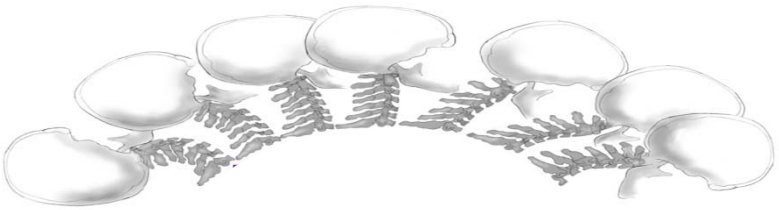

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DOCUMENTATION OF PROCEDURE

CPT CODE: 76499 "Unlisted Procedure" Roentgenometric Procedure One or More Areas

This code requires a description of procedure to accompany it. This document fulfills this purpose.

The International Chiropractic Association's written policy for this procedure:

Digital radiographic mensuration (per spinal region)

Digital radiographic mensuration is a biomechanical analysis technique. Anatomical landmarks from digital dynamic motion x-rays (DMX) or plain film radiographs. Studies are recorded in a computer program for the assessment of the biomechanical components of the vertebral subluxation(s) and spinal distortions. The computer's analysis compares the computerized biomechanical model to the patient's data and generates a report. They have determined 76499 the appropriate code.

Please note that the CPT codes are owned and determined by the American Medical Association. CPT codes are not chiropractic specific and so this interpretation was made so that all payers will understand that this code *best* identifies this procedure. We are not aware of a more appropriate code for this procedure.

The procedure is called **C**omputer-aided **R**adiographic **M**ensuration **A**nalysis (CRMA), also know as X-ray Digitization which includes: The technical component of loading the data into the computer and then the analysis of the data which will produce the CRMA report.

Technical Component

CRMA involves the computerized enhancement of DMX images and/or plain film radiographs. The process utilizes a computer with specialized software and requires detailed knowledge of human spinal anatomy by the doctor supervising the operation of that software. Magnification is compensated by the computer locking onto either the right or left identification maker on the films. Points must be placed at specific anatomical landmarks. Multiple positional images are analyzed. The result of this analysis produces an assessment of injury and impairment due to loss of motion segment integrity both for angular and translational integrity. This software demonstrates whether an injury has altered the relationship between spinal structures. Neither the patient nor his/her doctor can manipulate the results. The time required to screen, process the paperwork, perform the CRMA and forward the results is approximately 1 ½ to 2 hours. The CRMA report consists of both the Mensuration report and the biomechanical report.

CRMA Report

We are a prescription service providing objective diagnostic testing. The doctor utilizing our services has already established that he or she has medical necessity to employ the testing procedure. As an independent diagnostic testing facility, we cannot be held accountable for the referring doctor's pre-or post

notes. The written script along with any medical necessity notes along with the report, accompanies all claims.

The Biomechanical Report is the precise interpretation of the mensuration analysis in a narrative format. A trained doctor performs the digitization process and a Board Certified M.D. Radiologist confirms the results are accurate.

ABOUT NGC

The **N**ational **G**uideline **C**learinghouse (NGC) is a comprehensive database of evidence-based clinical practice guidelines and related documents. Their mission is to "provide physicians and other health professionals, health care providers, health plans, integrated delivery systems, purchasers, and others an accessible mechanism for obtaining objective, detailed information on clinical practice guidelines and to further their dissemination, implementation and use." It was created by the Agency of Healthcare Research and Quality (AHRQ), U. S. Department of Health and Human Services, in cooperation with the assistance of the A.M.A. and America's Health Insurance Plans (AHIP), a national trade organization representing 1,300 insurance companies who provide medical benefits to over 200 Million Americans. The criteria for inclusion in NGC are very stringent and our service of CRMA is listed in the guidelines as "X-ray Digitization." Therefore it has passed the NGC screening criteria. There is not another higher guideline listing in the *USA* that supersedes the NGC.

AMA Guides to the Evaluation of Permanent Impairment

The *American Medical Association*, in its *Guides to the Evaluation of Permanent Impairment*, list the following as acceptable means to rate impairment:

- Impairment due to loss of muscle power and motor function,
- Impairment due to abnormal motion of the spine,
- Impairment due to loss of motion segment integrity,
- Impairment due to disc problems,
- Impairment due to pain or sensory deficit, and segmental instability.

The CRMA report provides an *objective* diagnosis that the ordering physician can determine if an impairment is ratable.

It should be further noted that:

- Computer aided digitizing mensuration analysis software has demonstrated accuracy to 0.0023mm. Hand mensuration cannot approach the accuracy attained with advanced computer technology.
- The importance of utilizing CRMA is attested to by the following Supreme Court Ruling: *"If a physician, as an aid to their diagnosis, i.e., their judgment, does not avail themselves (sic) to the scientific means and facilities open to them for the collection of the best factual data upon which to arrive at their diagnosis, the results is not an error in judgment but* ***negligence*** *in failing to secure an adequate factual basis upon which to support their diagnosis or judgment."* The Pennsylvania Supreme Court, Smith vs. Yohe, 412 Pa. 94, at 105 (1963).

Benefits of CRMA to the Doctor and Patient

- Provides the doctor with an unbiased outside opinion of the biomechanical condition of the spine.

- Provides specific information that can be used to modify the existing treatment plan or to further validate the appropriateness of the current established treatment plan.

- Assists in the determination of impairment.

- Provides the doctor with a better understanding of the extensiveness of the patient's condition or injury, so that the doctor can better manage his patient.

- Provides the doctor with an effective baseline, by which any further or past conditions can be measured against in order to more accurately assess between 2 injuries, should an apportionment be requested. This also allows the doctor to better understand a pre-existing condition, an aggravation of a pre-existing condition or a condition which is newly established as a result of the condition or injury.

- Provides a more accurate diagnosis for ligament injury, giving both the location and extent of injury. Spinal ligament injury can cause or contribute to numerous painful conditions for patients including muscle hypertonicity, tenderness, pain with movement, restrictions of movement, muscle weakness, referred pain including radiculopathy, sclerodermal pain and headaches.

- Undiagnosed spinal ligament trauma can lead the doctor to incorrectly believe that the patient has no physical objective findings and is, therefore, symptom amplifying the condition mentally, due to poor coping skills or malingering. This can be especially important when a disc injury is ruled out by MRI since many doctors then incorrectly assume no significant soft tissue injuries are present. A recent study {Saifuddin, a, et al., "Magnetic resonance imaging of the cervical ligaments in the absence of trauma," *Spine,* 2003, Aug. 1;28(15): 1686-91} conclude that with cervical MRIs "…the spinal ligaments are commonly not visualized." Since MRIs are unreliable for identifying these injuries, the diagnosis of ligament injury is very often missed in whiplash cases. Therefore if CRMA is not utilized, the patient may receive an incorrect diagnosis of "non-organic pain."

- Provides a higher degree of safety for the patient who will receive adjustment or physical manipulative therapy as part of their treatment after any form of spinal injury. It shows the doctor the location and extent of the spinal injury.

- When the patient is injured and that injury leads to impairment, this has serious ramifications for the patient. The assessment must therefore be as accurate as possible. CRMA provides the highest level of accuracy currently available.

- When a patient is not responding the way that the doctor expected, the doctor will often want to investigate further to see if there is something that has been missed. DMX and CRMA is an ideal choice in these cases since in the case of cervical acceleration/deceleration injury, the diagnosis that is most often missed is that of ligament injury.

Conclusion

Patients with symptoms or any dysfunction related to the spine want to know that their provider has done everything he or she can in order to be able to treat them in the most efficient, effective and safest manner possible. In this way the patient can be more confident or receiving the most rapid and complete recovery possible. When our company provides DMX and CRMA to its client doctors, it is assisting their patients to achieve those goals.