Chiropractic "primary care physicians" lower healthcare costs by 69%.

- J Manipulative Physiol Ther. 2007 May;30(4):263-9

Patients who choose an HMO whose "gatekeepers" are primarily chiropractors incur 69% lower healthcare costs, on average, compared to patients who choose a conventional medical HMO.
Clinical utilization and cost outcomes from an integrative medicine independent physician association: an additional 3-year update.

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Background: The original study published in 2004 (see indented paragraph below) covered years 1999-2002. This article extends data by 3 years (2003-2005). Since Spring of 2003, the Chicago-area AMI providers have consisted of 14 DC’s and 7 “natural medicine” MD’s & DO’s (previously specializing in home birth and childcare). The numbers from this article come from 70,274 “member months” of data (“member months” = number of patients X number of months each patient was enrolled in the AMI IPA). Results (“DC” gatekeeper IPA {AMI} vs. 2 other “MD” gatekeeper IPA’s; all pts were from the same Chicago HMO): 1) # of AMI enrollees: year 2000 – 522, year 2005 – 1511; 2) % of adolescent enrollees: AMI year 2000 – 12% (classical HMO pts in year 2000) – 26%), AMI 2005 – 56%; 3) diagnostic profiles for AMI pts (year 2000, year 2005; only profiles w/ at least 5% occurrence are shown): a) wellness – 29%, 23% (classical HMO pts in year 2005 - 38%); b) orthopedic – 24%, 17%; c) mental health – 8%, 4%; d) gynecological – 7%, 7%; e) sinus/allergy – 6%, 3%; f) cardiac/hypertension – 5%, 3%; g) upper respiratory tract – 2%, 15%; h) gastrointestinal – 1%, 5%; i) dermatology – not reported, 6%; 4) % change in utilization of the following for AMI pts (compared to the MD IPA pts for all 7 yrs {1999-2005}): a) hospital admissions – 60% decrease; b) hospital days – 59% decrease; c) outpatient surgeries – 62% decrease; d) drug costs – 85% decrease; 5) AMI’s “utilization management fund cost savings” (an annual “hypothetical budget” was predicted by the HMO’s actuarial department {excluding drug costs}; adjusted for age & sex; annual savings are listed): a) 1999 – 67%; b) 2000 – 88%; c) 2001 – 57%; d) 2002 – 69%; e) 2003 – 70%; f) 2004 – 50%; g) 2005 – 81%; 6) AMI pt satisfaction scores (“Are you satisfied overall with your IPA’s performance?”): a) 1999 – 100%; b) 2000 – 89%; c) 2001 – 91%; d) 2002 – 90%; e) 2003 – 96%; f) 2004 – 94%; g) 2005 – 91%. Conclusion: “...the cost outcomes of the integrative medicine IPA are below those of the conventional medical IPA’s...” “...satisfaction scores are higher than the conventional medical IPA’s.” “The consistent decrease in cost and care utilization...warrants larger independent third-party funding for multicenter, randomized controlled trials.” AMI company info:, Alternative Medicine Integration (473 Central Ave., Ste. 2, Highland Park, IL 60035, 847-433-9946, www.amibestmed.com).
How cost-effective is chiropractic for injured workers?

Average treatment costs for injured workers:
Medical care vs. chiropractic care

Data taken from:
An evaluation of medical and chiropractic provider utilization and costs: Treating injured workers in North Carolina
Chiropractic care for injured workers is 90% less expensive than medical care.

- J Manipulative Physiol Ther 2004 Sep;27(7):442-448

Injured workers who undergo chiropractic care incur average treatment costs of $757, which is 90% less than the $8174 average cost of medical care.
How cost-effective is chiropractic for workers with low back injuries?

Compared to medical care, how much less costly is chiropractic care for on-the-job low back injuries?

Data taken from:
An evaluation of medical and chiropractic provider utilization and costs: Treating injured workers in North Carolina
Chiropractic care for LBP is 90% less expensive than medical care.

- J Manipulative Physiol Ther 2004 Sep;27(7):442-448

Workers who undergo chiropractic care for low back injuries incur average treatment costs of $684, which is 90% less than the $7743 average cost of medical care.
Chiropractic “primary care physicians” lower healthcare costs by 70%.


Patients who choose a chiropractor to be their HMO “gatekeeper” incur 70% lower healthcare costs, on average, compared to patients who choose an MD to be their “gatekeeper”.
How cost-effective are chiropractic "primary care physicians"?

What is the average decrease in healthcare costs for patients who choose a chiropractor to be their HMO "gatekeeper"?

70% Decrease

Data taken from:
Clinical and Cost Outcomes of an Integrative Medicine IPA.
Alternative Medicine Integration Group, LP, 473 Central Avenue, Suite 2, Highland Park, IL 60035; e-mail: rsarnat@amibestmed.com.
Clinical and Cost Outcomes of an Integrative Medicine IPA.
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Background: “Alternative Medicine, Inc.” (AMI) was formed in ’97 by Richard Sarnat, MD, an ophthalmologist (it changed its name to “Alternative Medicine Integration” in ’02). It was formed as an independent provider association (IPA) with chiropractors as the gatekeepers to see if such an approach would lead to lower healthcare costs compared to those w/ MD gatekeepers. Study background: Healthcare costs/procedures for pts of the “Alternative Medicine, Inc.” IPA were evaluated over a 4-yr period (1/1999-12/2002). Pts came from a 600,000 member “classical gatekeeper” HMO in Chicago. Enrollment in the AMI IPA was voluntary and through word of mouth (there was no marketing). It had 37 members during the first mth (1/1999) and 649 members during the last mth of the study (12/2002). All healthcare costs were evaluated, including costs from chiropractic care, other complementary and alternative care, medical care, referrals, lab work, hospitalizations, surgeries, drugs, etc. NOTE: “All ancillary testing and treatment outside the personal office of the primary care chiropractic physician was subject to MD medical director approval...” They started out w/16 “fully credentialed primary care chiropractic physicians” and ended up w/ 30 by the end of the study. All of the DC's had to pass credentialing by the HMO “Credentialing Peer Review Committee”, which was made up entirely of MD's. The DC's were screened for: treatment modalities used, criterion for referrals, and comfort in performing as a PCP. Preference was given for: broad scope of practice patterns, hx of interaction w/ MD specialists, and “demonstrated understanding of the pathophysiologic basis of disease as currently understood by evidence-based Western medicine.” The study data came from 21,743 “member months” (member months = number of patients X number of months each patient was enrolled in the AMI IPA). Results for the “DC” gatekeeper IPA (AMI) vs. 2 other “MD” gatekeeper IPA’s (all pts were from the same Chicago HMO): 1) AMI referral patterns (for year 2000; no data provided for other years): % of DC pts referred to MD specialists - 40%, % of DC pts managed solely by their DC - 60%; 2) Diagnostic profiles (for year 2000; no data provided for other years): a) AMI (only those categories w/ at least 5% are listed): wellness - 29%, orthopedic - 24%, mental health - 8%, gynecological (no OB) - 7%, sinus/allergy - 6%, cardiac/hypertension - 5%; b) MD IPA's: wellness - 35%, orthopedic - 8%, mental health - 1%, gynecological (no OB) - 9%, sinus/allergy - 3%, cardiac/hypertension - 9%; 3) % change in utilization of the following for IMA pts (compared to the MD IPA pts; for all 4 yrs): a) hospital admissions - 43% decrease; b) hospital days - 58% decrease, c) outpatient surgeries - 43% decrease, d) drug costs - 52% decrease; 4) AMI's “utilization management fund cost savings” (an annual "hypothetical budget" was predicted by the HMO's actuarial department (excluding drug costs; adjusted for age & sex; annual savings are listed): 1999 - 67%, 2000 - 88%, 2001 - 57%, 2002 - 69%. Conclusion: “The AMI experience seems to indicate that a non-pharmaceutical/nonsurgical orientation can reduce overall health care costs significantly...”. The results “demonstrate the potential superiority of an integrated health system in which chiropractic and CAM therapies play a significant primary care role.” the magnitude of the results is “so large that it is difficult to dismiss as purely coincidental to population bias...” Other: 1) AMI pt satisfaction scores: 1999 - 100%, 2000 - 89%, 2001 - 91%, 2002 - 90%; 2) AMI company info: www.amibestmed.com, Alternative Medicine Integration, 473 Central Ave., Ste. 2, Highland Park, IL 60035, (847)433-9946.
How cost-effective is manual therapy for neck pain?

Manual therapy is nearly twice as effective as medical care for neck pain*. Is manual therapy also more cost-effective?

Average year-long healthcare costs for the treatment of neck pain^*

Medical Care
$1241

Manual Therapy
$403

Manual therapy is nearly 70% less costly than medical care

Data taken from:

*Manual therapy, physical therapy, or continued care by a general practitioner for patients with neck pain. A randomized, controlled trial.
Department of Clinical Epidemiology, Cabrini Hospital, Victoria, Australia. Jan.Hoving@med.monash.edu.au

^Cost effectiveness of physiotherapy, manual therapy, and general practitioner care for neck pain: economic evaluation alongside a randomised controlled trial.
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Cost effectiveness of physiotherapy, manual therapy, and general practitioner care for neck pain: economic evaluation alongside a randomised controlled trial.


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Study background (an evaluator-blinded, RCT): 183 pts (45 yoa, avg./60% female) were studied. All had nonspecific neck pain for at least 2 wks (52% had sx for 7+ wks, 65% had a hx of neck pain) that was reproducible during exam. Their avg. pain level was 6/10. None had received PT or MT the 6 mths previous, and all were referred for the study by their general practitioner (from 2/97-10/98). During the study, the pts were allowed to continue on meds/exercises rx'd by their MD before the start of the study. They were randomly assigned to: 1) Manual therapy: Tx given by "six experienced manual therapists..." All were physical therapists who had “followed a three year curriculum in manual therapy after training in physiotherapy”; a) Tx description: Consisted of “muscular mobilization techniques, specific articular mobilization techniques, and stabilization techniques." "Spinal manipulations [low-amplitude, high-velocity thrust techniques] were not included in this protocol;" b) Tx frequency/duration: Tx’d 1x/wk for 6 wks, ea. tx lasted 45 min’s; 2) Physical therapy Tx provided by “five experienced physical therapists who were not manual therapy specialists" a) Tx description: “active exercise therapies were the cornerstone of their strategy” ("postural exercises, stretching, relaxation exercises, and functional exercises"). Traction, massage, or modality applications “could precede the exercise therapy." "Specific manual therapy mobilization techniques were not included in this protocol;" b) Tx frequency/duration: Tx’d 2x/wk for 6 wks, ea. tx lasted 30 min’s; 3) Continued medical care by their general practitioner (GP): They received advice on prognosis, psychosocial issues, self-care (heat application, home exercises), ergonomics (size of pillow, work position, etc.; “encouragement to await further recovery”, "an educational booklet containing ergonomic advice and exercises", and analgesics and NSAIDs. If necessary; a) Tx frequency/duration: -10-minute follow-up visits were scheduled ea. 2 wks; b) Tx period lasted 6 wks. Results (12 months after start of study):

1) Follow-up rate - 97% (178/183 pts); 2) % of pts who were “completely recovered” or “much improved” (pts rated themselves on a 6-pt scale from “much worse” to “completely recovered”); medical care - 56%, physical therapy - 63%, manual therapy - 72% (not ss superior to the other 2 txs); 3) % change in avg. pain on 0-10 VAS: medical care - 65% better (6.3 to 2.2), physical therapy - 54% better (5.7 to 2.6), manual therapy - 71% better (5.9 to 1.7; ss superior to PT only); 4) % of pts who had absences from work d/t neck pain; medical care - 33% of the employed pts (15/46), physical therapy - 29% (12/42), manual therapy - 19% (9/47; not ss superior to the other 2 txs); 5) Total healthcare costs: medical care - $1241, physical therapy - $1167, manual therapy - $403 (65%-68% less expensive than the other 2 txs; alternatively, the other 2 txs are approx. 3x more expensive). Conclusion: "Manual therapy is more effective and less costly than physiotherapy or care by a general practitioner for treating neck pain." “Manual therapy had significantly lower costs...” Comments: 1) What costs were included in “healthcare costs”? Pts completed a weekly cost diary that included all of the following: a) direct healthcare costs: costs of medical care, PT, or MD care, visits to other healthcare providers, drugs, professional home care, and hospitalization; b) direct non-healthcare costs; out of pocket expenses, costs of paid and unpaid help, and travel expenses; c) indirect costs: loss of production d/t missed work, days of inactivity (w/ or w/o a paid job); 2) Breakdown of healthcare costs: a) medical care ($1241); direct healthcare costs - $284, direct non-healthcare costs - $67, indirect costs - $890; b) physical therapy ($1167); direct healthcare costs - $351, direct non-healthcare costs - $114, indirect costs - $702; c) manual therapy ($403; ss less than the other 2 tx groups); direct healthcare costs - $200, direct non-healthcare costs - $43, indirect costs - $160. Other Avg. # of healthcare visits: a) medical care pts: general practitioner - 3, manual therapy - 7, physical therapy - 3, b) physical therapy pts: general practitioner - 1, manual therapy - 2, physical therapy - 15; c) manual therapy pts: general practitioner - 1, manual therapy - 7, physical therapy - 1. Absenteism from paid work (avg. # of missed days for ea. pt): medical care - 10 days, physical therapy - 8 days, manual therapy - 1 day (ss superior - ?; authors don’t say).

Manual therapy, physical therapy, or continued care by a general practitioner for patients with neck pain. A randomized, controlled trial.


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Study background: See “study background” from the study above. Results (1 wk after tx ended): 1) % of pts who rated themselves as “completely recovered” or “much improved”: medical care - 36% (note: 14% received manual therapy during study period), physical therapy - 51% (not ss superior to medical care), manual therapy - 63% (ss superior to the other 2 txs); 2) % change in avg. pain on 0-10 VAS (ss-?): medical care - 41% better (6.3 to 3.7), physical therapy - 49% better (5.7 to 2.9), manual therapy - 59% better (5.9 to 2.4); 3) absences from work d/t neck pain (ns): medical care - 26% of the pts, physical therapy - 29%, manual therapy - 13%. Conclusion: "...manual therapy is a favorable treatment option for patients with neck pain compared with physiotherapy or continued care by a general practitioner." “Primary care physicians should consider manual therapy when treating patients with neck pain.”

BONUS NOTE COMMENTS:

The “Manual therapy is nearly twice as effective as medical care for neck pain” comment comes from the 2002 Annals of Internal Medicine study (% of pts who were “completely recovered” or “much improved”: medical care - 36%, manual therapy - 68%).
Does Regular Chiropractic Care Result In Lower Healthcare Costs?

How much does regular chiropractic care lower yearly healthcare costs for patients over 65 years of age?

- **Chiropractic Patients**: $3,106
- **General Population**: $10,041

Regular chiropractic patients have 69% lower healthcare costs

Data taken from:
Maintenance care: health promotion services administered to US chiropractic patients aged 65 and older, part II.
Logan Chiropractic College, St Louis, MO, USA.
Maintenance care: health promotion services administered to US chiropractic patients aged 65 and older, part II.

Logan Chiropractic College, St Louis, MO, USA.

Study background: The 73 American DC’s who participated in the study were randomly chosen from a pool of eligible DC’s.

1) The DC eligibility requirements were: provide maintenance care (MC), 5+ yrs of practice or currently treating a pt with 5+ yrs of MC, and willing to help with research. Up to 10 consecutive eligible MC pts were studied from each practice.

2) The pt eligibility requirements were: 65+ yoa, received MC for at least 5 yrs, and received at least 4 MC visits/yr. Pt filled out an overall health status questionnaire (SF-36) and a survey of lifestyle health habits, medical use, healthcare costs, and perceived value of MC.

The DC’s filled out frequency & duration of each pt’s MC and components of MC (manipulation, exercise, nutrition, and/or PT). Data from MC pts was compared to non-MC pts (data taken from a 1987 general population survey of 65+ year-olds). Data was collected over 7 mths in 1995.

Results:

1) General:
   The 311 pts who were studied (an avg. of 4.26 from each chiropractor’s office) were 73 yoa on avg., had received 16.5 yrs of MC, and received 16.95 MC visits/yr.

2) Effects of MC:
   a) Overall health status:
      No diff. between MC and non-MC pts except for the “positive depression screener” scale of the SF-36 (17% for MC, 89% for non-MC).
   b) # of yearly visits to medical doctors:
      MC – 4.76,
      non-MC – 9 (based on the most recent government data from 1987).
   c) Healthcare costs:
      MC – $3,106,
      non-MC – $10,041 (based on 1987 government figures of per capita healthcare expenses for 65+ yoa and adjusted for percentage of growth in healthcare costs for each yr).
   d) Pts opinion of MC:
      95.8% believe it is “considerably or extremely valuable”.

Conclusion: Elderly pts under chiropractic maintenance care have 69% lower healthcare costs.

Other: What did MC consist of in this study (what type of care did they receive)?

1) manipulation - 100%:
   • diversified - used by 70% of DC’s,
   • activator - 28%,
   • Thompson - 22%,
   • soft-tissue - 21%,
   • Gonstead - 18%,
   • AK - 16%,
   • SOT - 14%,
2) stretching advice - 68%
3) exercise advice - 56%
4) diet advice - 45%
5) vitamin/mineral advice - 41%
6) PT - 35%

Do Spinal Manipulation Patients Improve Without The Need For Extra Care?

How much less of other forms of treatment are needed for spinal manipulation patients compared to medical patients?

Data taken from:
A Comparison of Osteopathic Spinal Manipulation with Standard Care for Patients with Low Back Pain.
Department of Orthopedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, 1653 W. Congress Pkwy., 1471 Jelke, Chicago, IL 60612, or at ganders@rush.edu.
A Comparison of Osteopathic Spinal Manipulation with Standard Care for Patients with Low Back Pain.
Department of Orthopedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, 1653 W. Congress Pkwy., 1471 Jelke, Chicago, IL 60612, or at ganderss@rush.edu.

Study background: 155 subacute LBP pts (sx of 3 wks - 6 mths duration) w/ an “osteopathic lesion suitable for manipulation” were studied.

They were randomized into 2 tx groups:
1) Standard medical care – medication (NSAIDs, analgesics, or muscle relaxants), active PT (?), passive PT (US, diathermy, hot/cold packs, tens), a corset, a 10-minute educational videotape on LBP, and no manual therapy;
2) Osteopathic manual therapy - any of the above plus any of a variety of manual therapy techniques including thrust, muscle energy, counterstrain, articulation, and myofascial release. A 10-minute educational videotape on LBP was also required.

Tx parameters (8 total txs for both groups): 1x a week for 1 month, then 1x every 2 weeks for 2 months.

Results after 12 weeks:
1) “We found no difference in clinical outcome...” (67% less pain - osteopathic care, 58% less pain - medical care).
2) There were stat. sig. differences in usage of:
   a) NSAIDs - 56% less usage for osteopathic (24.3 vs. 54.3);
   b) muscle relaxants - 75% less (6.3 vs. 24.3);
   c) physical therapy - 92% less (.2% vs. 2.6%).

Conclusion: Patients in both groups improved similarly and significantly, although the osteopathic patients used “significantly less" medication and physical therapy (“...the differences in cost were significant." This suggests “an important benefit of osteopathic manipulative treatment.”)

Comments: “More than 90% of patients in both groups were satisfied with their care.” “In the United States, most spinal-manipulation therapy is provided by chiropractors.”