



PREFACE

This report is provided to the Committees on Armed Services and the full Congress pursuant to Section 731 of Public Law 103-337 and Section 739 of Public Law 105-85 by the following Doctor of Chiropractic members of the CHCDP Oversight Advisory Committee:

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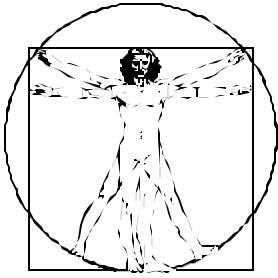
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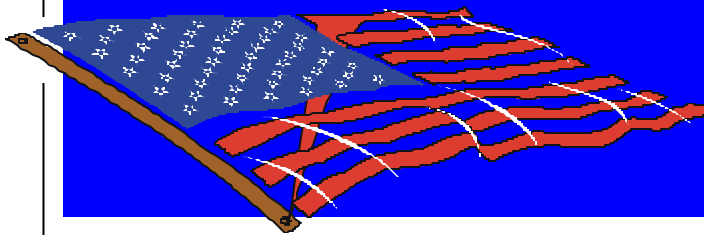
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REPORT

ON THE DEPARTMENT OF DEFENSE

CHIROPRACTIC HEALTH CARE DEMONSTRATION PROGRAM



*Prepared by the
Chiropractic Members of the
Oversight Advisory Committee
in collaboration with
Muse & Associates, Inc.*

March 3, 2000

*Submitted Pursuant to Section 731 of
Public Law 103-337 and Section 739 of
Public Law 105-85*

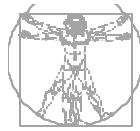
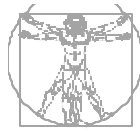
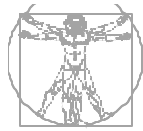


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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Section 731 of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337) mandated the conduct of the Chiropractic Health Care Demonstration Program (CHCDP) and the establishment of an oversight advisory committee (OAC) to assist and advise the Secretary of Defense in the development and conduct of the CHCDP, including the preparation of reports to the Congress. Congress directed the Secretary of Defense, with the assistance of OAC members, to evaluate the feasibility and advisability of introducing chiropractic care into the military health service (MHS) based on the CHCDP.

This report was prepared because the Doctor of Chiropractic members of the OAC do not believe that they have been afforded sufficient opportunity for input during the course of the CHCDP nor was their involvement sought in the analysis of CHCDP data or preparation of the draft final report by Birch & Davis, the CHCDP contractor. The results of this independent analysis of the CHCDP and associated data are presented below.

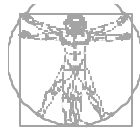
Is it both feasible and advisable to introduce chiropractic care into the MHS?

Yes. An evaluation of the data used in the CHCDP overwhelmingly indicates that it is both feasible and advisable to introduce chiropractic care into the MHS.

What would be the annual net savings to the Department of Defense (DoD) of introducing an open benefit policy for chiropractic care?

Birch & Davis estimate that the cost to the MHS of an open benefit policy for chiropractic care would be \$70.9 million. However, these costs will be reduced by offsets for inpatient care, emergency room services, physician services, physical therapy, other services, and recovered days. These cost offsets which will result in annual net savings to the DoD of \$25.8 million, explicitly demonstrate the advisability of adding chiropractic care to the MHS.

Annual Net Savings To DoD		
<i>Cost</i>	<i>Components</i>	<i>Source</i>
\$70,926,671.64	Unconstrained Demand Open Benefit	B&D Report Page IV-2
\$27,824,195.08	Central Range Recovered Days Savings (N=199,000)	B&D Report Page IV-2
\$18,028,204.45	Total Eliminated Charges With Chiropractic Services	Page 34
\$50,890,528.70	Total Saved Charges From Physical Therapy Substitution	Page 33
<i>\$25,816,256.59</i>	<i>Annual Net Savings To DoD</i>	



How much of a problem are spinal maladies in the Armed Forces of the U.S.?

The Birch & Davis report indicates that spinal maladies remain a major problem for the military. Using data from the CHCDP report, we estimate that about 5 percent of all military personnel will be treated for lower back pain during a given year. Additionally, the Demonstration illustrates the inadequacy of the MHS to currently address this problem. Integrating chiropractic care into the MHS will help address the current inadequacies and lack of options to access appropriate services for the treatment of lower back pain.

Did CHCDP participants who utilized chiropractic care for the treatment of lower back pain experience superior outcomes compared to patients who received more traditional types of care?

Yes. Military personnel who used chiropractic care for the treatment of lower back pain experienced superior outcomes compared to patients who received care from traditional medical providers. A higher proportion of chiropractic patients reported that they felt better, had less pain, and had fewer restrictions/physical limitations than patients receiving traditional medical care. Chiropractic patients also reported fewer days away from work or on restricted duty due to their medical condition.

Did chiropractic patients report higher levels of satisfaction than did patients receiving traditional medical care for treatment of lower back pain?

Yes. A review of CHCDP data indicates that chiropractic patients are more satisfied with their care than are patients who received traditional medical treatments. A higher proportion of patients seen by Doctors of Chiropractic reported greater satisfaction with their improvement (and their providers) compared to patients treated by traditional medical providers.

What are the implications of integrating chiropractic care into the MHS on military readiness and retention?

Integrating chiropractic care into the MHS will result in improved access to health care services for military personnel and will lead to the recovery of between 111,000 and 331,000 additional duty days per year. Improved access is directly correlated with patient satisfaction and is viewed by the DoD as a mechanism to enhance quality of life and raise morale among active duty personnel. Since results from the CHCDP indicate that military personnel who received chiropractic care returned to work faster and spent fewer days on restricted duty due to their medical conditions, there is reason to believe that integrating chiropractic care into the MHS will lead to enhanced readiness and increased retention in the military.



SECTION I

INTRODUCTION



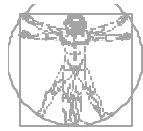
INTRODUCTION

Section 731 of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337) mandated the conduct of the Chiropractic Health Care Demonstration Program (CHCDP) and the establishment of an oversight advisory committee (OAC) to assist and advise the Secretary of Defense in the development and conduct of the CHCDP, including the preparation of reports to the Congress and the evaluation of the program. A copy of the CHCDP final report to Congress, prepared by Birch & Davis, the lead contractor on the CHCDP, has been prepared and forwarded to Admiral Thomas F. Carrato, Chief Operating Officer, TRICARE Management Activity. An initial draft of this report was made available to the Doctor of Chiropractic members of the OAC in November 1999, with a very short comment period. The OAC was not afforded an opportunity to meet and discuss the Birch & Davis draft before it was released for review. Also, an inordinately short amount of time was permitted for comments. A revised copy of the final report was received on February 16, 2000, with just one week allowed for submitting comments.

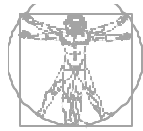
The current report was prepared because the Doctor of Chiropractic members of the OAC do not believe that they have been afforded sufficient opportunity for input during the course of the CHCDP nor was their involvement sought in the analysis of CHCDP data or preparation of the draft final report as mandated by Congress. Clearly, the report attests to the feasibility of providing chiropractic services in the military health system (MHS). However, in the opinion of the Doctor of Chiropractic members of the OAC, the final report does not adequately reflect the advisability of including chiropractic services in the MHS. Hence, we have prepared this report to address issues that we believe have not been adequately dealt with in the DoD report as well as to summarize some of the important findings from the Birch & Davis draft.

The remainder of this report is organized into 4 Sections. Section II presents background information on the CHCDP, including the legislative history. Findings concurrent with the CHCDP report are presented in Section III. Additional findings, including an estimation of the cost savings of chiropractic care to the MHS, are discussed in Section IV. Our recommendations for development and implementation of a plan to integrate chiropractic care into the MHS are presented in Section V.

Additionally, three appendices are included. Appendix A provides information on the nature of chiropractic care and its relationship to other aspects of health care. Contained in Appendix B is a copy of the December 1, 1999 letter that we, the chiropractic members of the OAC, submitted to Admiral Carrato, Chief Operating Officer, TRICARE Management Activity, critiquing the initial Birch & Davis draft of the CHCDP final report. Our February

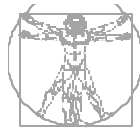


23, 2000 letter to Admiral Carrato reviewing the Birch & Davis February 10, 2000 revised final report is included as Appendix C.



SECTION II

BACKGROUND AND LEGISLATIVE HISTORY



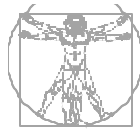
BACKGROUND AND LEGISLATIVE HISTORY

As mentioned in the Introduction, the CHCDP, including creation of the OAC, was mandated by Public Law 103-337. In 1997, the CHCDP was extended by Section 739 of Public Law 105-85, The National Defense Authorization Act for Fiscal Year 1998, for two additional years to expand the number of the participating sites and to further explore prospects of providing chiropractic health care services to the military on a more permanent basis.

Last year, Congress terminated the CHCDP but required the Department of Defense (DoD) to maintain, as a minimum, the current level and scope of chiropractic care services at the 13 authorized sites until at least September 30, 2000. More importantly, Congress further reinforced and reaffirmed the critically important role of the OAC by directing the Secretary of Defense to make full use of the OAC in preparing the final report on the CHCDP. Congress also directed the Secretary of Defense to provide opportunities for OAC members to provide their views as part of such a report. As a key component of this legislation, House Report 106-301 contained further reaffirmation of the OAC's preeminent role in the CHCDP by directing the Secretary of Defense to ensure that the OAC be "full participants" in the "collection and analysis of data and preparation of the final report." The House Report further authorized preparation of a minority report to be forwarded as part of the CHCDP final report, if necessary. Finally, Congress directed that the OAC be full participants in the development of any plan to incorporate chiropractic health care services into the medical care facilities of the Armed Forces or as a health care service covered under the TRICARE program.

Since the inception of the CHCDP, the Congress clearly envisioned an active, fully engaged OAC that would be participating intimately in the development, conduct, analysis and reporting on this project. It was also the intent of the Congress to allow the OAC to participate in the preparation of the final report to the Congress by the statutory deadline of January 31, 2000.

Despite this clear, consistent, and sustained Congressional mandate for the OAC in the program, the authors of this report must inform the Congress that such intimate participation by the Doctor of Chiropractic members on the OAC in the data analysis and report preparation phases of the CHCDP was sporadic at best. In fact, with rare exceptions, over the past 20 months, the overwhelming majority of the participation by OAC Doctor of Chiropractic members in the conduct, development, and evaluation of the CHCDP, has essentially been relegated to responding to draft analyses and conclusions reached by the Department of Defense's consultants at the firm of Birch & Davis, rather than direct participation in the analysis of data, the implementation of the CHCDP at the 13 authorized sites, or the preparation of the remarks contained in the Final Evaluation reports. This "passive" and effectively non-participatory role played by the OAC Doctors of Chiropractic

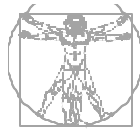


is clearly inconsistent with Congressional intent as reflected in the statutes that have governed the CHCDP since its inception in 1994.

Although the Doctor of Chiropractic members of the OAC have expressed many of these concerns to key Members of Congress and their staffs over the past three years, our deepest concerns about the lack of direct participation by OAC Doctors of Chiropractic were realized when the vast majority of data analysis and review were completed by the DoD and its consultants at Birch & Davis. Although the Birch & Davis final report alludes to full and open participation by OAC members, including involvement in the evaluation of the CHCDP, our opportunity to participate was severely constricted to inordinately short comment periods and our concerns about advisability of integrating chiropractic care into the MHS have been largely ignored. OAC Doctor of Chiropractic members were also excluded from contributing to the conclusion section of the DoD report until release of the Birch & Davis report.

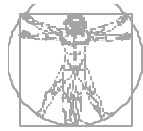
Correspondence in 1999 from the Chief Operating Officer of the TRICARE Management Activity to the Doctors of Chiropractic serving on the OAC, coupled with a clear message expressed during a July, 1999 conference call, clearly illustrate the DoD's resistance to the active, direct participation of the Doctor of Chiropractic members of the OAC in the data analysis and report writing of the CHCDP. A July 22, 1999 letter to one Doctor of Chiropractic member on the OAC from the Chief Operating Officer of the TRICARE Management Activity clearly stated the Department's position that Doctor of Chiropractic members of the OAC cannot be delegated a role in the conduct of the demonstration program. The letter also asserted that Doctor of Chiropractic members of the OAC could not participate in the analysis of data or preparation of reports despite the clear statutory mandate by the Congress that the OAC actively participate in all of these functions. Additionally, the letter clearly reflects the view of the Department that, despite Congressional requirements to the contrary, the OAC was to merely respond to DoD and its consultants' work products-- not participate actively in their preparation. A request by the Doctors of Chiropractic serving on the OAC for an emergency meeting to discuss these and other concerns was rejected by the Department. This rejection came despite support for this proposed meeting from Senator Strom Thurmond, a senior Member of the Senate Armed Services Committee, and the sponsor of Section 731 of the 1995 National Defense Authorization Act that created the original CHCDP.

Finally, as a result of OAC and Congressional pressure, only one Doctor of Chiropractic member of the OAC was provided direct access to information regarding the design and implementation of the final evaluation plan for the CHCDP developed by the Birch & Davis consultative team. This member was required to sign a confidentiality agreement in February, 1999 and was instructed not to inform, communicate, or divulge information relative to the final evaluation plan of the CHCDP to any other members of the OAC. This unfortunate action taken by DOD to effectively isolate the OAC from the Department's consultants on the CHCDP was perhaps the most serious indicator that the Department had no intention of including the OAC in the intimate details of the program.



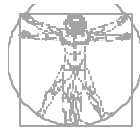
Despite the persistent lack of compliance with the clear intent of Congress regarding the OAC participation in the conduct, data analysis, and report preparation phases of the CHCDP, the Doctor of Chiropractic members on the OAC were finally presented with the DoD consultants' initial draft of their final report just prior to Thanksgiving 1999 and were given until December 7th to provide any comments or other input on the consultants' findings. This was the first opportunity for OAC Doctor of Chiropractic members to review the Birch & Davis draft report and to formally respond to the methodologies and data analyses utilized by the consultants in reaching their conclusions on the CHCDP. A letter was submitted to the Chief Operating Officer of the TRICARE Management Activity of the DoD on December 1 outlining a brief overview of concerns and proposed changes to the final draft report. We, the chiropractic members of the OAC, identified numerous shortcomings and inconsistencies in the initial Birch & Davis draft that needed to be corrected. Subsequently, on February 23, 2000, we received a revised version of the Birch & Davis final report with only one work week allowed for review and submission of additional comments. While some of our initial suggestions were accepted and have been incorporated into the revised Birch & Davis report, others, particularly those related to the Birch & Davis cost analysis and advisability of integrating chiropractic health care into the MHS, have been ignored. Thus, we continue to express our deepest concerns that we were not afforded sufficient opportunity to be involved. The input sought by the Department in the final days of the CHCDP review process was insufficient and should have been sought and incorporated in the CHCDP from 1994 through the preparation of the final report to Congress.

We, therefore, urge the Congress to give weight to the views expressed in our current report regarding the CHCDP, and to reinforce its statutory requirement that the OAC actively participate in the implementation plan phase of the mandates contained in Section 702 of the fiscal year 2000 National Defense Authorization Act. We are grateful for this opportunity to provide our views regarding the Department of Defense report to Congress on the results of the Chiropractic Health Care Demonstration Program.



SECTION III

FINDINGS CONCURRENT WITH THE CHCDP REPORT



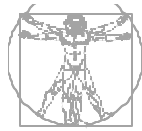
FINDINGS CONCURRENT WITH THE CHCDP REPORT

Finding #1: The results of the CHCDP clearly demonstrate that it is feasible to integrate chiropractic care into the military health care system. Perceptions and attitudes towards chiropractic care improved over time.

As cited in their final CHCDP report, Birch & Davis conclude that it is feasible to integrate chiropractic care into the military health system.¹ In their Executive Summary, Birch & Davis state that "An analysis of the data concludes that it is feasible to establish chiropractic services within the DoD...The CHCDP has shown that chiropractic services can be implemented within the DoD and are feasible." They further conclude that:

- X Results of the survey data and referral patterns at each site suggest that traditional health care providers recognized the value of chiropractic care by their willingness to refer patients to chiropractic clinics. Perceptions and attitudes about the acceptance of Doctors of Chiropractic and the appropriateness of spinal manipulation to treat certain medical conditions were judged to be favorable by traditional providers.
- X Provider attitudes toward Doctors of Chiropractic changed positively over time. The ability of Doctors of Chiropractic was judged more favorably after their integration. The study found that among traditional providers, the perceived appropriateness of chiropractic care and the perceived abilities of Doctors of Chiropractic increased over time.
- X Analysis of data collected from patients and providers indicates that chiropractic care was well received by the patient population. Overall, patients responded more favorably to chiropractic treatment than they did to traditional medical care.
- X Chiropractic service appears to have complemented and augmented traditional medical care. Enhanced readiness and the likely benefit of improved retention rates provide additional support for the advisability of integrating chiropractic care into the MHS.

¹Birch & Davis Associates, Inc. *Final Report: Chiropractic Health Care Demonstration Program*, Falls Church, VA, February 10, 2000.



- X The CHCDP did not result in any adverse medical care or patient perceptions that would contraindicate the feasibility of offering chiropractic care to DoD beneficiaries throughout the military health system.
- § The study results indicate that facilities were established and fully operational within 60 to 90 days. At each of the selected sites, chiropractic health care services were not constrained by contracting issues, physical space, or the ability to procure appropriate equipment.
- § Start-up costs ranged from approximately \$20,000 to \$90,000 at each site, including the costs for facility modifications and equipment loans, leases, and purchase.
- § No insurmountable issues delayed or prevented the establishment of chiropractic services at the 13 demonstration sites.²

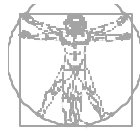
The CHCDP has, therefore, clearly shown that chiropractic services can be successfully implemented within the military health care system. Initiating chiropractic care within the DoD is feasible.

Finding #2: Levels of patient satisfaction with chiropractic care during the CHCDP were high and significantly better than those reported for traditional medical care.

An important factor to determining the advisability of chiropractic care in the military is patient satisfaction with that care. To this end, data on patient satisfaction compiled from the "Four Week Follow-Up" Survey that was included in the CHCDP were re-analyzed. Differences in the levels of satisfaction for persons receiving chiropractic care and traditional medical care were examined. As is illustrated below, patients receiving chiropractic care reported significantly higher levels of satisfaction than did patients treated by traditional medical practitioners.

One of the important questions involving level of satisfaction with medical care asked lower back pain patients how they judged their improvement following treatment. Responses are presented in Table 1. At four weeks following treatment, 81.5 percent of those who visited a Doctor of Chiropractic rated their satisfaction with their improvement as "excellent" compared to only 55.6 percent of those who received care from traditional medical providers. At the other end of the spectrum, patients treated by Doctors of Chiropractic were nearly 5

²Ibid.



times less likely to rate their satisfaction level as "poor" in comparison with patients seen by traditional medical practitioners.

Table 1

<i>How satisfied are you with improvement in your condition? (four week survey)</i>		
	Chiropractic	Traditional
Excellent	81.5%	55.6%
Somewhat	13.8%	22.9%
Poor	4.6%	21.5%

CHCDP participants were also asked several other questions regarding satisfaction with their medical care. To each of these questions, experiences with chiropractic care were rated significantly higher by respondents than was traditional medical care. For example, as shown in Table 2, a higher proportion of patients receiving chiropractic treatment rated their practitioner's willingness to spend time with them as "excellent" (93.7%) than was true for patients treated by other providers (77.5%). Likewise, fewer chiropractic patients rated their practitioner's willingness to spend time with them as "poor" (1.2% vs. 6.1%).

Table 2

<i>How satisfied are you with the practitioner's willingness to spend time with you? (four week survey)</i>		
	Chiropractic	Traditional
Excellent	93.7%	77.5%
Somewhat	5.0%	16.4%
Poor	1.2%	6.1%

Similar patterns are evident in patients' responses to questions on their perceptions of explanations of their treatment (Table 3), access to care (Tables 4 and 5), and amount of time spent at the clinic waiting for treatment (Table 6). In each instance, chiropractic care was rated higher, better, or more satisfactory than care received from traditional medical providers.

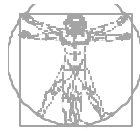


Table 3

<i>How satisfied are you with the explanation of your treatment? (four week survey)</i>		
	Chiropractic	Traditional
Excellent	95.1%	81.1%
Somewhat	3.9%	13.6%
Poor	0.9%	5.3%

Table 4

<i>How satisfied are you with the ease of making appointments? (four week survey)</i>		
	Chiropractic	Traditional
Excellent	91.4%	71.6%
Somewhat	6.0%	15.0%
Poor	2.6%	13.4%

Table 5

<i>How satisfied are you with the length of time you waited to get an appointment? (four week survey)</i>		
	Chiropractic	Traditional
Very Satisfied	92.0%	72.1%
Somewhat	5.5%	15.5%
Very Dissatisfied	2.5%	12.5%

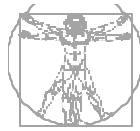


Table 6

<i>How satisfied are you with the waiting time in the clinician's office? (four week survey)</i>		
	Chiropractic	Traditional
Very Satisfied	95.0%	75.4%
Somewhat	4.1%	15.5%
Very Dissatisfied	0.9%	9.0%

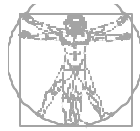
These response patterns clearly show that chiropractic care patients are more satisfied with their care than are patients who received traditional medical treatment. On each of the measures, the level of satisfaction is much higher for chiropractic care. A higher proportion of patients receiving chiropractic care reported greater satisfaction with their improvement and their providers compared to patients receiving care from traditional providers.

Improving quality of life for military personnel was recently cited by Rudy de Leon, Undersecretary of Defense for Personnel and Readiness, as a major goal within the DoD.³ Among the health-related issues that DoD intends to address is improving access to care. Improved access to health care, which is directly correlated with patient satisfaction, is seen as a mechanism to enhance the quality of military life, raise morale, and, thereby, increase retention. Integrating chiropractic care into the military health system is, therefore, an important step towards achieving these objectives.

Finding #3: Findings from the CHCDP indicate that personnel who utilized chiropractic care for the treatment of lower back pain experienced superior patient outcomes compared to patients who received more traditional types of care.

One of the keys to determining the advisability of including chiropractic care in the military health care system is patient outcomes. The best way to assess outcomes from patient visits is to judge the success of the treatment. To this end, the "Four Week Follow-Up" Survey collected information from patients about the outcomes of their visits to Doctors of Chiropractic and traditional medical practitioners. Level of activity and duty restriction data were compared for chiropractic patients and those of other providers. As is evident in these tables, a clear pattern of responses emerges. On every question, a higher proportion of

³Linda Kozaryn, Defense Leaders Champion Troop Needs, Armed Forces Press Service, January 10, 2000.



patients receiving chiropractic care reported better outcomes than did patients treated by traditional medical practitioners.

Table 7 describes how patients felt four weeks after treatment. As can be readily seen, nearly half (48.5%) of the patients who were treated by Doctors of Chiropractic reported no restrictions four weeks after receiving their treatment versus one-third (32.1%) of those who were treated by traditional providers. Similarly, a smaller proportion of patients who received chiropractic care (44.1%) reported feeling "somewhat restricted" compared to those treated by traditional providers (50.0%). For those who reported feeling "very restricted," the pattern of responses is most telling. Nearly 18 percent of respondents who received care from traditional providers responded that they felt "very restricted" four weeks after treatment versus 7.4 percent for chiropractic patients. Thus, patients who were treated by traditional providers were nearly two and one-half times more likely to report feeling "very restricted" at four weeks post-treatment.

Table 7

<i>What best describes you today? (four week survey)</i>		
	Chiropractic	Traditional
Not Restricted	48.5%	32.1%
Somewhat	44.1%	50.0%
Very Restricted	7.4%	17.9%

The response pattern shown in Table 7 is repeated in Tables 8 and 9. In Table 8, the proportion of patients who reported no restrictions is 28 percent greater for those who were treated by a Doctor of Chiropractic (73.4% vs. 52.9%). Likewise, a smaller proportion of patients receiving chiropractic care (19.2%) reported their current level of activity as "somewhat restricted" four weeks after treatment than was the case for patients treated by traditional providers (29.4%). Among respondents who stated that their level of activity was "very restricted," a much lower proportion of respondents were chiropractic patients. In addition, the percentages (7.4% vs. 17.7%) are nearly identical with the results presented in Table 7 on how patients felt four weeks after treatment.

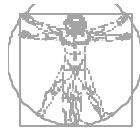


Table 8

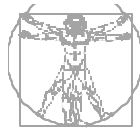
<i>What is your current level of activity? (four week survey)</i>		
	Chiropractic	Traditional
Not Restricted	73.4%	52.9%
Somewhat	19.2%	29.4%
Very Restricted	7.4%	17.7%

Participants in the "Four Week Follow-Up" Survey were queried as to whether their lower back problem currently limited their performance. The results are presented in Table 9. Table 9 shows that a much higher proportion of patients who received chiropractic care reported no limitations on their performance compared to those receiving care from traditional medical practitioners (73.2% vs. 53.3%). Nearly 47 percent of patients receiving traditional medical care reported at least some performance limitations four weeks after treatment compared to 27 percent of patients seen by a Doctor of Chiropractic. Additionally, patients treated by traditional medical practitioners were more than twice as likely to definitively report that their performance was limited than were patients receiving chiropractic care (20.9% vs. 9.5%).

Table 9

<i>Do your problems limit your performance? (four week survey)</i>		
	Chiropractic	Traditional
No	73.2%	53.3%
Somewhat	17.3%	25.9%
Yes	9.5%	20.9%

When asked whether they felt better now, a clear difference is evident in the response patterns of patients receiving chiropractic care compared to patients treated by traditional medical providers (Table 10). Over three quarters (78.5%) of respondents who saw a Doctor of Chiropractic strongly agreed with the statement that they felt better now compared to half (49.2%) of those who were treated by a traditional provider. Also, the proportion of chiropractic



patients who strongly disagreed that they felt any better four weeks after treatment is much smaller (6.9%) than the proportion receiving traditional medical care (28.8%).

Table 10

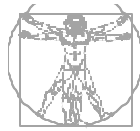
<i>I feel better now (four week survey)</i>		
	Chiropractic	Traditional
Strongly Agree	78.5%	49.2%
Somewhat	14.6%	22.0%
Strongly Disagree	6.9%	28.8%

Table 11 presents data on patients' self-reported assessments of the results of their treatment. As shown in Table 11, 82.9 percent of the patients who were treated by a Doctor of Chiropractic reported good results from the treatment compared to 50.7 percent of patients served by traditional medical providers. On the other hand, the proportion of patients receiving chiropractic care who felt they did not receive good treatment was very low (4.6%), much lower than the 24.6 percent of patients receiving care from traditional providers who did not feel they received positive outcomes from their treatment.

Table 11

<i>I had good results from the treatment? (four week survey)</i>		
	Chiropractic	Traditional
Strongly Agree	82.9%	50.7%
Somewhat	12.6%	24.8%
Strongly Disagree	4.6%	24.6%

As part of the "Four Week Follow-Up" Survey, CHCDP participants were asked about whether their pain was worse now than when their treatment began. As shown in Table 12, at four weeks following treatment, a smaller proportion of chiropractic patients strongly agreed that their pain was worse now compared to patients who received traditional medical care (4.4% versus 9.9%). Additionally, among patients treated by a Doctor of Chiropractic, a higher



proportion (88.0%) strongly disagreed that their pain was worse four weeks after treatment than was the case among patients who were treated by traditional medical providers (70.5%).

Table 12

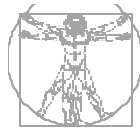
<i>The pain is worse now (four week survey)</i>		
	Chiropractic	Traditional
Strongly Agree	4.4%	9.9%
Somewhat	7.6%	19.6%
Strongly Disagree	88.0%	70.5%

Among the better indicators of treatment outcome for persons who have suffered from lower back pain are the number of days of work missed (Table 13) and the number of days on restricted duty (Table 14) as ordered by their authorized medical provider. On both of these measures, chiropractic care surpassed treatment by traditional providers.

As shown in Table 13, 87.1 percent of patients who saw a Doctor of Chiropractic lost no duty time and only 3.3 percent missed more than one week. For traditional providers, 66.1 percent of patients had no lost duty time and 8 percent missed more than one week. Patients treated by Doctors of Chiropractic averaged less than one missed day due to their medical condition (0.69 days) while patients who received care from traditional providers missed an average of 1.71 days as a result of their medical condition.

Table 13

<i>Days off duty (four week survey)</i>		
	Chiropractic	Traditional
0	87.1%	66.1%
1 to 4	9.6%	25.8%
5 and up	3.3%	8.0%



Approximately 72 percent of patients receiving chiropractic care reported zero restricted duty days due to their medical condition (Table 14). For personnel treated by traditional providers, the corresponding proportion was 51.1 percent. Approximately 30 percent of chiropractic patients reported restricted duty time, with 24.3 percent having restrictions in excess of one week. For those who received care from traditional providers, 48.9 percent reported restricted duty time resulting from their medical condition and over 40 percent were on restricted duty for more than one week.

Table 14

<i>Days on restricted duty (four week survey)</i>		
	Chiropractic	Traditional
0	71.5%	51.1%
1 to 4	4.2%	8.2%
5 and up	24.3%	40.7%

As can be seen from these findings, outcomes were much better for chiropractic care than for traditional medical care. A higher proportion of patients treated by Doctors of Chiropractic said they felt better, reported less pain than previously, and had fewer physical restrictions and limitations than patients receiving care from traditional providers. Chiropractic patients also reported fewer days away from work or on restricted duty due to their medical problems. Thus, the re-examination of "Four Week Follow-Up" Survey data confirms the efficacy of chiropractic care in the military health care system.

Finding #4: Results from the CHCDP highlight the implications for enhanced readiness that arise from the use of chiropractic care. Additionally, enhanced readiness may also lead to increased retention of military personnel.

We concur with the findings from the Birch & Davis final report that military personnel who receive chiropractic care are more likely to return to work faster and spend less time on restricted duty than personnel who receive traditional medical care. More specifically, patients treated by Doctors of Chiropractic for lower back pain are, on average, likely to return to work more quickly than a patient who received care from a traditional provider. Similarly, patients treated by Doctors of Chiropractic spent, on average, fewer days on restricted duty. We agree with the Birch & Davis conclusion that "the total effect of



chiropractic care on active duty time availability would likely range between 111,000 and 331,000 additional duty days per year, with a central value of about 199,000" (p. IV-31-- includes both lost duty and restricted duty days).

The Birch & Davis final report asserts that, "Chiropractic care is associated with improved outcomes in time availability of active duty, reduced inpatient admissions by active duty, and reduced physical therapy visits" (p. IV-2). These findings serve as the basis for the contention that enhanced readiness is a direct product of chiropractic care.

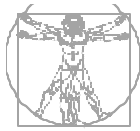
Additionally, the DoD has identified improved access to health care as a major factor in improving the quality of life for military personnel. DoD recognizes that improving access to health care is directly associated with improved morale and, thereby, is a significant issue in increasing both readiness and retention.⁴ While the Birch & Davis report does not attempt to correlate enhanced readiness with increased retention rates, they conclude that "Active duty beneficiaries clearly have a strong demand for chiropractic services, and this demand is strictly increasing with age" (p. IV-11). Given this finding, there is reason to believe that there may be a relationship between enhanced readiness and increased retention rates in the military if chiropractic care were integrated into the MHS. Enhanced readiness and the likely benefit of improved retention rates provide additional support for the advisability of introducing chiropractic care into the MHS.

Finding #5: Findings from the CHCDP indicate that spinal maladies remain a big problem for the military. Further, the Demonstration illustrates the inadequacy of the current care system to address this problem.

The Birch & Davis final report indicates that spinal maladies remain a big problem for the military. During 1994, Steven A. Meskin, Ph.D., F.S.A., M.A.A.A. analyzed the cost of implementing chiropractic benefits into a proposed national health care plan.⁵ While the Meskin study does not focus exclusively on military personnel, it does provide insights into the most common diagnoses that Doctors of Chiropractic treat. Meskin estimated that of the 170 million non-elderly adults (ages 16-64) residing in the United States during 1992, 6.4 percent (10.9 million) received care from Doctors of Chiropractic. Of those individuals, 85 percent (9.3 million), were diagnosed with lower back pain. This study indicated that a large majority of non-elderly people who utilize chiropractic care are diagnosed with lower back pain.

4 Ibid.

5 Meskin, Stephen. *The Cost of Chiropractic Benefits*. May, 1994.



Using data contained in exhibits G51 and G61 of the Birch & Davis final report, we calculated that approximately 51.5 patients per thousand, or about 5 percent of all personnel enrolled in the MHS, will be treated for lower back pain during a year.⁶

This information, coupled with the Meskin study findings, indicates that spinal maladies remain a big problem for the military. Because of the large annual demand for medical treatment and assistance with conditions related to lower back pain in the MHS, some of the demand may be unmet. Introducing Doctors of Chiropractic to help serve this unmet demand will address the current inadequacies and lack of options for obtaining treatment for lower back pain in the MHS.

Conclusions Based on Findings 1 Through 5

Although we categorically reject the position by the DoD that the incorporation of chiropractic health care services into the MHS is not “advisable,” the assessment of the CHCDP by Birch & Davis was overwhelmingly positive. Birch & Davis cited improvements in patient outcomes, improved acceptance of chiropractic by military health care providers, reduced inpatient admissions due to chiropractic treatment, and dramatic reductions in lost work days due to chiropractic health care services. Furthermore, a careful reading of the final report reflects the fact that the only apparent reason why the consultants did not recommend the ‘advisability’ of integrating chiropractic into the MHS was an overstated, erroneously-derived ‘cost estimate’ and manpower offsets. These arguments are refuted by the critique and additional information provided in the present report.

Therefore, we conclude the following:

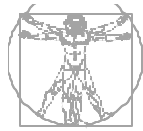
- 1) The integration of chiropractic health care services into the MHS is both feasible and advisable, based on the data contained in the CHCDP final report;
- 2) The CHCDP clearly demonstrated a high level of patient satisfaction among all branches of the military;
- 3) The CHCDP revealed dramatic improvement in patient outcomes and, in the words of the Birch & Davis Associates’ team, “patients who saw Doctors of Chiropractic were significantly more likely to show self-reported improvement in health over the four-week survey period than patients who saw traditional providers.” Birch & Davis also found that patients were more likely to give their provider excellent marks (a perfect score) if they were seen by a Doctor of Chiropractic;

⁶ Number of patients per thousand= 298.5 per thousand visits (average of all ages groups) / 5.8 average visits for chiropractic= 51.48 visits per thousand.



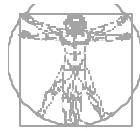
- 4) Chiropractic health care services dramatically reduced the number of lost duty days among military personnel, thus increasing productivity and combat readiness;
- 5) The cost estimates attributable by the Birch and Davis team to chiropractic health care services in the MHS were dramatically overstated, with methodologies utilized that failed to assign cost savings to perhaps the most important data set in the CHCDP – a savings of at least 199,000 military labor days *per year* as a direct result of chiropractic care; and
- 6) Chiropractic care in the military may actually result in a net savings to the MHS, if factoring in those savings identified by the Birch and Davis consultant team, the 199,000 labor days saved, and other factors identified by the Doctors of Chiropractic on the OAC and their consultants at Muse & Associates.

Therefore, we conclude that full integration of chiropractic care into the MHS is fully justified and both feasible and advisable; will **not** have a negative effect on either aggregate MHS health care costs or medical manpower levels currently in effect; and will significantly enhance health care for the men and women of the Armed Forces.



SECTION IV

ADDITIONAL FINDINGS BY DOCTOR OF CHIROPRACTIC MEMBERS OF THE OAC



ADDITIONAL FINDINGS BY DOCTOR OF CHIROPRACTIC MEMBERS OF THE OAC

Our examination of "Four Week Follow-Up" Survey data indicates that chiropractic treatment leads to better outcomes, more satisfied patients, and less duty time lost. To assess the advisability of chiropractic care, it was also necessary to examine the cost implications of such care. This was accomplished by analyzing data from several sources. We began by analyzing information on military personnel and payrolls. We then examined Medicare data to assess whether access to chiropractic care results in cost savings.

Birch & Davis estimate that the cost to the MHS of an open benefit policy for chiropractic care would be \$70.9 million.⁷ As discussed below in Additional Findings 1, 2, and 3, however, these costs will be reduced by offsets for recovered days, physical therapy, and other eliminated services. These cost offsets will result in annual net savings to the DoD of \$25.8 million.

Additional Finding #1: The Birch & Davis report failed to complete the cost savings of chiropractic care to the MHS.

According to DoD, there were 1,252,000 people on active duty in 1996.⁸ Personnel costs for active duty personnel totaled almost \$38.4 billion.⁹ To calculate the average annual personnel costs per person, we divided total personnel costs by the number of people on active duty. This resulted in average personnel costs per person of \$36,353. The Birch & Davis final report states that average annual active duty pay is "approximately" \$30,000 per person.¹⁰ Assuming a standard work year of 260 days (5 days a week for 52 weeks), the average daily cost per person for active duty personnel is \$139.82.

The Birch & Davis final report states that the reduction in time off active duty from the integration of chiropractic care would result in recovered duty days. The number of days that could be recovered ranges from 331,000 to 111,000, with a central value of 199,000.¹¹ These estimates of recovered days were multiplied by the average active duty daily personnel cost of \$139.82. This results in recovered costs of between \$46.8 million and \$15.5 million. For

⁷ Birch & Davis Associates, Op. Cit., page IV-2.

⁸ U.S. Bureau of the Census, *Statistical Abstract of the United States (117th edition)*, Table 548, Washington, D.C., 1997.

⁹ Ibid.

¹⁰ Birch & Davis, *Final Report Chiropractic Health Care Demonstration Program*, page G-83.

¹¹ Op. Cit., page IV-31.



the central value the estimated savings is \$27.8 million. The cost estimate for the central value was used as the basis for all subsequent calculations.

Additional Finding #2: The Birch & Davis report underestimated the medical offsets associated with chiropractic care.

Analysis of "Four Week Follow-Up" Survey and related payroll data indicate that there would be significant cost savings if chiropractic care were integrated into the MHS. To confirm that cost differences exist between chiropractic and traditional medical treatment, we examined data for the Medicare population. The general demographic characteristics of the military and Medicare populations differ substantially. Our purpose in examining Medicare data is two-fold. First, if it can be shown that a pattern of cost differences between chiropractic and traditional care also occurs in the Medicare population, then one may conclude that such differences are due to the nature of the treatment received and not to the characteristics of the populations involved. Second, if Medicare payments are less for beneficiaries receiving chiropractic care, then the advisability of including chiropractic care in the MHS is supported.

The Medicare data presented in this report were compiled from HCFA's 1996 Medicare 5 Percent Standard Analytic File (SAF). The SAF files are based on all Medicare provider claims records submitted during a calendar year. The 5 Percent SAF was created by selecting a sample of records from the 1996 Medicare 100 percent claims file.

We begin with an analysis of baseline summary claims data for all Medicare-covered medical services utilized by beneficiaries with a primary diagnosis of lower back pain in 1996 irregardless of what type of provider delivered the medical services (Table 15). We then compare payment differences for beneficiaries who received chiropractic treatment versus traditional medical care, initially for their lower back pain claims only (Table 16) and then for all of their medical claims (Table 17).

Table 15 captures all of the Medicare payments for all medical services provided during 1996 to beneficiaries with a primary diagnosis of lower back pain. As shown in this baseline summary table, more than 5.4 million Medicare beneficiaries received a primary diagnosis of lower back pain during 1996. These individuals consumed nearly 187 million services, with Medicare payments totaling approximately \$37 billion or an average of \$6,807 per beneficiary.



Table 15

Baseline Summary of All Claims for Patients with a Primary Diagnosis of "Lower Back Pain"					
File	Patients	Services	Paid	Percent of Total Paid	Average Paid per Patient
All Files	5,424,840	186,779,600	\$36,928,683,465	100%	\$6,807
DME	1,393,240	7,441,900	\$874,454,200	2%	\$628
Home Health	774,460	3,801,780	\$3,341,614,676	9%	\$4,315
Hospice	42,980	111,320	\$205,360,352	1%	\$4,778
Inpatient	1,505,320	2,757,160	\$17,169,890,030	46%	\$11,406
Hospital	4,246,140	23,624,880	\$3,753,784,860	10%	\$884
Outpatient*					
Professional*	5,404,960	148,400,320	\$9,541,311,125	26%	\$1,765
Nursing Facility	295,360	642,240	\$2,042,268,222	6%	\$6,915

*Hospital Outpatient refers to the facility. The Professional file includes physician claims and those of other practitioners.

Examination of the distribution of claims among the sub-files reveals that Medicare beneficiaries received their medical care in numerous provider settings and that the average payments per patient vary considerably by setting.

A fundamental flaw in the Birch & Davis cost analysis was their failure to examine total health care costs for individuals diagnosed and treated for lower back pain. The Birch & Davis analysis only looked at claims for lower back pain, accounting for approximately 10 percent of the total health care costs of those individuals participating in the demonstration. Thus, Birch & Davis omitted all but a small portion of the medical costs of military personnel diagnosed with lower back pain. As a result of this shortcoming, we divided our analysis of Medicare claims data into two parts. To maintain comparability with the Birch & Davis methodology, we first examined Medicare claims for lower back pain only. Then we analyzed all medical claims for Medicare beneficiaries with a primary diagnosis of lower back pain.

Our analysis of lower back pain claims only for Medicare beneficiaries with a primary diagnosis of lower back pain is summarized in Table 16. Comparing the data in Table 16 with the information in Table 15 indicates that claims for lower back pain constitute only 13 percent of all medical services consumed by Medicare beneficiaries with a primary diagnosis of lower back pain during 1996 and only 7 percent of their total Medicare payments.



Table 16

Summary of 'Lower Back Pain' claims only for patients with a diagnosis of 'Lower Back Pain'						
Patient Type	File	Patients	Services	Paid	Percent of Total Paid	Average Paid per Patient
Patient Not seen by Chiropractor	All Files	3,900,720	14,151,400	\$2,158,779,388	100%	\$553
	DME	194,720	464,800	\$39,631,481	2%	\$204
	Home Health	60,240	161,500	\$131,826,485	6%	\$2,188
	Hospice	40	140	\$313,714	0%	\$7,843
	Inpatient	132,700	148,920	\$757,569,963	35%	\$5,709
	Outpatient	1,375,760	2,462,040	\$362,987,992	17%	\$264
	Professional	3,559,400	10,887,600	\$784,617,870	36%	\$220
	SNF	16,560	26,400	\$81,831,882	4%	\$4,942
Patient seen by Chiropractor	All Files	1,524,120	10,658,340	\$467,421,674	100%	\$307
	DME	20,640	40,960	\$2,981,232	1%	\$144
	Home Health	5,380	12,480	\$8,504,182	2%	\$1,581
	Inpatient	15,500	17,420	\$97,155,291	21%	\$6,268
	Outpatient	179,820	331,140	\$49,874,563	11%	\$277
	Professional	1,523,080	10,254,920	\$304,241,502	65%	\$200
	SNF	1,080	1,420	\$4,664,904	1%	\$4,319

Of greater interest, however, is the difference in average payments between Medicare beneficiaries treated by a Doctor of Chiropractic and those seen by other provider types. The average Medicare payment for beneficiaries receiving chiropractic treatment (\$307) was significantly lower than the average payment to other providers (\$553). The average Medicare payment for chiropractic services to treat lower back pain was 55 percent of the average payment to traditional medical care providers. With two exceptions (outpatient hospital setting and inpatient setting), average payments for chiropractic care were lower than average payments to traditional medical providers for the treatment of lower back pain.

The Birch & Davis analysis disregarded the overwhelming majority of health care costs for persons participating in the CHCDP. By failing to examine the total health care costs of persons with a primary diagnosis of lower back pain, a significant amount of information was excluded. Consideration of such information could lend further support to the issue of advisability.

Summary data for all claims for Medicare beneficiaries with a primary diagnosis of lower back pain are presented in Table 17. Similar to our analysis of lower back pain claims only (Table 16), total Medicare payments for beneficiaries who were treated by a Doctor of Chiropractic for their lower back pain were, on average, lower than corresponding payments for beneficiaries who received treatment for their lower back pain from traditional provider types (\$4,079 versus \$7,873). Average Medicare payments for all medical claims for persons with a primary diagnosis of lower back pain were only half as great for beneficiaries



receiving chiropractic care compared to traditional medical treatment for their lower back pain. The differences are repeated for each provider setting.

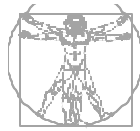
Table 17

Summary of all claims for patients with a primary diagnosis of 'Lower Back Pain'						
Patient Type	File	Patients	Services	Paid	Percent of Total Paid	Average Paid per Patient
Patient not seen by Chiropractor	All Files	3,900,720	140,959,560	\$30,711,688,607	100%	\$7,873
	DME	1,119,940	6,282,280	\$746,010,192	2%	\$666
	Home Health	665,840	3,407,980	\$3,037,275,557	10%	\$4,562
	Hospice	37,540	97,860	\$181,662,240	1%	\$4,839
	Inpatient	1,226,820	2,310,720	\$14,367,520,945	47%	\$11,711
	Outpatient	3,177,460	18,668,620	\$3,057,440,586	10%	\$962
	Professional	3,880,840	109,612,080	\$7,469,368,074	24%	\$1,925
	SNF	260,300	580,020	\$1,852,411,014	6%	\$7,116
Patient seen by Chiropractor	All Files	1,524,120	45,820,040	\$6,216,994,859	100%	\$4,079
	DME	273,300	1,159,620	\$128,444,008	2%	\$470
	Home Health	108,620	393,800	\$304,339,119	5%	\$2,802
	Hospice	5,440	13,460	\$23,698,111	0%	\$4,356
	Inpatient	278,500	446,440	\$2,802,369,086	45%	\$10,062
	Outpatient	1,068,680	4,956,260	\$696,344,274	11%	\$652
	Professional	1,524,120	38,788,240	\$2,071,943,051	33%	\$1,359
	SNF	35,060	62,220	\$189,857,208	3%	\$5,415

Analysis of Medicare claims data indicates that, irregardless of whether one examines all payments or restricts the analysis to just lower back pain claims, chiropractic care is less expensive than traditional medical care. Chiropractic care also results in lower overall health care costs among Medicare beneficiaries. From these results, one can infer that integrating chiropractic care into the MHS will save money. These findings support an unconditional and unconstrained advisability of adding chiropractic care to the MHS.

The next step is to calculate the total cost recovered through the substitution of chiropractic care for traditional care. The Birch & Davis final report states that the average person will use 0.2 emergency room (ER) visits, 0.7 primary care physician visits and one physical therapy (PT) visit per episode of back pain, or they will go to see a Doctor of Chiropractic.¹² This creates the substitution effect of replaced PT visits discussed in the Birch & Davis final

¹² Op. Cit., page IV-13.



report. Birch & Davis estimate that there would be 330,340 fewer PT visits if chiropractic care was available to military personnel.¹³

Birch & Davis attributed a cost of \$57.43 to each PT visit.¹⁴ Simple multiplication of the cost of a PT visit by the estimate of the number of saved PT visits results in \$18.9 million in savings to the MHS.¹⁵ Next we added the cost savings from fewer ER and primary care visits by multiplying the numbers by their respective costs. This results in total savings of \$50.9 million. These cost effects are illustrated in Table 18.

Table 18

<i>Physical Therapy Substitution Effect*</i>	
<i>Average Cost Per Visit</i>	
ER	\$122.66
Primary Care	\$102.99
Physical Therapy	\$57.43
Chiropractic Care	\$56.76
<i>Calculations</i>	
Saved PT Visits	330,340
CHCDP Physical Therapy Costs Savings Only	\$ 18,973,350
CHCDP Report Average Number Of ER/Primary Care/PT Visit Costs	\$ 50,890,520
*Source: Birch & Davis Report, page IV-10, IV-13, and IV-21.	

Birch & Davis concluded that there would be \$6.7 million in cost savings associated with a reduction in inpatient care.¹⁶ Using a proportional allocation based on our analysis of the Medicare data, we estimate that there would be additional savings of \$11.3 million from other services (Table 19). Thus, the savings that would accrue from substituting chiropractic care for traditional medical treatments would be \$18 million. The \$11.3 million of cost savings for these other services were neither calculated nor reported in the Birch & Davis report.

13 Op. Cit., page IV-21.

14 Op. Cit., page IV-10.

15 Ibid.

16 Birch & Davis, Op. Cit., p. IV-33.

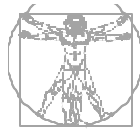


Table 19

Eliminated Services and Associated Savings for Chiropractic Services			
	<i>5% SAF Charges</i>	<i>CHCDP Savings</i>	
DME	\$628.00	\$368,893.56	2.0%
Home Health	\$4,315.00	\$2,534,674.73	14.1%
Hospice	\$4,778.00	\$2,806,645.63	15.6%
Outpatient	\$884.00	\$519,270.56	2.9%
Professional	\$1,765.00	\$1,036,778.89	5.8%
SNF	\$6,915.00	\$4,061,941.08	22.5%
Subtotal	\$19,285.00	\$11,328,204.45	62.8%
Inpatient	\$11,406.00	\$6,700,000.00	37.2%
Total	\$ 30,691.00	\$18,028,204.45	100.0%

*CHCDP inpatient amount from Birch and Davis Report, page IV-33.

Additional Finding #3: The Birch & Davis report underestimated the total savings of integrating chiropractic care into the MHS.

Four steps are involved in estimating the total cost savings of integrating chiropractic care into the MHS. The first step involves calculating the savings that would result from the recovered days of active duty identified and discussed in the Birch & Davis final report. The second step involves addressing the absence of primary care physician and ER visit costs in the recovered cost of physical therapy. The third step is to calculate the value of other medical services that would be eliminated along with inpatient treatment and the fourth step is to apply these savings against the Unconstrained Demand Open Benefit model, which was the most expensive benefit design included in the CHCDP.

The cost to the military of an open benefit policy for chiropractic care was calculated by multiplying the average cost per chiropractic visit (\$56.76 - Table 18) as calculated by Birch & Davis by the projected estimate of the number visits (1,249,589). This would result in \$70.9 million in costs to the MHS. However, these costs will be reduced by the offsets discussed above.¹⁷ When we subtract the savings calculated above from the estimate of the cost of chiropractic care derived from the most expensive benefit model developed used in the CHCDP, we find that these cost offsets produce a net savings to the DoD of \$25.8 million (Table 20).

¹⁷ The use of 330,340 as the total number of physical therapy visits that will be eliminated is based upon the MHS-Wide Basis Using Model which is not the most expensive model in the CHCDP Report. The cost of implementing chiropractic care in the MHS with the Wide Basis Using Model is based upon a projected use of 984,126 visits at a cost of \$55.9 million. CHCDP Report, page IV-21.

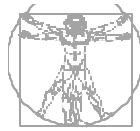
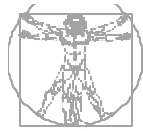


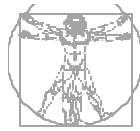
Table 20

Annual Net Savings To DoD		
<i>Cost</i>	<i>Components</i>	<i>Source</i>
\$70,926,671.64	Unconstrained Demand Open Benefit	B&D Report Page IV-2
\$27,824,195.08	Central Range Recovered Days Savings (N=199,000)	B&D Report Page IV-2
\$18,028,204.45	Total Eliminated Charges With Chiropractic Services	Table 19 (above)
\$50,890,528.70	Total Saved Charges From Physical Therapy Substitution	Table 18 (above)
\$25,816,256.59	Annual Net Savings To DoD	



SECTION VI

RECOMMENDATIONS



RECOMMENDATIONS

In view of the conclusions reached earlier in this report, including cost savings attributable to chiropractic in the military, coupled with the overwhelmingly positive benefits of chiropractic care cited by the Department's own Birch & Davis consultant team, we are pleased to propose the following specific recommendations to be carried out by the Committees on Armed Services and the full Congress, to begin the process of full integration of chiropractic into the MHS:

- 1) The implementation plan requirement contained in Section 702 of the National Defense Authorization Act, Fiscal Year 2000 (Public Law 106-65), should be triggered and the DoD should be required to begin development of the implementation plan as envisioned by the Committees on Armed Services during 1999.
- 2) By no later than January 31, 2001, the Secretary shall have developed the implementation plan to incorporate chiropractic into the MHS, and reported such plan to the Defense Committees of the House of Representatives and the U.S. Senate.
- 3) In carrying out the development of the implementation plan, the Secretary of Defense shall personally ensure that Doctors of Chiropractic who serve on the OAC are intimately engaged with DoD in the preparation of the implementation plan.
- 4) The current level of chiropractic health care benefits at the statutorily-required thirteen sites shall be continued indefinitely, at level of service currently being provided at these sites.
- 5) The implementation plan described above shall include, at a minimum, the following components –
 - (a) full integration of chiropractic health care services into the MHS, but phased into the MHS as follows:
 - (i) Phase I: All active duty personnel, with particular emphasis on providing chiropractic services where the impact on combat readiness will be most significant, by no later than October 1, 2001:

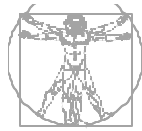


- (ii) Phase II: All active and non-active duty personnel receive chiropractic health care services by no later than October 1, 2002; and,
 - (iii) Phase III: All active, non-active duty personnel and their dependents receive chiropractic health care services by no later than October 1, 2003.
- (b) Direct access to chiropractic health care services by men and women of the Armed Forces;
 - (c) Chiropractic health care services shall be provided at all military health care facilities;
 - (d) Full scope of practice, defined as follows:

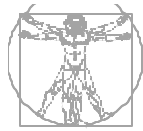
Doctors of Chiropractic are trained and educated at chiropractic colleges accredited by the Council on Chiropractic Education (recognized as an accrediting agency for chiropractic education by the U.S. Department of Education). Their scope of practice extends well beyond treatment and incorporates broad patient evaluation and diagnostic components, as well as the following services –

- (i) Primary contact, screening, and coordination of care services;
- (ii) Diagnostic testing and imaging, including differential diagnosis, with the accompanying ability to perform and/or order as well as interpret diagnostic tests, including venipuncture;
- (iii) Ordering and interpreting diagnostic imaging, electro-diagnostic testing, and laboratory analysis;
- (iv) Manipulation/adjustment services and a range of other manual and physical therapeutic procedures, including daily living instructions, ergonomics, and exercise/rehabilitation and counseling; and
- (v) Nutritional counseling, including advice on vitamins and food supplements.

Note: Prescriptive drugs and surgery are outside a Doctor of Chiropractic's scope of professional practice.

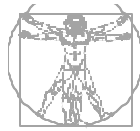


- (e) Doctors of Chiropractic operating with the same, full hospital privileges and credentials authorized for physicians in the MHS and TRICARE.
- (f) Chiropractic health care services provided through a variety of mechanisms, including but not limited to: contract employees and Doctors of Chiropractic serving as Commissioned Officers.
- (g) Establishment of a Chiropractic Health Care Policy Board to assist and advise the Assistant Secretary for Health Affairs and the Secretary of Defense on the implementation of the chiropractic integration plan and all subsequent administration of the chiropractic health care benefit program. Such Board shall also serve as a policy-making authority within the Department of Defense for chiropractic health care services and benefits in the military.
- (h) Establishment of a chiropractic education and training program to be available to all military health care providers, administrators, and support personnel within the military health system, including TRICARE, to assist in the assimilation of chiropractic health care services into the mainstream of all health care services provided to the Armed Forces. Such education and training program shall be carried out by, among others, the colleges and universities that comprise the Association of Chiropractic Colleges.
- (i) Stringent reporting requirements shall be imposed on the Department of Defense, to ensure that they report on a regular, detailed basis on the implementation and administration of the chiropractic health care benefits program in the MHS, including a requirement that the General Accounting Office monitor and report on the chiropractic health care benefit program on a regular, ongoing basis to the Congress and the Department.



APPENDIX A

BACKGROUND RESEARCH ON CHIROPRACTIC CARE



BACKGROUND RESEARCH ON CHIROPRACTIC CARE

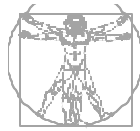
Within the past 100 years, chiropractic has become the third-largest profession of healthcare delivery in the world. The American Chiropractic Association defines chiropractic as, “a branch of the healing arts that is concerned with human health and disease processes. Doctors of Chiropractic are physicians who consider man as an integrated being, but give special attention to spinal mechanics, neuromusculoskeletal, neurological, vascular, nutritional, and environmental relationships.” (ACA Master Plan, ratified by the House of Delegates June 1964, amended June 1979.)¹

According to the Association of Chiropractic Colleges, chiropractic is defined as "a healthcare discipline that emphasizes the inherent recuperative ability of the body to heal itself without the use of drugs or surgery." In practice, chiropractic "focuses on the relationship of structure [primarily the spine] and function [as coordinated by the nervous system] and how that relationship affects the preservation and restoration of health."²

Chiropractic's focus on the principles of holism have gained it a wide public following among alternative medical procedures (with utilization rates ranging between 11 percent³ and 15.7 percent⁴ of the U.S. population). Interest in less-invasive interventions and natural healing is demonstrated by the rapidly growing number of Americans visiting alternative health providers, rather than allopathic physicians.^{1,3}

Chiropractic is recognized and licensed in every state and province in North America, as well as in 76 nations representing the European, Asian, Latin American, Caribbean, Eastern Mediterranean, and Pacific domains.⁶ The increasing acceptance of chiropractic as mainstream healthcare is clear, an acceptance that has grown in tandem with greater emphasis on research by professional organizations and colleges. It also stems from rigorous standards for accrediting and review of educational curricula at chiropractic colleges around the world, 16 of which are accredited in the United States by the Council for Chiropractic Education (CCE). The CCE has had accrediting agency status with the U.S. Department of Education since 1974, and with the Council on Postsecondary Accreditation since 1976. The minimum number of hours required for CCE accreditation is 4,200, ranging from 4,400 to 5,220 hours at colleges nationwide.⁵ In fact, the didactic basic science and clinical science hours among chiropractic colleges around the United States is nearly the same as the corresponding averages obtained from medical schools nationwide.⁷

With more than 65,000 licensed practitioners in the United States, chiropractic is the foremost profession through which spinal manipulation/adjustment is administered—largely in the treatment of back pain but increasingly for other neuromusculoskeletal disorders and for non-neuromusculoskeletal conditions as well. It has been estimated that the total number of chiropractic office visits nationwide each year is 250 million,⁸ with 94% of all spinal manipulations/adjustments administered by Doctors of Chiropractic.⁹



PATIENT OUTCOMES

Over 40 randomized clinical trials have been published comparing spinal manipulation/adjustment with other treatments for low-back pain. The better-quality clinical trials have indicated that spinal manipulation/adjustment is superior to other types of intervention (corsets, massage, mobilization, back education, physiotherapy, acupuncture) or at least as effective as NSAIDs—¹⁰⁻¹⁹ but without the side effects of NSAIDs, which have been shown to affect no fewer than seven organ systems (gastrointestinal, hepatic, renal, hematologic, cutaneous, respiratory, and central nervous system), sometimes fatally.^{20,21} These findings have been given additional weight by at least two meta-analyses published in peer-reviewed medical journals, unequivocally supporting the effectiveness of spinal manipulation/adjustment in treating acute low-back pain in the absence of radiculopathy.^{22,23}

PATIENT SATISFACTION AND COST-EFFECTIVENESS

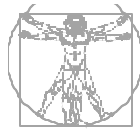
In addition to improved patient outcomes, an integral part of evaluating the use of any healthcare modality is its cost. Chiropractic care has been found to be a superior treatment option and demonstrates lower costs.²⁴ This pattern is consistently observed from the perspectives of workers' compensation studies,²⁵⁻³⁰ databases from insurers,³¹⁻³³ and other health economists.^{34,35} Some studies have suggested the opposite [that chiropractic services are more expensive than medical services],^{36,37,39} but these studies contain significant refuted flaws.^{28,38}

The cost advantages for chiropractic for matched conditions appear to be so dramatic that Pran Manga, a prominent Canadian health economist, has concluded in a study commissioned by the Canadian National Government (Ontario Ministry of Health) that doubling the utilization of chiropractic services from 10 percent to 20 percent may realize savings as much as \$770 million in direct costs and \$3.8 billion in indirect costs.³⁵ Furthermore, in no cost studies to date have either iatrogenic or legal burdens been calculated, which suggests advantages for chiropractic health care.

Patient satisfaction with chiropractic treatment has also invariably been shown to be abundantly greater than that found with conventional management.^{39,40} Satisfied patients are far more likely to be compliant in their treatment,⁴¹ giving Doctors of Chiropractic yet another advantage over other professionals in terms of improved patient outcomes.

APPROPRIATENESS AND GUIDELINES

Spinal manipulation/adjustment has also excelled in experimental designs bearing great clinical significance beyond randomized trials. Panels convened by the RAND Corporation,^{42,43} as



well as field practitioners' utilization studies,⁴⁴ have provided additional clinical support to that found in randomized clinical trials of spinal manipulation/adjustment for the management of low-back pain.

In addition, the Mercy Conference guidelines, plus relevant literature, formed the basis of the clinical practice guidelines on low-back pain released in December 1994 by the Agency for Healthcare Policy and Research (AHCPR).⁴⁵ These guidelines rank spinal manipulation/adjustment in the *top tier* of clinical options available for treatment of low-back pain.

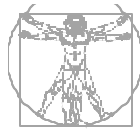
EARLY CHIROPRACTIC INTERVENTION

The AHCPR guidelines specifically state that "manipulation can be helpful for patients with low-back problems without radiculopathy when used within the first month of symptoms." These conclusions were arrived at after extensive peer review of the literature, on-site clinical evaluations (pilot reviews), and the hearing of testimony by a 23-member multidisciplinary panel of experts, including consumer representatives. Both strengths and weaknesses in the scientific base were identified, so that it was possible to rank each type of clinical intervention on the effectiveness of its outcome (positive or negative) and the strength of its foundation as published in peer-reviewed literature.

Perhaps the most distinguishing characteristic of this study is that, among 23 options for the therapeutic intervention for relieving back pain, spinal manipulation and the use of nonsteroidal antiinflammatory agents remain sole strategies expected to have the most beneficial effect. All the remaining options (the use of acetaminophen, muscle relaxants, opioid analgesics, antidepressants, colchicine, oral steroids, shoe insoles, physical agents [including hot and cold packs], or lumbar corsets and back belts; trigger point, facet point, ligamentous or epidural injections; bio-feedback; traction; transcutaneous electrical stimulation; acupuncture; activity modification; bed rest; or mild exercise) either have fewer documented effects or are contraindicated.⁴⁵ Similar guidelines developed within Great Britain have come to essentially the same conclusions.⁴⁶

Clearly these findings indicate that *early chiropractic intervention is the most effective and drugless intervention for most cases of low-back pain without sciatica*. Scientific research is the driving force that has enabled all these treatment options to be evaluated and ranked. Since only 15 percent of all medical procedures have been documented by research,⁴⁷ and only 1 percent have been shown to have any scientific value,⁴⁸ the research that has led to the high ranking of chiropractic intervention takes on even greater significance. Chiropractic has received little research funding, but has used its resources to produce a premier status in scientific research circles, such as AHCPR.⁴⁹

The strong educational and research bases of chiropractic, in addition to painstaking efforts to adopt standards and achieve consensus, have led to its increasing inclusion in reimbursement systems in public and private payer systems. In both the United States and Canada,



chiropractic has been included in Medicare, the majority of private insurance programs, workers' compensation, and personal injury reimbursement systems. Increasing numbers of health maintenance organizations (HMOs), preferred provider organizations (PPOs) and other managed healthcare systems are routinely including chiropractic services, as well.

CHRONIC PAIN CONSIDERATIONS

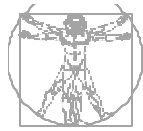
The belief that low-back pain is benign and will usually disappear after six weeks with no intervention has been significantly refuted by the recent literature. One study in the British Medical Journal demonstrated that, in a cohort of 170 patients, **60 percent still complained of pain and disability after one year**. Indeed, the author of this study was forced to conclude that low-back pain "should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes."⁵⁰ A second study published within the past year was largely in agreement.⁵¹ From these studies, it is reasonable to conclude that all cases of low-back pain have the potential to become chronic if left untreated. Therefore, such cases require immediate and appropriate intervention.

TREATMENT OF CONDITIONS OTHER THAN LOW-BACK PAIN

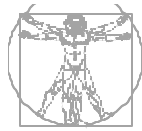
The process of validation of spinal manipulation/adjustment for the management of low-back pain has been more recently repeated for the cervical region and the treatment of neck pain and headache. In the past decade, clinical trials, prospective series and case studies have provided a strong evidence base for the management of these conditions by spinal manipulation/adjustment.⁵²⁻⁶⁶ The types of headache that have been documented in this research include tension-type, migraine and cervicogenic.

Other conditions in which the literature has suggested that there may be responsiveness to chiropractic intervention include the following:

1. Upper extremity disorders: carpal tunnel syndrome⁶⁷⁻⁷⁰
2. Obstetric/gynecologic disorders:
 - a. Dysmenorrhea⁷¹⁻⁷³
 - b. Premenstrual syndrome⁷⁴⁻⁷⁶
3. Conditions of infants, children and adolescents:
 - a. Scoliosis^{77,78}
 - b. Otitis media⁷⁹⁻⁸¹
 - c. Colic^{82,83}
 - d. Enuresis⁸⁴



4. Pulmonary and circulatory disorders:
 - a. Asthma⁸⁵⁻⁸⁸
5. GI dysfunctions⁸⁹⁻⁹¹
6. Primary contact or care services^{92,93}



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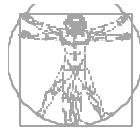
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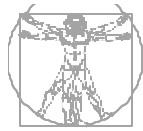
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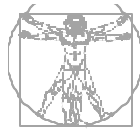
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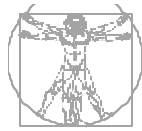
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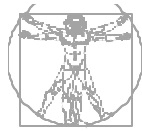
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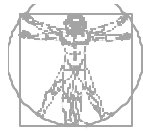
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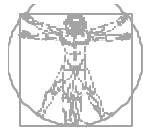
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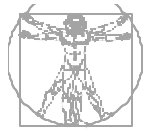
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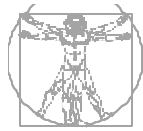
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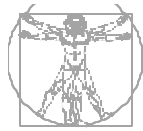
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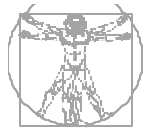
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APPENDIX B

DECEMBER 1, 1999 LETTER TO ADMIRAL CARRATO



APPENDIX C

FEBRUARY 23, 2000 LETTER TO ADMIRAL CARRATO