting out inter-professional referral protocols can serve as guidelines. As part of the health care system at large, however, the chiropractic profession must now begin to focus more of its resources in researching and developing clinical standards relevant to collaborative care. As noted earlier, such efforts are needed to meet the many and varied needs of all patients.

CONSULTATION, HISTORY & EXAMINATION

I. OVERVIEW

The chiropractic case history and pediatric examination are concerned with the accumulation of information pertinent to the overall health status of the child. The history and examination of the child is unique and age specific, and needs to be employed when a child presents for chiropractic care. The following is a comprehensive set of history questions, which can to be applied in an age, appropriate manner, according to the specific needs and condition of the patient, as determined by the judgement of the attending doctor.

II. HISTORY

CHIEF COMPLAINT/ Reason for Seeking Chiropractic Care

PRESENT ILLNESS/PROBLEM (if any)

Onset

Progress

- Duration
- Quality
- Severity
- Exacerbation/ Remission
- Frequency
- Radiation
- Treatment
- Location

PAST HISTORY

Birth History

- Prenatal Care
- Prenatal Complications
- Length of Labor
- Vaginal / C-section
- Forceps
- Anesthesia
- Quality of labor
- Presentation
- Length/ weight
- Birth Complications
- Apgar Score

Feeding History

- Breast/Bottle
- Types of Formula
- Solid foods
- Food allergies

FAMILY HISTORY

- Health status of parents
- Health status of siblings
- Health status of grandparents
- History of congenital problems
- History of genetic problems
- History of infertility
- History of mental or other problems
- History of illness within the family/i.e. diabetes

MILESTONES

- Age child sat up
- Age child rolled over
- Age Child crawled
- Age child crept
- Age child walked
- Age child took first steps

Age child began to babble
Age child put two words together
Is the child toilet trained?

VACCINATION HISTORY

Has the child been vaccinated? Fully/ Partial
If child has had vaccination which ones and when
Did the child have any reaction adverse or otherwise?

ILLNESS HISTORY

Has the child been ill since birth?
If the child has been ill, with what and what treatment did the child receive?
Frequency and duration of illness
History of broken bones
History of hospitalization

PRIOR CARE

What type of care has the child received and for what?
Medical/osteopathic/chiropractic/dental
Other

SOCIAL HISTORY

Does the child interact with adults
Does the child interact with peers?
Does the child have any attention problems?
Does the child appear to play with toys?

REVIEW OF SYSTEMS

General Appearance
Nourishment, height, weight, growth, etc.
Skin
general appearance, color, swelling dryness,
rashes, etc.
Head/ Neck
swelling, headaches, pain, dizziness, vertigo,
lymph node
Ears
pain, swelling, pinna, infection, discharge, ringing etc.
Nose

nosebleeds, discharge, difficulty smelling, etc.

Throat
tonsil swelling, teeth, gums, bleeding, soreness, tongue, etc.

Respiratory
difficult breathing, cough, sputum, bronchitis, history of asthma, etc.

Cardiovascular
Heart murmur, heart defect, palpitations, great vessel defects, chest pain, etc.

Gastrointestinal
bleeding, upset, abdominal pain, nausea, vomiting, diarrhea, constipation, belching, food intolerance, etc.

Genito-urinary
bladder infections, kidney infections, difficulty urinating, bed wetting, onset of menses, difficulty with menses, onset of puberty, testicular pain, vaginal discharge, vaginal pain, undescended testicles

Musculoskeletal
pain in spine/ joints, difficulty walking/ crawling, muscle pain sports injuries, stiffness, congenital abnormalities

Neurological
Seizures, numbness, tingling, loss of feeling/sensation, loss of balance, lack of speech, loss of eye contact, delayed development,

Psychiatric/ Social
anxiety, difficulty with peers, depression, mood swings, attention difficulty, nervousness, antisocial behavior

Endocrine/Hematological
Sweating, dryness of skin, moth, anemia, excessive hunger, bruising, bleeding, thirst, diabetes

III EXAMINATION

GENERAL APPEARANCE

Does the child appear well nourished?
Does the child appear over or underweight?
Does the child appear to be happy and interactive?
Does the child appear to act age appropriate?

SKIN

Lesions, cafe-au-lait spots, mila, rashes, hemangiomas, dermatitis, urticaria, tinea, pityriasis roacea etc.

HEAD / NECK

bumps, lymph node swelling, hair discoloration, hair loss, rashes, head tilt
Thyroid, sutures, cranium

EYES

bilateral tracking of objects, focusing, strabysmus, visual acuity, lateral planes of gaze eye deviations, conjunctiva, sclera, colorblindness, eyelids

EARS

Otoscopic examination, pinna size, shape, form, Rinne, Weber, periauricular examination

NOSE

Foreign bodies, discharge, nasal mucosa, form, displacement

MOUTH/THROAT

Tonsils, tongue, swellings, lymph node swelling, salivary glands, discoloration, plaques, pharynx, sores

LUNGS

Inspection, auscultation, palpation, percussion, lymph node swellings, excursion

HEART

Inspection, auscultation, murmurs, palpation, percussion

ABDOMEN

Inspection, bowel sounds/ auscultation, percussion, palpation, light/deep, organ palpation, swelling, organ enlargement, lymph swelling, rebound tenderness

NERVOUS SYSTEM

Infantile Automatisms

- Rooting
- Sucking
- Babinski
- Fencer/ tonic neck
- Reverse fencer
- Stepping
- Gallant
- Perez
- Startle/Moro
- Grasp
- Blink

Cranial Nerves

- I Olfactory
- II Optic
- III Oculomotor
- IV Trochlear
- V Trigeminal
- VI Abducens
- VII Facial
- VIII Vestibulochochlear
- IX Glossopharyngeal
- X Vagus
- XI Accessory

XII Hypoglossal

Reflexes

- Jaw
- Brachioradialis
- Biceps
- Triceps
- Patella
- cremasteric
- Abdominal
- Achilles
- Chaddock
- babinski

Dermatomes

Vibratory sense

Pain/ temperature

Toes walking/ heel walking/ heel to toe walking

Muscle testing

MUSCULOSKELETAL

- Postural Observation
- Gait Observation
- Range of Motion
- Cervical
- Thoracic
- Lumbar
- Extremities
- Inspection/ palpation of muscles
- scoliosis screening
- Leg length deficiency
- body symmetry
- Handedness

SPINE/CRANIUM

- Inspection/ Observation
- Gait Observation
- Postural Examination
- Static palpation
- Motion Palpation
- Spinal Muscle Imbalance
- Para spinal edema/lymph node swelling
- Leg length

Body symmetry: guteal , scapular, iliac crest
cranial sutures/ cranial torque/ head tilt
Instrumentation
Muscle testing

Many of these examination parameters are utilized based on an age specific and presentation specific basis.

Specific literature on the appropriate history and examination techniques for the chiropractic practitioner can be found in numerous texts. The reader is directed to those texts listed in the bibliography for detailed description of such techniques. The intent of this chapter is not to serve as a teaching tool. Rather, the purpose is to assist in establishing guidelines related to acceptable history techniques to be used by the practitioner.

The history-taking procedure has been considered the most clinically sophisticated and complex task used by health care providers. Its purpose is to provide the clinician with one or more diagnostic impressions. These are then confirmed or altered following the judicious selection of additional tests -- and it can be noted in the literature that this process does indeed occur. Much of the information that will lead a clinician to a management plan then is gained very early in the doctor patient/parent interaction.

The history and physical examination of the child is extremely important. Firstly, it requires the participation of the parent/guardian/care-giver as well as that of the child. In the very young child the information obtained in the history is solely dependent upon the parent/ guardian/ care-giver. In addition it is important to note that the parent who is not the primary caregiver may not be the best source of information with respect to the history. It is therefore incumbent upon the doctor of chiropractic to encourage all who care for the very young child to participate in the history taking process. With respect to the older child, the child's own participation in the history process is invaluable and should encouraged.

When a long term or chronic problem is at issue, it is important to gather additional information after obtaining the proper consent forms, from the child's other health-care providers as well as teachers, coaches, and others.

MODES OF CARE

This section provides a generic topical summary of typical chiropractic procedures in current use for the pediatric population. Most chiropractic named technique procedures consists of a combination of various analytic and treatment components. Clinical practice and scientific investigation are ongoing processes and it is understood that this document is a dynamic entity that will require modifications as new knowledge becomes available.

A Use of ineffective or unsafe mode of care

Due to the developing nature of the pediatric spine and nervous system, some modes of care need to be modified. The nature of the pediatric spine is cartilaginous with active growth plates.

The normal ranges of motion of the pediatric spine exceed those of the adult. Any adjustment performed which velocity, thrust, extension, lateral flexion, rotation, extension, flexion, axial distraction and traction require modification for the pediatric patient. Any lack of specificity in adjusting the pediatric spine is contraindicated.

B. Chiropractic adjustment modes

1. High velocity thrusts with high force
CONTRAINDICATED
2. High velocity thrusts with recoil
INDICATED WITH MODIFICATION TO ROM AND THRUST
3. Low velocity thrusts without recoil
INDICATED WITH MODIFICATION TO ROM AND THRUST
4. Low velocity thrusts with recoil
INDICATED WITH MODIFICATION TO ROM AND THRUST
5. Sustained force
INDICATED WITH MODIFICATION TO FORCE
6. Blocking techniques
INDICATED WITH MODIFICATION TO EQUIPMENT
7. Manually assisted mechanical thrusts
INDICATED WITH MODIFICATION TO THRUST
8. Mechanically assisted manual thrust
INDICATED WITH MODIFICATION TO THRUST
9. Low velocity controlled vectored force
INDICATED WITH MODIFICATION
10. Cranial/Sacral Adjusting
INDICATED WITH MODIFICATION
11. Myofascial / Soft Tissue
INDICATED WITH MODIFICATION
12. Extremity Adjusting
INDICATED WITH MODIFICATION

C. Non-manual Procedures

1. Exercise and Rehabilitation

INDICATED WITH MODIFICATION

2. Education Procedures
INDICATED
3. Electrical Modalities
AGE SPECIFIC INDICATION
4. Thermal Modalities
AGE SPECIFIC INDICATION
5. Ultraviolet
NOT INDICATED
6. Ultrasound and Phonophoresis
AGE SPECIFIC INDICATION
7. Bracing /Supports / Orthotics
AGE SPECIFIC INDICATION
8. Traction
AGE SPECIFIC INDICATION
9. Nutritional Advice
INDICATED
10. Lifestyle Recommendation
INDICATED
11. Wellness Care/Prevention - Health Promotion/Spinal Hygiene
INDICATED

FREQUENCY & DURATION OF CARE

Specific parameters of care appropriate for each individual pediatric case are impossible to define. Each case must be evaluated with complicating factors, concomitant conditions and all other extenuating circumstances taken into consideration in order to assure the patient maximum benefit through chiropractic care.

Pediatric patients progress at a different rate from adults therefore it is important that adult guidelines not be overlaid on the pediatric patient. Since the nature of pediatric care is somewhat different again, individualization is paramount. In addition, the subjective and objective findings associated with chiropractic care of the pediatric patient is significantly different than that of the adult population.

Principles of Case Management

The primary missions of health care delivery are to provide sufficient care to restore health, maintain it, and prevent the occurrence or recurrence of injury and illness. The practical boundaries on what will constitute necessary and sufficient care are situational. However, guidelines framing expectations of care outcome can be drawn from the literature and adapted by practical experience on a case-by-case basis.

Chiropractic shows the unique ability to determine sub-clinical spinal disorders such as any of the components of the vertebral subluxation complex, known to precede symptoms/end stage conditions eliminating the need for the most part of crisis intervention. A key principle is that chronicity should be prevented wherever possible. Patients who are at risk for becoming chronic show characteristic patterns involving their illness and life situations.

III. RECOMMENDATIONS

The frequency with which a particular patient needs to see their chiropractor is based on the subjective findings, if applicable and the objective clinical findings and the opinion of the doctor. There is no set template on the number of visits needed to obtain maximum chiropractic improvement for the population as a whole. Each patient who presents at the chiropractic clinic is unique and different and must be treated as such.

Some of the factors which need to be taken into consideration is the age of the patient, type of work or daily activities, trauma or aggravation, stability and function ability of supporting structures (muscles and ligaments) the structural integrity of the spine and its articulations (degeneration, demineralization, biomechanical loss or failure). These and other factors are the considerations which go into making a plan of care/number of visits for each patient.

After a patient starts an initial program of care they will be re-examined/re-assessed at proper intervals. This is done to determine the patient's response to care and if the frequency can be reduced or needs to be increased and/ or if a referral is necessary. The re-exam/re-assessment may be performed several times during the course of care until the patient reaches maximum chiropractic improvement (MCI). Maximum improvement varies with each patient and will depend on those factors noted above. Once a patient reaches MCI they are released from care and recommended to a PRN basis or other type program which they and their chiropractor agree upon.

The following shall serve as a guideline. It is important to note that with proper documentation additional care or alteration of care schedule may be warranted for the categories of conditions and levels of care listed herein.

Additional Definitions

- | | |
|-----------------------|---|
| Phase I, II, III, IV: | These phases refer to the radiographic presentation of the (subluxation) degeneration which occurs in the spine. (Hadley MD). |
| Acute: | New condition, not exceeding 12 months duration |
| Chronic: | Old condition, duration of longer than 12 months |

Trauma:	Onset due to accidental/intentional injury.
Non-trauma:	Symptoms which arise insidiously.
Clinical:	That condition which has overt signs and symptoms.
Subclinical:	A condition the signs of which require investigation and in which overt symptoms have yet to occur, and would go unnoticed with progressive degeneration until it becomes clinical.

The nature of chiropractic care for the pediatric patient is unique. While one child may seek chiropractic care for the subluxation patterns that occur as part of the birth process, another may seek chiropractic care as a result of a genetic disorder which has caused subluxation as a significant chronic component. The nature of the care therefore, with respect to the duration is significantly different.

Subluxation as we have seen earlier in these guidelines can result from a myriad of stresses on the pediatric spine. The child who presents without symptomatology may still present with spinal subluxations. Frequently in the pediatric population, due to the nature of the growing spinal structures, and the lack of a maturity of the neurological system, the presence of subluxation is without pain or symptomatology. In the presence of symptomatology, it is likely that the level of subluxation is greater, and may require a longer duration of care, with a greater frequency.

In addition the chronic nature of a pediatric condition, such as cerebral palsy may require life-long chiropractic care to minimize subluxation and to maintain optimum functioning in the child and subsequently in the adult.

Accidents are the leading cause of pediatric morbidity. Trauma therefore needs to be addressed frequently in the pediatric population, and the subluxation patterns and changes caused thereby. Birth trauma, generalized falls and developmental patterns, may present another level of subluxation in the child. Automobile accidents, and the flexion-extension injuries caused by these accidents can have a significant impact on the developing spine of the child, and therefore the subluxations caused by these automobile accidents need to be addressed by chiropractic care. The following are some of the categories of possible subluxation causes in the child:

ACUTE-	trauma, accidents, falls, birth trauma, toxic exposure
NORMAL DEVELOPMENT-	achievement of normal milestones such as sitting up crawling, walking etc.
ABNORMAL DEVELOPMENT-	those caused by the presence of congenital/ genetic considerations such as portcullis, cerebral palsy, muscular dystrophy, and autism, ADD/ADHD
PATHOLOGY-	those caused by the presence of pathology such as fracture, disease etc.

While these categories are not all inclusive, they should serve as a guideline. There can be considerable overlap between the categories in a child and there can also be the presence of only one category.

The question of supportive care for the child is often presented. The following can serve as a guideline for supportive chiropractic care for children:

The necessity of long term palliative care or supportive care should accomplish one or more of the following goal in order to be considered necessary and appropriate:

1. Care of an exacerbation to return the patient to pre-exacerbation status.
2. Improvement or maintenance of activities of daily living.
3. Improvement or maintenance of work status.
4. Increase of functional strength.
5. Increase stamina, endurance and activity tolerance.
6. Increase functional range of motion.
7. Improve mental attitude.
8. Decrease need for, or amount of, medication.
9. Prevention of surgical intervention when appropriate.
10. To attain optimal expression of life.

V. COMMENTS

In the course of the management of a chiropractic case the objective indicators of vertebral subluxation(s) and other dysfunctional articulations and structures demonstrated during Level I (see glossary for definition of levels of care) care may decrease. As the patient's clinical indicators are minimized and spinal function improves and stabilizes, the frequency of care is reduced and the patient is advanced to Level II care. Some of the variables considered during the evaluation of the patient's status include, but are not limited to age, occupation/lifestyle, past metabolic history, past history of injuries/fractures/surgeries, genetic predisposition, amorphic spinal structure, cortical and medullary bone irregularities, bone density irregularities, articular irregularities, joint irregularities, chronic adaptive postural and structural changes, chronicity, the number of spinal subluxations present, patient tolerance to active care, and the degree of patient cooperation.

When a patient has demonstrated sufficient reduction of clinical indicators of vertebral subluxation and other dysfunctional articulations and structures, they should be advanced from Level II care. The chiropractor should then recommend Level III care.

At some point during a patient's care, the practitioner may note that those clinical indications of vertebral subluxation and other dysfunctional articulations and structures (including, but not limited to those found by motion and static palpation, instrumentation, radiography, etc.) are becoming either more or less noticeable. In order to ascertain the optimal elapsed time period between chiropractic office visits, the practitioner would then begin the process of decreasing or increasing visit frequency. Should the indicators for the presence of a vertebral subluxation and other dysfunctional articulations and structures are imperceptible or absent, in the clinical opinion of the practitioner, office visit frequency would be decreased. At some point in this process, however, the indicators for the presence of a vertebral subluxation and other dysfunctional articulations and structures may again be manifested, necessitating a chiropractic adjustment and a reassessment of visit frequency.

The concerns of the public regarding health care have shifted to an active responsibility for their physical well being. Patients who understand the major objective of chiropractic knowingly choose this approach to help them maximize their health potential. Scientific evidence identifies components of the vertebral subluxation and other dysfunctional articulations and structures and may reveal physiologic changes that occur after the correction of the vertebral subluxation and other dysfunctional articulations and structures. Moreover, it is observed clinically that dramatic changes may occur after the correction of a vertebral subluxation and other dysfunctional articulations and structures. Most chiropractors have observed changes after spinal adjustments that affect major body systems and the patient's complex metabolic system. The clinical explanation for these changes is associated with improved natural functions. When interference to the nervous system is reduced, the body's capacity to heal and thrive is rekindled. Vertebral subluxations and other dysfunctional articulations and structures may occur during the birth process, therefore, it is imperative that chiropractic care should begin as soon as possible. Chiropractic care should continue, in accordance with the patient's needs and the chiropractor's clinical opinion, for the life of the patient.

CONTRAINDICATION & COMPLICATIONS

While chiropractic procedures have consistently been demonstrated to be comparatively safe, special caution is warranted with certain conditions. Prevention of complications from chiropractic care is facilitated when good professional judgment is exercised and quality care is provided. Elements common to all primary care practitioners include sufficient history taking and record keeping, thorough examination, timely re-evaluation procedures throughout the course of case management, good communication with the patient and appropriate response in the event that an unexpected incident does occur. If a significant adverse result from a procedure is apparent, it is of critical importance that the intervention or procedure associated with the onset of the complication not be repeated.

The evidence shows that the low incidence of injury or complications from adjustments is promoted by quality care which follows professional judgment consistent with the objectives of chiropractic care. Chiropractic professional judgment includes, without limitation, appropriate response to unexpected findings and reevaluation of the suitability of a particular technique or procedure associated with the discovery of a complication. The doctor of

chiropractic should be alert to the possibility of encountering unusual findings in any phase of care.

Patient safety can be further enhanced by the chiropractic profession's commitment to quality assurance.

When assessing the safety and efficacy of chiropractic care, two factors should always be considered: the type of technique being utilized and the integrity of the area of the spinal column/or articulation being addressed. These two factors assist in evaluating any risk that may be associated with the application of chiropractic care.

The primary focus of the chiropractic management of complications is the recognition of unusual findings that may require modification of the plan of care when the unusual finding is observed..

It is important to note that the literature clearly illustrates that most serious adverse effects with spinal manual procedures, or spinal manipulative therapy as it is described in medical literature (in reference to procedures applied by professions other than the chiropractic profession), have not been the result of procedures performed by doctors of chiropractic. It is important, therefore, that throughout all the professions a standard minimum training greater than or equal to that of a DC in adjustive/manual procedures be required prior to performance of SMT.

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