CHIROPRACTIC SERVICES UNDER MEDICARE

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INSPECTION OF

CHIROPRACTIC SERVICES UNDER MEDICARE

RICHARD P. KUSSEROW
INSPECTOR GENERAL

Inspection Prepared By:

William C. Moran
Theodore L. Koontz
Donald A. Kuhl
Margaret H. Shell
John M. Traczyk

Office of Analysis & Inspections
Region V
300 South Wacker Drive
Chicago, IL 60606

With Assistance By:

Milton Anderson
Richard Odell
Hugh Owens

Office of Analysis & Inspections
Region VII

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Summary of Findings

- In CY 1984, Medicare Part B expenditures for chiropractic services were $93.6 million, as compared with $38.2 million in 1979 and $19.2 million in 1975. The average annual rate of growth in Medicare expenditures for chiropractic services between 1975 and 1984 was 18.7%. (An anticipated 50% growth in the supply for chiropractors over the next five years will probably increase this rate of growth.)

- Many chiropractors would like to see expansion of Medicare coverage of chiropractic services to include x-ray, an initial diagnostic visit, routine laboratory services and physical therapy. In the absence of effective utilization controls, adoption of these recommendations would raise Medicare expenditures for chiropractic services from $93.6 million for CY 84 to more than $260 million in CY 87.

- Congress intended a specific limitation on Medicare coverage of chiropractic care by authorizing payment only for "...treatment by means of manual manipulation of the spine (to correct a subluxation demonstrated by x-ray to exist)..." Although the Part B carriers have systems in place which routinely deny claims for non-covered services provided by chiropractors such as laboratory tests and physical therapy, the x-ray requirement is not currently well enforced, may be unenforceable and is highly conducive to abuse.

- There are no standards commonly agreed upon by carriers or the profession regarding the appropriate frequency of chiropractic services. Denials of claims based on reviews triggered by frequency parameters have had little effect on the total volume or dollar value of paid services. In December 1985, HCFA mandated a review of all claims for chiropractic services involving more than 12 visits per year. It appears that this screen will result in a heavy administrative burden on the carriers with a limited relative pay-off.

- In order to establish a workable means of controlling utilization and cost, it is recommended that HCFA and the Department should consider submitting to Congress a legislative proposal which would continue to limit Medicare coverage of chiropractic services to treatment by means of manual manipulation to correct a subluxation demonstrated by x-ray; and cap the number of services allowed for a beneficiary at 12 per year. This would result in a savings of $23.9 million in CY 87.

I. Introduction

Purpose and Objectives

In the period January through May 1985, a national program inspection on Medicare coverage of chiropractic services was conducted by the Region V (Chicago) Office of Analysis and Inspections, Office of the Inspector General, Department of Health and Human Services.

This study was done in response to growing concerns regarding: the rapidly rising cost of chiropractic care under Medicare Part B; the possible implications of previously conducted OIG targeted investigations of chiropractors; an emerging perception that current Medicare legislation and regulations may not be administered in such a way as to provide intended limits on coverage; and a perception by chiropractors and others that the benefit does not adequately cover or reflect current patterns of practice.

The inspection had four general objectives:

- To develop an understanding of chiropractic as a profession as seen by its practitioners, schools and associations, as well as representatives of mainstream medicine.

- To explore with the chiropractic community how current Medicare legislation and regulations affect them and their patients, and in particular to discuss with them how they evaluate the x-ray requirement and handle billing.

- To gather and analyze data on patterns of chiropractic utilization and expenditures under Medicare, Part B.

- To examine how Medicare Part B carriers process chiropractic claims and to determine the effects of their screens and reviews.

Methods

In order to achieve these objectives, the inspection had three major segments:

- On-site discussions were held with 86 organizations and individuals in 13 states and the District of Columbia, selected to provide broad geographic and interest-group participation. Included were representatives of 12 chiropractic colleges, 15 chiropractic associations, 28 medical societies and hospital associations, and 22 third-party payers (Medicare Part B carriers and private payers), as well as representatives of HCFA and other policy experts.

- Telephone discussions were held with a representative sample of 145 chiropractors in eight states, who were randomly selected from lists of providers with billing numbers, provided by randomly selected Part B carriers.

- An analysis was made of the billing and payment histories of chiropractors in the telephone sample for claims processed in calendar year 1983, along with other data on Medicare billing and expenditure patterns provided by Part B carriers and HCFA. (See Appendix A for a discussion of sampling methodology for the telephone survey and the provider history review.)

II. Overview

What is Chiropractic?

The American Chiropractic Association describes the discipline as follows:

> "Chiropractic is a branch of the healing arts which is concerned with the human health and disease process. Doctors of chiropractic are physicians who consider man as an integrated being but gives special attention to spinal mechanics, neurological, vascular, and nutritional relationships...
>
> Chiropractic is built on three related scientific theories and principals...
>
> 1) Disease may be caused by disturbances of the nervous system ...
>
> 2) Disturbances of the nervous system may be caused by derangements of the musculoskeletal structure. Off-centerings (subluxations) of vertebral and pelvic segments represent common mechanical clinical findings in man ...
>
> 3) Disturbances of the nervous system may cause or aggravate disease in various parts or functions of the body ..."
> (American Chiropractic Association, Chiropractic; State of the Art, 1984. pp. 8-9

Medicare Coverage of Chiropractic Services

In 1972, PL 92-603 authorized limited Medicare Part B coverage of chiropractic services. In the final legislation, chiropractors were defined as physicians for coverage purposes, but payment was limited to : **"...treatment by means of manual manipulation of the spine (to correct a subluxation demonstrated by x-ray to exist) ..."** (Section 1861(r)(5), Social Security Act). There was considerable controversy surrounding the passage of this legislation which was adopted despite the recommendations and concerns about chiropractic as a form of treatment contained in the 1968 HEW report, Independent Practitioners Under Medicare. Almost every mainstream medical group also formally opposed passage.

Educational standards were set for chiropractors and payment could only be made for services provided in states where chiropractors were legally authorized to practice.

The regulations for this benefit further limited coverage to payment **"...only for the chiropractor's manual manipulation of the spine to correct a subluxation... which has resulted in a neuromusculoskeletal condition for which manipulation is an appropriate treatment."** (42 CFR 405.232b(c). Not included for coverage were other services that chiropractors were licensed in some states to perform, including: an initial diagnostic visit, adjunctive services (physical therapy), routine laboratory work and, most important, x-rays which are required by the legislation to justify treatment.

Utilization of and Expenditure for Chiropractic Services Under Medicare

The national figures on Medicare utilization of chiropractic services show minority but growing demand by the elderly for such care, with a rapid rate of growth for expenditures.

- In calendar year 1984, total Medicare expenditures for chiropractic services were greater than $93.6 million, as compared with $38.2 million in 1979 and $19.2 million in 1975. The average annual rate of growth in Medicare expenditures for chiropractic services between 1975 and 1984 was 18.7%. (An anticipated 50% growth in the number of chiropractors over the next five years will probably increase this rate of growth.)

- A report from the National Medical Care and Utilization Survey (published in 1984 by the National Center for Health Statistics) estimates that in 1980, 5.2% of the U.S. population, age 65 and over, received services from a chiropractor. This is greater than the percentage of persons in this age group which received services from a podiatrist (4.4%), and less than received services from an optometrist (9.2%), a nurse (18.1%) or an MD/DO (76.7%).

- OIG analysis of HCFA's 1983 prevailing charge summary data showed that manual manipulation of the spine was the 9th most frequently billed procedure under Medicare in 1983. This was exceeded only by such routine services as urinalysis, complete blood count, blood sugar, and follow-up hospital and office visits.

III. Chiropractic Today: A Continuing Paradox

Because heated controversy regarding chiropractic theory and practice continues to exist, it was decided early in the study to examine Medicare issues in the context of how the profession views itself and is viewed by others. On-site and telephone discussions with chiropractors, and their schools and associations, coupled with a review of background materials (many of which were provided by respondents) result in a picture of a profession in transition and containing a number of contradictions.

Growth of Acceptance by Patients and Society

Despite historical opposition from organized medicine, there has been a steady growth in the acceptance of chiropractic as a profession. There are now about 24,000 chiropractors in the United States and in 1985, 9847 students were enrolled in 15 chiropractic colleges. About 4% of the total US population receives some services from a chiropractor each year. As the result of law suits and other pressures, the American Medical Association has revised its code of ethics to allow some cooperation between physicians and chiropractors. Similarly, the Joint Commission on the Accreditation of Hospitals has revised accreditation standards to allow hospitals the option of including chiropractors on their staffs.

Chiropractors have been quite successful in obtaining recognition from Federal and State governments, and have been included in many governmental programs. For example:

- Chiropractors are now licensed in all states, although there is considerable variation in statutory definitions of the profession and of its scope of practice.
- Chiropractic services have limited coverage under Medicare and under Medicaid programs in about half the states. In all states, chiropractic services are covered under worker's compensation programs.
- In 20 states, legislation has been passed which mandates either coverage or offering of coverage of chiropractic services under private health insurance policies.
- Federal financial assistance is available to chiropractic students under the HEAL program. However, chiropractic colleges in general receive no state support.

Professional Organization and Practice

Chiropractors have organized their professional and educational structure into a format which to some extent mirrors mainstream medicine. There are two major (and competing) national organizations, the American Chiropractic Association and the International Chiropractors Association, state and local societies, specialty boards, a national Board of Chiropractic Examiners and a Council on Chiropractic Education which recommends policy and sets accreditation standards for chiropractic colleges across the United States.

Within the profession, there continues to be a debate between "straight" chiropractors who limit their activity to spinal manipulation therapy and "mixers" who use a variety of therapeutic techniques, most often different forms of physical therapy. It is recognized by many chiropractors that elaborate claims for universal efficacy of chiropractic care have been greatly overstated in the past, but there continues to be some disagreement within the profession regarding which conditions are appropriate for chiropractic care and regarding appropriate parameters for treatment.

During the field visits, chiropractors were asked how they viewed their position within the larger health care delivery system, and their relationship with orthodox medicine. The respondents maintained that, for many patients, the chiropractor can and should serve as a sort of gatekeeper, doing an initial diagnostic work up on patients, referring those for which chiropractic care is inappropriate. It is for this purpose that many chiropractors are seeking greater access to hospital diagnostic resources and physical therapy facilities, and expansion of their scope of practice in states where their activity is limited. However, many also conceded that most patients at an initial visit present such complaints as headaches or lower back pain, and view the chiropractor as a specialist dealing with a limited set of conditions.

Many of the respondents stressed the value of expanded scientific inquiry into the efficacy of chiropractic, and welcomed the continued upgrading of curriculum and admission standards at the colleges. They were eager to point out the increased time the colleges have allocated to teaching the basic sciences and stressed the increased numbers of PhDs on their faculties from such disciplines as chemistry, physiology, nutrition, etc.

The Problem Side of Chiropractic

Despite the evidence which was presented during the study regarding the increased emphasis on science and

professionalism in the training and practice of chiropractors, there also exist patterns of activity and practice which at best appear as overly-aggressive marketing and, in some cases, seem deliberately aimed at misleading patients and the public regarding the efficacy of chiropractic care. Teaching materials provided by one chiropractic college warn students of "cultists" within the profession which on one side are "anti-diagnosis, anti-therapeutics, pseudo-religious and stress one cause/one cure"; and, on the other extreme, use a "plethora of questionable elixirs, pseudo-medical concepts regarding treatment of specific disorders, and practice a variety of (questionable) healing philosophies."

During the study, discussions were held with reform-minded chiropractors who are in the process of forming a separate professional group of practitioners, the National Association of Chiropractic Medicine, that would set strict standards of ethical conduct and practice, and would actively work in cooperation with consumer groups and others to expose and rid the profession of questionable activities. To date, this group appears to have attracted only a small proportion of the profession. During the discussions, some representatives of schools and associations recognized that there continue to be problems with some of the chiropractors, but emphasized their minority status within the profession.

Examples of problem situations gathered during field visits included:

- Practice-building courses, popular with many chiropractors, advocate advertising techniques which suggest the universal efficacy of chiropractic treatment for every ailment known to humans. The chiropractor's staff is encouraged to reinforce this message even in regard to a patient's questioning the continued use of medication and other therapies prescribed by other physicians for life-threatening conditions and venereal disease.

- A newspaper in Iowa published a multi-part story on chiropractic where a reporter visited many chiropractors and got many different conflicting diagnoses and proposed treatment plans.

- There was testimony regarding patients who, on the basis of a limited examination, had been encouraged to sign contracts for a multi-year course of chiropractic therapy (payable in advance by Mastercharge, Visa or in easy installments).

- A major televison station in Chicago did an expose of cancer scams which heavily involved chiropractors in Illinois.

Prior to the start of this program inspection, OIG regional studies had uncovered problems with chiropractors vis a vis federal programs. Independent studies of chiropractic services conducted by the Chicago, Phildelphia and New York regional offices found serious recordkeeping problems. The office records did not support diagnostic information submitted with the claim; frequently, little else was documented beyond the patient's payment record (i.e. no complaint, no examination notes, no treatment notes or progress notes, no documentation for the taking of or evaluation of x-rays, etc.) Treatments billed for spinal ailments were in fact treatments for sinus problems, bed wetting, crossed eyes, sprained wrist. A review of office records showed patients receiving regular treatment, with little or no change, over long periods of time, some going as far back as late 1960s and early 1970s. In addition:

- For a sample of 21 patients, one New York chiropractor was unable to furnish treatment records for 19 patients, or x-rays for 16 patients.

- A Pennsylvania chiropractor billed Medicaid for the same-day treatment of a nine-member family, with no documentation of such in the office records.

- The Atlanta Regional Office has investigated a chiropractor who, using a medical doctor's provider number and signature stamp, billed Medicare for the x-rays and office visits, and also for physical therapy which was provided (if provided at all) by the chiropractor.

Some of these problems are not unique to chiropractors. But, at a time when chiropractors are pursuing greater legitimacy in the competition for limited health care dollars, caution should be exercised before any changes in coverage are considered.

IV. Chiropractic Under Medicare

The Social Security Act limits Medicare coverage for chiropractic services to **"treatment by means of manual manipulation of the spine to correct a subluxation demonstrated by x-ray to exist."** Because chiropractic theory regarding illness differed so greatly from mainstream medicine, the x-ray requirement was written into the benefit as an attempt to "control program costs by insuring that a subluxation actually exists" (from a 1978 GAO review of Medicare coverage of chiropractic). The consensus, from the chiropractic community as well as representatives of the health care field, is that the x-ray requirement has not served this purpose. As noted previously, Medicare expenditures for chiropractic services have increased at an annual rate of 18.7% between 1975 and 1984.

The responses in the telephone survey (supported by information gathered during the field visits) brought into question some of the other basic assumptions inherent in the coverage. There was no clear consensus as to what a subluxation is; furthermore, in the telephone survey:

- The majority (81%) stated that, on an older person's x-ray, more "wear and tear," osteoarthritis and osteoporosis will show up, and not subluxations per se.

- The majority of respondents (84%) said that there are subluxations that do not show up on x-rays.

- Nearly half stated that, when billing Medicare, they "could always find something" (by x-ray or physical examination) to justify the diagnosis, or actually "tailored" the diagnosis to obtain reimbursement.

- Many respondents in the telephone survey, in advocating a change in the benefit, volunteered that the majority of their Medicare patients had chronic conditions that would never be corrected, and were receiving what was essentially palliative or maintenance care for those conditions.

These responses raise serious questions as to the extent that Medicare is paying for conditions that do not meet the original intent of the law.

Subluxations and the X-ray Questions

Previous regional studies of selected chiropractors raised serious questions as to whether chiropractors were billing

only for treatment of subluxations visible on x-rays, as specified by the Medicare benefit. The 1974 ACA guidelines for Medicare claims review (later withdrawn) stated:

> "subluxations ... demonstrable by x-ray represent only a relatively small portion of spinal subluxations treated by Chiropractic Physicians. Clinical subluxations not necessarily demonstrable by x-ray, constitute the majority of spinal subluxations successfully treated by Chiropractic Physicians."

In our current study, the on-site discussions with chiropractic schools and associations went even further. As was summarized at one school: subluxations are a minor part of chiropractic practice, the term itself is out-of-date, and the x-ray requirement is a distortion of chiropractic which forces chiropractors to state a subluxation is present on an x-ray even when it is not.

Based on a 1979 New Zealand study of chiropractic praised by chiropractors in its fairness to their profession, chiropractors in the telephone survey were asked whether there were different categories of subluxations (such as "structural" and "functional") and whether there are subluxations that do not show up on x-rays. According to the New Zealand report, "structural" subluxations are generally visible on x-rays; "functional" subluxations may not be evident on x-rays because they relate to the functioning of a joint, as in impaired range of motion. While no clear consensus emerged around the structural/functional distinction itself, 84% of the respondents in this current study said that there are subluxations that are not visible on a standard x-ray, and their descriptions generally related to function (fixations, hyper/hypo-mobility).

Having gotten a consensus that some subluxations are not visible on x-rays, respondents gave a very different set of answers when asked whether chiropractors do anything different in treatment or billing when a Medicare patient's x-ray does not show a subluxation:

- 29% stated that one could "always find something" on the x-ray to justify the billing, but there was wide divergence as to whether this "something" correlated to the patient's complaint or treatment.

- 10% indicated that if they determined the subluxation by other means (i.e. physical examination and palpation) they billed it as though it appeared on the x-ray;

- 6% actually said they "adapted" their diagnosis to "what Medicare wants to hear." As one chiropractor said, "Do we change the diagnosis? I'll find a millimeter out of alignment or rotated on any x-ray ... It's called 'the insurance game'... I don't consider it lying - it's just learning how to function within the system ... [for example,] when you get to the allowed number of treatments, change the subluxation up or down one and give a new date of onset."

Examining the responses about the appropriateness of x-rays in relation to the age of patients helps provide at least an internal logic to the apparent contradictions in these responses. Eighty-one percent of the respondents indicated that the older a person, the greater the likelihood of conditions showing up on x-rays; however 87% of this subgroup specified general degeneration of the spine, osteoarthritis, osteoporosis, and not subluxations per se, as the kinds of things that would show up. The implication is that although there are subluxations that do not show up on x-rays, a chiropractor "can always find something" on an older person's x-ray that for Medicare purposes can be related to, or reinterpreted as, a subluxation.

The cost of an x-ray to justify Medicare reimbursement can often exceed the total reimbursement for the treatments themselves. Almost every chiroprctor interviewed complained that this high initial expense was unfair to a patient already on a limited income. However, a great many chiropractors, including those who disagreed with the x-ray requirement, admitted that they would x-ray the Medicare age group anyway, either to rule out inappropriate conditions (e.g., cancer) or to protect themselves from malpractice suits. This becomes an important consideration when looking at the requested coverage changes below.

Desire for Expansion of Medicare Coverage.

At the beginning of each telephone interview and again at the end, chiropractors were queried about changes they would like made in the Medicare benefit. Far and away, the biggest response (68%) was for coverage/reimbursement of x-rays. Thirty-one percent felt the x-ray requirement should be changed or eliminated, but many felt the x-ray should be reimbursed even if the requirement were dropped. From the discussion in the previous paragraph, it is unclear whether dropping the x-ray requirement will result in significantly fewer x-rays. Any shifting of x-ray costs from the patient to the program could mean substantial increases in Medicare expenditures.

Thirty-seven percent of the respondents felt that Medicare should expand coverage to include more or all of the chiropractors' scope of practice (i.e. what they had been taught and are licensed to perform). Linked with this group were 17% who specifically wanted coverage for physical therapy by chiropractors, 8% who wanted coverage for the initial examination, and 13% who wanted parity in coverage and/or reimbursement with mainstream medical practitioners. 18% recommended the liberalization or elimination of the limits on the number of allowable visits. The implementation of any of these recommendations would result in significant increases in Medicare payments, with no new effective control over quality or quantity of services.

The chiropractic schools and professional associations voiced support for all of these changes. In addition, many school representatives spoke of the need for federal funding for research, comparable to the research money available to medical schools.

As noted previously, it is unclear to what extent Medicare now pays for treatment of conditions that do not meet the original intent of the law. The chiropractic community seems to sidestep rather than clarify the ambiguities involved in the current program while requesting a major increase in coverage and costs for the Medicare program.

V. Billing and Payment Patterns for Chiropractors in the Sample

The actual pay-out of Medicare dollars for chiropractic services depends on both the volume and variety of claims which are submitted for payment and on how Part B carriers review and process them. There are differences in treatment philosophy and practice between chiropractors (as well as differences in patient preference) which result in a wide variance in both the number of services billed and in the types of covered and non-covered services that are included. As indicated above, there is a significant (but undetermined) volume of billing for correction of subluxations that do not show up on an x-ray.

Carriers have systems in place to deny claims for some non-covered services (e.g. physical therapy) but not others (e.g. manipulation of the spine where the subluxation is not demonstrated by x-ray). They have no common standards to determine the appropriate frequency of covered services and there is little consistency among carriers in the number of covered services per patient that are approved for payment. Less than 6% of all services billed are denied for utilization reasons. Because claims for chiropractic care include many services at small cost, and because the review of claims (beyond determination of completeness, and whether a service is covered) is labor intensive and expensive, carriers seldom review actual x-rays or office records. Denial of claims flagged by utilization screens has relatively little effect on Medicare payout. (See Appendix B for a more detailed discussion of these patterns than is presented below.)

Billing Patterns

The average number of services billed for a patient in the sample was 13.4 and the average number allowed for payment was 10.4. The average total dollars billed for a patient was $224, the average allowed was $131 and the average paid was $87. The average number of Medicare patients served by a chiropractor in the sample was 39.

These averages, however, mask the diversity across the full range of the scale. At the low end, about 28% of the patients only received between 1 and 5 services in a year that were billed to Medicare. At the high end, however, 19% of the patients received more than 20 services, almost half (47%) of all services billed. In the sample 14.3% of the chiropractors on average billed for more than 20 services for each Medicare patient seen.

Payment Patterns by Carriers

The Medicare Carriers Manual recognizes the somewhat ambiguous position of chiropractic and states that:

> "Implementation of the chiropractic benefit requires an appreciation of the disparate orientation of chiropractic theory and experience and those of traditional Medicine since there are fundamental differences regarding the etiology and theories of the pathogenesis of disease" (Sec. 2250)

The manual presents a system for classifying subluxations, a general discussion of treatment parameters and a schema for relating various symptoms to a particular area of the spine. The manual also lists examples of conditions for which manual manipulation of the spine is not an appropriate treatment. Some critics have suggested that this system has provided a blueprint for some chiropractors to work backward to identify the appropriate location of a subluxation for billing purposes, as opposed to treating and billing for a subluxation which has been identified on an x-ray.

Claims for payment for chiropractic services must include a statement of diagnosis and symptoms, specify the precise level of the spinal subluxation and must indicate that an x-ray film is available for carrier review. The carriers appear to spend a considerable amount of time assuring that the documentation on the claim is complete, but seldom is an actual x-ray or office record reviewed. Most carriers have instituted automated systems which (if the procedure is coded correctly) reject claims for non-covered services such as x-ray or physical therapy. The carriers have set up their own frequency parameters which flag for review the claims of patients whose number of covered services exceeds the carrier's established thresholds for review. There is little consistency nationally, and none at all in the sample carriers, regarding these parameters.

In the sample, 22% of all services submitted for payment were denied by the carriers. Of these, 16.7% were denied more or less automatically because they were duplicate bills or non-covered services, while only 5.3% were denied because they exceeded frequency parameters or failed to meet other utilization review criteria. There was little consistency among carriers in their overall denial rates which ranged in total between 2.7% and 47% of all services. Similarly, denials for non-utilization reasons ranged between 0.3% and 32.2%, and denials for utilization ranged between 0.8% and 14.8%.

An examination of how individual chiropractors fared in relation to the intensity with which they treated patients or billed for services showed only a limited relationship. Chiropractors that on the average billed for more than 20 covered services per patient per year had 20.6% of their covered services denied, but there was little variation in the percent of covered services denied for groups of chiropractors that on the average billed for 20 or fewer services per patient per year.

In order to bring at least partial consistency to frequency screens, HCFA in the fall of 1984 set up a pilot project which would require some carriers to review all claims for chiropractic care for chronic cases that exceeded one treatment per month. However, there was no common definition provided for chronic care. At the time this study was begun, there had been only partial participation in this project and at least one of the participants had modified HCFA's mandated frequency screens because too many cases would have been selected for additional intensive review.

When processing chiropractic claims, the carriers have had to individually impose administrative order on a situation where the standards for evaluating x-ray documentation are ambiguous and there is no concensus regarding the number of services a patient should receive. It seems clear that the x-ray requirement is ignored by some chiropractors. On a benefit/cost basis, the x-ray requirement may be unenforceable. This suggests the need for a change in the benefit which would provide a workable approach to limiting utilization as originally intended by Congress and which would reflect somewhat more clearly the current realities of chiropractic practice.

VI. Recommendations

- o HCFA and the Department should vigorously oppose any movement to expand the coverage of chiropractic services to include an initial diagnostic visit, x-ray, laboratory services or adjunctive therapy. In the absence of effective utilization controls, the cost of these proposals would more than double the cost of chiropractic care under the Medicare benefit in the next several years (from $93.6 million in CY 84 to more than $260 million in CY 87.)

Legislation was introduced in the 98th Congress which would remove the x-ray requirement for justifying chiropractic services and would expand Medicare coverage to payment for an appropriate x-ray, physical examination and related routine lab tests. Chiropractic associations and individual practitioners would also like to see coverage of adjunctive (physical therapy) services.

The financial impact of expansion would be great. A survey done by the American Chiropractic Association indicates that in 1984, the median bill for an initial visit to a chiropractor, including diagnostic tests, x-ray etc, was about $110. If bills at this amount were submitted for only half of the patients seen by chiropractors in the sample (and paid at 80%), the Medicare expenditures for the sample would increase more than 50%. Coverage of physical therapy would at a minimum increase cost by another 16% (the amount denied by carriers in the sample for non-covered services). Under an expanded program, (and assuming an annual rate of growth in the cost of chiropractic services of 18.7%) it is projected that in CY 87, total annual cost to Medicare for chiropractic services would more than double to $260 million. Given Medicare history relative to coverage of other physical therapy services, and the 50% expected increase in chiropractors over the next five years, the amount would probably be greater.

- o HCFA and the Department should consider submitting a legislative proposal to Congress which would:

  - Continue to limit Medicare coverage of chiropractic services to manual manipulation of the spine to correct a subluxation demonstrated by x-ray to exist.

  - Cap the number of services for which a patient could receive payment at 12 per year. All covered services over 12 visits would be automatically denied. ($23.9 million savings in CY 87.)

The carriers have in place systems which for the most part routinely deny payment for non-covered services, such as x-ray, laboratory tests or physical therapy, provided by chiropractors. However the requirement that Medicare cover only the treatment of those subluxations demonstrated by x-ray is not well enforced and may be unenforceable. Although the chiropractors in this study admit they sometimes bill for services in cases where the subluxation is not clearly demostrated by x-ray, the carriers have not found x-ray review to be cost effective. This is because there is little agreement among carriers, chiropractors or others regarding the criteria which should be used to determine which conditions of the spine (shown on an x-ray) are actually subluxations which require treatment. X-ray review is also labor intensive, relatively expensive and often the last step in the process of determining which claims should be paid.

In addition, the carriers indicate that even when an x-ray clearly shows a subluxation, there are no agreed upon standards regarding the appropriate number of services (manipulations) required to treat a given acute or chronic condition. Similarly, neither national chiropratic association has approved or endorsed any utilization review criteria. Given the ineffectiveness of these brakes on costs and utilization, a 12 service per year cap is recommended.

The impact of a 12 service cap on patients would be minimal. It would allow patients with chronic conditions one treatment a month and would encompass the number of services provided to a majority of the patients needing acute care. (Over two thirds of the patients in the sample received less than 12 covered services per year.) Patients who do not respond after 12 treatments would still have the option of seeking additional services in the traditional medical care system. The cap would also provide both patients and chiropractors with a known level of coverage against which treatment decisions could be made. The imposition of a cap would be similar to the dollar limitation which has been imposed on outpatient psychiatric services and on services provided by independent physical therapists.

In December 1985, HCFA mandated all carriers to implement a screen on chiropractic claims set at 12 services per year.

The manual issuance requires that "[m]edical necessity determinations must be made on all claims where the parameters are exceeded." Carriers are required to "[r]eview both those claims which exceed the parameters and those which do not." However there remains the question of what standards should be used to evaluate these claims.

If this screen is implemented with a level of development and review sufficient to deal with the problems raised by this inspection, the burden on the carriers could be quite heavy. We estimate that between 31% and 56% of the Medicare patients receiving chiropractic services will have their claims examined. This is the range between the proportion of patients with 12 or more approved services and the proportion with 12 or more billed services. Some will require more than one review because they will submit claims after the first batch of 12 is examined or because they are treated for more than one acute episode.

If a well developed review (with examination of an x-ray) costs at least $10, if 5.2% of the 31 million Medicare patients with part B coverage see a chiropractor each year, if 43.5% require review, and if each patient in the sample is reviewed 1.5 times, then the annual cost to the carriers will be $10.5 million. Since HCFA requires a 5 to 1 return on medical review/utilization review, the cariers would have to reduce total chiropractic pay out almost 50% to meet the standard. It may be argued that some reviews can be done for less than $10, but these would involve no additional contact with the chiropractor, no x-ray review and no consideration of evidence other than that which is submitted on the face of the claim.

Based on sample data, a 12-visit cap would annually save about 8.6% in Medicare expenditures for chiropractic services. Assuming an 18.7% annual rate of growth of the billings for chiropractic services, this would amount to about $13.4 million in savings from reduced payment for services in CY 87. To this can be added a reduction of $10.5 million per year, the estimated additional cost of the HCFA mandated screens, for a total savings of $23.9 million a year. (See Appendix C for a further discussion of the derivation of the impact of the cap.)

- The Department should examine the ways in which it can further encourage the submission of scientific research proposals by chiropractic colleges, which meet the standards applied to other projects supported by the National Institutes of Health.

There continues to be a debate within the chiropractic profession, and with outside observers, regarding the extent to which chiropractic should be accepted and judged only by the internal standards of the profession. This discussion has been influenced by the separatist approach which chiropractors have historically maintained and by their reaction to criticism from organized medicine.

As chiropractors seek access to mainstream resources and look for acceptance by a larger portion of the society, there would be value for all parties in finding a meeting ground where issues could be examined within a common set of ground rules and definitions. Increased access to research funding by chiropractic colleges would provide one point of mutual interaction between chiropractors and other health professions, and would serve to enhance the position of those segments of the profession that seek to improve the quality of chiropractic education and who would work to limit the use of questionable diagnostic and therapeutic techniques used by some chiropractors.

Appendix A

Sampling Methodology for Telephone Survey and Review of Provider Histories

In order to obtain a representative sample of carriers, providers and patients for use in the telephone survey and in review of provider histories, the following steps were taken:

(1) OIG headquarters staff obtained from HCFA a print-out of "Part B Expenditures for Chiropractors by Type of Service, Payment Records Processed 1/83 - 12/83." Each carier's percentage of total dollars paid was determined and multiplied times 10,000. Each carrier was assigned sequentially a block of numbers equal to its share of 10,000. Eg, carrier #1 was assigned numbers 1-154, carrier #2, numbers 155 - 245, etc.

(2) Ten numbers from a range of 1 to 10,000 were selected using a random number table, and carriers where selected whose block of numbers encompassed the selected numbers. Because we were sampling with replacement, 6 carriers were selected once and 2 carriers came up twice.

(3) From each carrier that was selected, a list of current chiropractors with provider numbers was requested. Using a random number table, 20 provider numbers were selected from each of the carriers that came up once and 40 chiropractors were selected from the 2 carriers that came up twice.

(4) Of the 200 chiropractors selected, telephone discussions were completed with 145.

(5) A complete provider history for CY 83 was requested for each provider selected. Because the list of provider numbers was current, but the billing histories were over a year old, only 152 provider histories were obtained.

Appendix B

Expanded Discussion of Treatment, Billing and Payment Patterns for Chiropractors in the Sample

Treatment and Billing Patterns

Of the 200 randomly selected chiropractors, 154 had payment histories indicating services had been billed for one or more Medicare beneficiaries in 1983. The remaining 46 chiropractors had an active Medicare billing number, but no bills had been received for processing because they were not then serving Medicare patients, or had moved, retired or expired. The 154 chiropractors served 5964 patients and provided 79,775 services that were billed to Medicare. The total dollar value of these services billed was $1,337,604, the amount allowed $785,349, and the amount paid $516,499.

- The average number of services billed for a patient was 13.4 and the average number allowed was 10.4.
- The average total dollars billed for a patient was $224, the average allowed $132, and the average paid $87.
- The average number of Medicare patients served by a chiropractor (for which a bill was submitted) was 39.
- The average total number of services billed by a chiropractor for all patients served was 518, and the average number of services allowed and paid was 404.
- The average total dollar value of services billed by a chiropractor was $8686, allowed was, $5100, and paid $3354.

But further consideration should be given to patterns at the high and low ends of the treatment scale. Table 1 below presents a breakdown of patients and services by frequency of services billed per patient. Table 2 illustrates treatment patterns in a somewhat different way by grouping chiropractors according to the average number of services billed for all the patients in their practice, and showing the percent of all patients served by each group of chiropractors and the percent of all billed services that were provided.

Table 1

Number, Percent, and Cumulative Percent of Patients and Services Billed by Number of Services Billed Per Patient

Number of Services Billed	Number of Patients	% of Patients	Cumulative % of Patients in Sample	Number of Services Billed	% of All Services Billed	Cumulative % of Services Billed
1-5	1,688	28.3%	28.3%	5,185	6.5%	6.5%
6-10	1,449	24.3	52.6	9,015	11.3	17.8
11-15	1,038	17.4	70.0	16,035	20.1	37.9
15-20	644	10.8	80.8	11,727	14.7	52.6
21 +	1,145	19.2	100%	37,813	47.4	100%
Total	5,964	100%		79,775	100%	

As indicated in Table 1, about half (52.6%) of the patients in the sample received 10 or fewer services that were billed to Medicare. This is fairly evenly divided between the 28.3% of the patients that received between 1 and 5 services and the 24.3% that received between 6 and 10 services. At the other extreme, 19.2% of the patients received more than 20 services and accounted for almost half (47.4%) of all services billed. The distribution of these high-use patients tapers off fairly quickly, but extends far to the right. For example, 11.7% of the patients received between 21-30 services (25% of all services billed), and 4.1% of the patients received between 31-40 services (11.2% of all services billed). The highest user was a patient that had 153 services billed to Medicare in 1983.

Table 2

Number, Percent, and Cumulative Percent of Chiropractors, Patients Served and Services Billed by Average Number of Services Billed Per Patient

Average Number of Services Billed Per Patient	Number of Chiro-practors	% of all Chiroprac-tors (Cum. %)	Number of Patients Served	% of all Patients Served (Cum. %)	Number of Services Billed	% of all Services Billed (Cum. %)
1-5	19	12.3% (12.3%)	200	3.4% (3.4%)	807	1% (1%)
>5-10	38	24.7 (37)	1,253	21.0 (24.4)	10,213	12.8 (13.8)
>10-15	55	35.7 (72.7)	2,710	45.4 (69.8)	33,626	42.2 (56)
>15-20	20	13.0 (85.7)	1,315	22 (91.8)	23,309	29.2 (85.2)
>20	22	14.3 (100%)	486	8.2 (100%)	11,820	14.8 (100%)
Total	154	100%	5,964	100%	79,775	100%

Table 2 provides a view of the billing and service patterns of chiropractors in the sample broken out by the relative intensity of their practice - the average number of services billed for each Medicare patient they served. The median chiropractor provided on the average between 10 and 15 services that were billed. At the low end 12.3% of the chiropractors (serving 3.4% of the patients) averaged between 1 and 5 services per patient. At the other end, 14.3% of the chiropractors averaged more than 20 services per patient, served 8.2% of all patients in the sample, and accounted for 14.8% of all services billed.

There are a number of explanations for these differences in billing patterns. Although Medicare pays only for manual manipulation of the spine, some chiropractors obviously provide other services such as x-ray and adjunctive services which are included on the bills submitted. In addition, there continue to be differences in treatment philosophy between "straights" and "mixers" which might account for some variation. Chiropractors also have differing views regarding which conditions are appropriate for chiropractic treatment and there are indications that a proportion of the profession advocates regular maintenance and preventive care that may not be specifically related to either an acute episode or a specific, chronic condition. There are no commonly accepted frequency parameters for care which have been agreed upon at the national level by the profession, and standards previously adopted have been withdrawn.

An important reason for the variation in frequency which must be considered is patient preference. The high percentage of patients receiving between 1-5 and 6-10 services, suggests that there are a number of elderly persons who go to a chiropractor seeking relief for a particular acute episode or who may see a chiropractor briefly and discontinue treatment. There are also economic incentives (co-payments and deductibles) which would operate to modify utilization all across the scale.

Part B Carrier Processing and Payment of Claims

The actual payment for chiropractic services under Medicare depends on the processing of claims by the Part B carriers. The Medicare Carrier Manual recognizes the somewhat ambiguous position of chiropractic and states that:

> "Implementation of the chiropractic benefit requires an appreciation of the disparate orientation of chiropractic theory and experience and those of traditional medicine since there are fundamental differences regarding the etiology and theories of the pathogenesis of disease." (Sec. 2250)

The Medicare Carrier's Manual presents a system for classifying subluxations, a very general discussion of treatment parameters and a schema for relating various symptoms to a particular area of the spine. The manual also lists examples of conditions for which manual manipulation of the spine is not an appropriate treatment, e.g. rheumatoid arthritis, muscular distrophy, multiple sclerosis, emphysema, etc. Some critics have suggested

that this system provides a blueprint for some chiropractors to work backward to identify the appropriate location of the subluxation based on a complaint, as opposed to treating a subluxation which has been identified on an x-ray or by other means.

Claims for payment of chiropractic services require more documentation than is required for comparable services provided by an MD or DO. In addition to a statement of a diagnosis and symptoms, a claim for chiropractic services must:

> "Specify the precise level of spinal subluxation, contain certification on all bills by the treating chiropractor that an x-ray film is available for carrier review demonstrating a subluxation at the specified level of the spine; and include identification of the treatment phase and adjustment - e.g. second, fifth, tenth treatment." (Sect. 4118B)

The carriers appear to spend a considerable amount of time assuring that written documentation is available on the face of the claim submitted. Claims without this documentation should routinely be denied. But only in the most unusual cases is there any review of a chiropractor's actual office records to compare what is written on the claim with what has been recorded in the patient's history. Seldom is an actual x-ray film reviewed. One chiropractor that serves on a carrier professional review committee,interviewed as part of the field study, discribed the quality of some office records and x-rays that he had reviewed as an embarassment to the profession.

Most of the carriers have instituted claims processing systems which should (if the procedure is coded correctly) easily and automatically reject all claims for non-covered services such as x-ray, laboratory or physical therapy provided and billed by a chiropractor. As indicated and discussed further below, over 75% of all the rejections of services for payment are on the basis of lack of documentation or for submission for payment of a non-covered service.

Once non-covered services have been eliminated, the covered manual manipulation of the spine services are evaluated for necessity. The carriers have set up their own frequency parameters which flag for review the claims of patients whose number of covered services exceeds the carrier's established limits. There is little consistency nationally, and none at all among the carriers in the sample, regarding these frequency screens.

In order to bring at least partial consistency to these frequency screens, HCFA in the fall of 1984 set up a pilot project, which would require some carriers to review all claims for chiropractic care for chronic cases which exceeded one treatment per month. However, there was no common definition provided for chronic cases. At the time this study was begun, there had been only partial participation in this pilot project, and at least one of the participants had modified HCFA's mandated frequency screens because too many cases would have been selected for additional intensive review.

The extreme variation in dealing with chiropractic claims among carriers in the sample is illustrated in Table 3 below which presents the number and percent of services denied by each carrier in its sample, broken down by "Non-UR" (non-covered services, etc) and UR (Exceeding frequency screens, etc.) reasons.

Table 3

Number of Services Billed and Number and Percentage of Services Denied by Non-Utilization Review and Utilization Review Categories.

Carrier	Services Billed In Sample	Number and % of Services Denied		
		Non-UR (%)	UR (%)	Total (%)
A	10,972	37 (0.3%)	265 (2.4%)	302 (2.7%)
B	9,979	556 (5.6)	661 (6.6)	1,217 (12.2)
C	4,698	177 (3.8)	247 (5.3)	424 (9.0)
D	10,418	2,280 (21.9)	147 (1.4)	2,427 (23.3)
E	14,430	3,904 (27.1)	122 (0.8)	4,026 (27.9)
F	11,805	1,553 (13.2)	960 (8.1)	2,513 (21.3)
G	10,073	3,245 (32.2)	1,493 (14.8)	4,738 (47.0)
H	7,400	1,600 (21.6)	351 (4.7)	1,951 (26.3)
Total	79,775	13,352 (16.7%)	4,246 (5.3%)	17,598 (22.0%)

As indicated in Table 3, 22% of all billed chiropractic services presented for payment are denied. This ranges among carriers from 2.7% to 47.0%. Denial rates for non-UR reasons range from 0.3% to 32.2%, and averages 16.7% Denial for UR reasons range from 0.8% to 14.8% and averages 5.3%. Over 75% of all denials are for non-UR reasons; that is, the services were not covered by Medicare. Less than 25% are because the number of services provided exceeded one of the various frequency screens. Given the low dollar amount paid per chiropractic service, low rate of UR denial and the high cost of development, the IG seriously questions the cost effectiveness of edits in controlling chiropractic utilization.

Another way of considering the carrier's handling of claims is to examine the patterns of denials for utilization reasons after claims for non-covered services and duplicate bills have been removed. Table 4 below shows distribution of chiropractors, the number of patients they serve and services they bill arrayed by the relative intensity of covered services (total services billed less non-covered services) which they bill. It also shows the relative denial rates for covered services which were billed.

Table 4

Number and Percent of Chiropractors, Patients Served and Services Billed after Denial for Coverage; and Percent of Services Denied for Utilization Review Reasons by Average Number of Services Billed per Patient after Denial for Non-covered Services

Average Number of Services Billed Per Patient After Denial for Non-covered Services	Number of Chiropractors (%)	Number of Patients Served (%)	Number of Services Billed After Denial for Coverage (%)	Percent of Services Denied for UR
1-5	21 (14%)	284 (4.8%)	1,103 (1.7%)	1.5%
>5-10	56 (38)	2,155 (36.2)	16,769 (25.2)	4.1
>10-15	49 (33)	2,308 (38.7)	28,246 (42.5)	7.7
>15-20	15 (10)	1,117 (18.7)	17,986 (27.1)	5.0
>20	7 (5)	93 (1.6)	2,319 (3.5)	20.6
Total	148 (100%)	5,957 (100%)	66,423 (100%)	6.4%

As indicated in Table 4, over 10% of the chiropractors in the sample (serving 18.7% of the patients) bill for an average of between 15-20 covered services (manual correction of a subluxation) per year. Approximately 5% of the chiropractors (serving about 1.6% of the patients) bill for an average of more than 20 services per year. As would be expected, the carriers rejected for payment only 1.5% of the covered services billed by chiropractors who bill for between 1-5 services per patient. There is relatively little difference in the denial rates for providers who billed between 5-10, 10-15 and 15-20 services per year. The carriers denied 20.6% of covered services for chiropractors that billed for more than 20 services.

Across the board, however, there is no statistical relationship between the average number of covered services billed and the denial rate for services that exceed frequency parameters. That is, knowing the relative intensity with which a chiropractor provides covered services to his patients does not allow one to predict at what rate services will be denied because frequency or other UR screens are exceeded.

Appendix C

Estimation of the Effect of a 12 Service Cap

1) For the 152 chiropractors in the sample that billed patients for one of more services in CY 83, the following information was gathered: total number of services billed and allowed; total dollars billed, allowed and paid; total number of patients served; total number of services denied for (a) utilization and (b) non-utilization reasons, and total dollar value of services denied for (a) utilization reasons.

2) It was assumed that the effect of a cap could only be projected on the basis of a reduction in allowed services and allowed dollars. That is, no credit could be taken for any reduction in billed services that the carriers would have made had there not been a cap in effect.

3) The average number of allowed services per patient (total allowed services/total patients served) was determined for each chiropractor. The chiropractors were divided into two groups: (A) chiropractors with an average number of allowed services equal to or less than 12 and (B) chiropractors with an average number of allowed services greater than 12.

4) A new variable (total dollars paid after the cap) was created for each chiropractor. For chiropractors in the (3A) group (providers with an average number of services allowed per patient equal to or less than 12):

Total dollars paid after the cap =
Total dollars paid.

For chiropractors in the (3B) group (providers with an average number of services allowed greater than 12.

Total dollars paid after the cap =
12 X Total patients served x (Total dollars paid/Total services allowed).

(5) The Percent of dollars saved under the cap =

$$1 - \left(\frac{\text{Weighted} \sum (\text{Total dollars paid after cap})}{\text{Weighted} \sum (\text{Total dollars paid})} \right) = .085.$$

(6) Because of the lack of availability of data, we were forced to make the final estimate of savings based on the average number of services billed. We know that some patients served by chiropractors with an average number of services per patient allowed equal to or less than the cap, had allowed services greater than the cap; and that some patients served by chiropractors with an average number of services allowed per patient greater than the cap have an allowed number of services less than the cap. For purposes of computation it is assumed these two groups would balance out.

(7) The projected dollar savings for 1987 assumed a 18.7% annual rate of growth and was computed as follows:

Dollar savings in CY 87 =

1984 Medicare expenditures for chiropractic services x
Annual rate of growth for three years x
Percent of dollars saved under the cap =

$93.6 million x(1.187 x 1.187 x 1.187) x .085 =

$13.3 million.