In Support of Chiropractic Physician Inclusion in the New Mexico Centennial Care Program

Summary of Published Research and Data of Cost-Efficiency and Effectiveness of Chiropractic Medicine

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Executive Summary Fact Sheet

- Prior FIRs on inclusion of chiropractic medicine in the NM Medicaid program fail to recognize potential cost savings and decreased utilization of current healthcare procedures
- Including chiropractic physicians will add a competitive provider group to treat conditions already covered by the NM Medicaid program
- A congressional study conducted in New Mexico, allowing full reimbursement for chiropractic physicians resulted in $14 million in savings over a 2 year period
- Health insurance members with chiropractic coverage have on average, have a 28% decrease in cost per episode of low back pain
- Patients who see a chiropractic physician first for low back pain are 30 times less likely to have surgery than those that see a surgeon first
- Initiating care with a chiropractic physician saves 20% per episode for spinal related disorders and results in 40% savings in overall healthcare costs
- Medicaid enrollees referred for complementary and alternative medical procedures had a 60% decrease in prescription use, 60% decrease in emergency room visits, and 27% decrease in yearly claims costs
- 55% of patients referred to chiropractic physicians discontinued prescription opioid use following treatment
- Patients receiving treatment from a chiropractic physician are 51% less likely to suffer an adverse drug reaction
- Per episode average treatment cost for conditions such as lower back pain, neck pain, or headache were lower for patients treating with a chiropractic physician than for patients treating with a medical doctor or physical therapist
- Patients with chronic low back pain and other medical problems who received spinal manipulation from a chiropractic physician had lower costs of care and shorter episodes of back pain than patients in other treatment groups
- In 2017 the American Academy of Physicians updated their guidelines for the treatment of acute and chronic back pain, recommending the use of non-pharmacological treatment, such as spinal manipulation, as a first line treatment

Introduction

The benefits of care provided by doctors of chiropractic continue to be demonstrated by research throughout the U.S. health care system. Consideration of adding chiropractic services to the New Mexico Medicaid program benefits package has been discussed many times in previous legislative committees and hearings, yet, to date the New Mexico legislature has yet to require managed care organizations offering Centennial Care coverage to add it to the essential benefits package. Government sponsored insurance programs across the country are reimbursing for chiropractic medicine more than ever. Medicare covers spinal manipulative therapy in all 50 states, and over half of the states (27) offer some reimbursement through state Medicaid programs.

The decision to provide coverage in each state is based on policymakers' perceptions of both benefits and costs. The cost of including doctors of chiropractic as a covered physician is often misunderstood. Prior fiscal impact reports on the matter make flawed assumptions and conclude that adding another provider group is more expensive and less effective than current care. However the published data and research on this topic does not indicate that is the case for chiropractic medicine. The reality is that chiropractic physician delivered care is both more effective and less costly than the current model of care for some specific primary care conditions, like lower back pain. Previous erroneous fiscal impact reports on adding doctors of chiropractic to New Mexico Medicaid benefits fail to recognize the cost savings potential of chiropractic medicine. In fact a Congressional study published June 16, 2009 by Brandeis University, used New Mexico chiropractic physicians in their study. Less than 50% of the physicians participated, yet using chiropractic to the fullest extent of their scope of practice saved Medicare 14 million dollars over a two year period of time. The following review of the literature shows the potential for cost savings and overall decreased in utilization of healthcare services with treatment from a chiropractic physician as compared to other forms of treatment.

Studies on the effectiveness of treatment by doctors of chiropractic

Research by Dagenais (2015), shows that spine pain is one of the most common and costly causes of health care utilization in the United States, with 61% of patients seeking care from a medical doctor (MD), or doctor of osteopathy (DO), 28% from doctor or chiropractic (DC), and 11% from both a medical doctor and physical therapist (PT). Given the availability of such different treatment methods for spine pain and similar problems, it is more important than ever to identify high value and cost effective services. Health economists indicate the highest value services are those that effectively prevent or treat disease and cost less than competing approaches. Alternatively, services of the lowest value are those that have less satisfactory outcomes and cost more than the alternatives. Regardless of which type of provider is used, the goal for policy makers should be to incentivize the use of high-value services and discourage the use of low-value services. In this study, Dagenais and his colleagues

concluded: “Overall, cost comparison studies from private health plans and workers compensation (WC) plans reported that health care costs were lower with chiropractic care.”

Over the past several years, there have been several key milestones in the evaluation of the effectiveness of and cost-effectiveness of various approaches to back and neck pain. These milestones and conditions have been identified through an increasing number of studies and reports (Redwood 2016).

Individuals with Chiropractic Insurance Have Lower Annual Health Care Costs

This comprehensive study (Legoretta, et al. 2004) concluded that access to managed DC care reduces overall health care expenditures through several effects, including: (1) substitution of DC delivered care for traditional medical care, especially for spinal related conditions; (2) more conservative and less invasive treatment profiles and; (3) lower health service costs associated with managed DC care. Systematic access to managed DC care not only led to clinically beneficial results but also lowered overall health care costs.

A four year retrospective claims data analysis compared more than 700,000 health plan members with a DC coverage benefit, and 1,000,000 members of the same plan without the DC benefit. The results of this study revealed that members with insurance plans covering chiropractic services had lower annual total health care expenditures compared to those without coverage ($1,463 vs. $1,671). Back pain patients with DC coverage had lower utilization of plain radiographs, low back surgery, hospitalizations and magnetic resonance imaging (MRI). Patients with DC coverage also had lower average back pain episode-related costs ($289 vs. $399).

Chiropractic Physician Delivered Services for Back and Neck Pare are Cost-Effective

A report from CAN Group, a subsidiary of United Health Group was published in 2007 (Elton). This study documented that orthopedic conditions account for more medical expenses than any other condition, and that back and neck pain account for a far higher percentage of orthopedic expenses than any other orthopedic condition. The report goes on to show that DC delivered services for back and neck pain are significantly more cost-effective than all competing approaches. The UHC Group concluded that the single most important factor in holding down cost was the profession of the doctor with whom care is initiated.

To briefly summarize these findings when care is initiated with a doctor of chiropractic the severity and adjusted total episode cost is lower than for care initiated with a primary care medical physician. Moreover the cost is also drastically lower than for care initiated with an orthopedist, a physical medicine rehabilitation physician, or another practitioner. Among other findings in the report, the authors made the following opinions: (1) “When first provider seen is a conservative provider (i.e. chiropractic physician), treatment appears to be characterized by spinal manipulation and active/passive therapies” and: (2) “When first provider seen is a primary care physician, spine care appears to be characterized by radiology, pharmacology, hospitalization and surgery.”

The concept of first provider seen was evaluated again by Dr. Fritz et al., with results published in September 2015. In this claims analysis, various provider types were compared to primary care providers (PCP) for utilization rates of services. The authors found: compared to PCPs, when patients with lower back pain initiated care with a DC there was lower utilization of radiographic services and surgery.

Another study specifically looking at surgical utilization in work related lower back injuries, shows cost savings when DCs are the provider to initiate care. Keeney et al (2013) stated: "Reduced odds of surgery were observed for those whose first provider was a DC. 42.7% of workers (with back injuries) who first saw a surgeon had surgery, in contrast to only 1.5% of those who saw a DC first."

Mercer Study Concludes Chiropractic Care is Cost Effective

A 2009 study by Choudhry and Milstein compared DC delivered care to that provided by medical physicians. The authors noted the annual cost of treatment of neck pain by chiropractic physicians was $302 lower than that from medical physicians. Similarly, they concluded "When considering effectiveness and cost together, chiropractic physicians care for low back pain and neck pain is highly cost effective, and represents a good value in comparison to medical physicians care and to widely accepted cost-effectiveness thresholds."

Seeking Treatment from a Doctor of Chiropractic First Saves an Average of 40% of Healthcare Costs

A study from Blue Cross Blue Shield of Tennessee examined 85,000 subscribers (Liliedahl, Finch, Axen, and Goertz 2010). The study compared the cost of care from medical doctors vs. doctors of chiropractic. In order to level the playing field, subscribers had open access to MDs and DCs, there were no limits placed on number of visits and no difference in co-pays. The authors found after risk adjusting each patient's cost, that episodes of care initiated with a DC were 20% less expensive than episodes initiated with an MD. The researchers estimated that allowing DC-initiated episodes of care would have led to an annual cost savings of $2.3 million for the 85,000 subscribers of BCBS Tennessee. This led the authors to conclude: "When insurance companies restrict access to DC initiated care for low back pain, they may inadvertently be paying more for care than if such restrictions were removed."

Utilization of Chiropractic Medicine Decreases Hospitalization, Surgical, and Pharmaceutical Costs

Analysis of clinical and cost utilization data from an integrative medicine independent physician association (IPA) which looked at chiropractic services utilization found significant decreases in patient costs (Sarnat 2007). Using claims data from a 7 year period utilization of chiropractic services was associated with a decrease in patient cost for the following use of services: (1) 60.2% decrease for in-hospital admissions, (2) 59.0% decrease in hospital days, (3) 62.0% decrease for outpatient surgeries and procedures, and (4) 85.0% decrease in pharmaceutical costs when compared with conventional medicine (ie visits to MD/PCP)

Healthcare Expenditures for DC Care Less than Other Provider Combinations

A trio of studies from 2016 (Hurwitz et al) examined healthcare costs and utilization for patients with low back pain, neck pain, and headaches. They evaluated data for patients seeking care from chiropractors, physical therapists or medical doctors in the state of North Carolina. They found healthcare expenditures for patients with low back pain, neck pain, and headaches were all lower in those who received chiropractic care alone when compared to any other combination of healthcare providers.

After Considering Other Patient Variables, DC Care Still Associated with Lower Healthcare Costs

Admittedly, a common weakness shared by many of the studies described above has to do with how comparisons are made between those receiving and not receiving chiropractic care. We know patients who visit a DC tend to be different in some way from those who do not. Therefore, it can be difficult to figure out if any lower costs found in this population are a result of care from a DC or other factors such as age, education, socioeconomic status and existing comorbidities.

In 2012 Martin et al published the most exhaustive analysis to date, taking in to consideration all the above mentioned factors. Martin and his team identified 12,000 patients with low back and neck pain from the Medical Expenditure Panel Survey and estimated weather those seeking complementary and integrative health care (CIH) such as chiropractic, acupuncture, massage, and herbalism had higher or lower healthcare costs when compared to non-users. The authors use a statistical tool know as propensity score matching to account for covariates such as, age and sex that predict whether or not a patient receives a specific treatment. They found that propensity-score matched cost for spine care were $526 lower and total health care costs were $298 lower for CIH users versus non-users.

Although a number of CIH practices were included in this study, chiropractic medicine accounted for 75% of CIH services identified. As a result, investigators conducted a chiropractic-specific analysis of expenditures and found that the results were the same. Of note is the fact that patients who used CIH providers, including doctors of chiropractic, had lower in-patient hospitalization costs.

Medicaid Enrollees referred for CAM treatments had 27% decrease in total claims costs

The Rhode Island Department of Health published data in November of 2016 on a pilot project involving complementary and alternative medicine (CAM) co-management. Healthcare utilization rates for patients referred for CAM therapies (chiropractic manipulation, acupuncture, and massage) were compared pre and post referral. The findings demonstrated: (1) Prescriptions declined from 70% pre-referral to 26% post-referral; in particular opioid use declined from 8% pre-referral to 1% post-referral. (2) Emergency room visits declined from 7.57 visits pre-referral to 2.98 visits post-referral. (3) Average Pre-referral claims costs were $19,456.59 per enrollee; post-referral claims costs declined to $14,150.70. (4) 92% “agree or strongly agree their CAM provider reduced their pain level”; 82% “believe their quality of life has improved by participating” and 96% “would recommend the program to friends or family suffer from chronic pain or fatigue.”

Patients Receiving Care from a DC are Less Likely to Use Opioids or Suffer an Adverse Drug Event

Multiple studies have been published this year showing a decrease in prescription opioid use for patients under the care of a DC. Results from a study out of New Hampshire showed patients receiving treatment for non-cancerous lower back pain from a DC were 55% less likely to fill a prescription for opioid medication than those that did not receive chiropractic services (Whedon 2018). Furthermore, average charges per person for opioid prescriptions were also significantly lower among recipients of chiropractic services.

In another study looking at treatment with a DC and medication use, authors examined adverse drug event in patients undergoing chiropractic treatments. Adverse drug events (ADEs) are injuries that result from prescription drug interventions. Types of ADEs include medication errors, adverse or allergic reactions, and overdoses. Adverse drug events are associated with increased rates of disability, hospitalization and mortality, and may result from appropriate use of medications as well as overuse and misuse. Analgesics are among the drug classes most often associated with occurrence of an ADE. The research team from the New Hampshire Department of Health concluded: The risk of an ADE was significantly lower among recipients of chiropractic services as compared with nonrecipients. The adjusted likelihood of an ADE occurring in an outpatient setting within 12 months was 51% lower among recipients of chiropractic services as compared to nonrecipients.

It is worth noting that in both of these studies were in non-Medicaid populations. Other articles have shown Medicaid enrollees are prescribed opioid medication at a higher rate than the general public and are also more likely to suffer and overdose. Therefore it is possible the decrease in opioid use and ADE could be even more drastic in the Medicaid population.

Conclusion

There a many more studies that have similar findings of cost savings or no added expense to over health care costs when chiropractic physicians are reimbursed by third party payers. With this reoccurring conclusion that patients with spine related disorders who start care with a chiropractic physician have lower health care costs, perhaps instead of asking: “If the New Mexico Medicaid program should cover chiropractic medicine services?” We should be asking: “How do we incentivize that all patients with neck pain or back pain first seek care from a chiropractic physician?”

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