



The latest research by Richard Sarnat, MD (left), and James Winterstein, DC (right).

## Chiropractors as Primary Care Providers

UPDATE TO 2004 STUDY SHOWS CONTINUED LOW UTILIZATION COSTS AND HIGH PATIENT SATISFACTION RATES.

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The latest issue of the *Journal of Manipulative and Physiological Therapeutics* features an update to Sarnat and Winterstein's 2004 research paper that assessed chiropractors' effectiveness as primary care providers (PCPs). As with the 2004 report, the latest research concludes that a managed care network with chiropractic gatekeepers saves substantial costs and results in decreased utilization as compared to PCPs using conventional medicine alone.

The original report<sup>1</sup> analyzed utilization data from 1999 to 2002; the updated report provides similar data from 2003 to 2005. The basic idea behind the chiropractic PCP model was to create an integrative system of health care using PCPs who specialized in nonpharmaceutical and nonsurgical approaches, and to compare patient and provider data with the traditional HMO system. An independent provider association (IPA), known as Alternative Medicine Integration Group (AMI), served as the integrative health care system and operated within the standard HMO model.



**The latest research by Richard Sarnat, MD (left), and James Winterstein, DC, principal investigators, emphasizes the benefits of using a chiropractic gatekeeper model.**

The recent analysis<sup>2</sup> supports the original finding that patients enrolled in the chiropractic network experienced fewer hospital visits, spent less time in the hospital for care, underwent fewer surgeries and used far fewer pharmaceuticals than other HMO patients who received traditional medical care, resulting in low utilization costs and high patient satisfaction scores. Moreover, chiropractors succeeded in diagnosing and treating patients at a level nearly equal to medical doctors.

In 1999, at the start of the initial study, enrollment included only 37 members. By 2002, enrollment

had increased to 649 members. In the updated report, enrollment had more than doubled, without employing any marketing incentives to attract potential patients to the IPA. Study participants originated from an open enrollment offered to all of the HMO's members in metropolitan Chicago. One notable difference between the 2004 report and the 2007 report is that the recent IPA panel of PCPs included not only doctors of chiropractic, but also "CAM-oriented medical doctors and osteopathic doctors." Of significant interest to the study authors was whether expanding the panel would affect utilization, particularly considering enrollment size.

AMI contracted with the same DCs for both studies, each of whom specialized in nonpharmaceutical and nonsurgical approaches and underwent credentialing processes that exceed the existing National Committee for Quality Assurance requirements for CAM providers. The recent IPA panel consisted of 14 doctors of chiropractic and seven CAM-oriented medical doctors/DOs. As in the previous report, AMI's medical directors acted as the integrative link to conventional medical referrals and inpatient health care utilization, and provided medical management oversight.

#### Utilization and Costs: A Continuing Trend

For the entire seven-year study period (1999-2005), AMI's members (70,274 total member-months) had 60% fewer hospitalizations, 62% fewer outpatient surgical cases and 85% lower pharmaceutical costs than HMO members. With such low utilization rates, AMI's resulting health care costs were well below the amounts predicted for all seven study years. The fact that utilization rates were low during all seven years "gives credence to the argument that the power to achieve reduced utilization is due to the underlying philosophy of medical management and not due to differences in PCP education or licensure," according to the study's authors.

The updated report continues to suggest that chiropractors are well-suited to act as PCPs. As was the case in 2001, chiropractors in 2005 were able to manage 60% of their patients without requiring a referral to a conventional medical specialist. DOs efficiently fulfilled their primary care duties as well, managing 91% of their patients without a referral. "It is unfortunate that other variables in member utilization, aside from referral patterns, cannot be compared between the PCPs of different licensure," noted the study authors. "The overall model of medical management is so integrated among the PCP panel that it would be misleading to artificially separate and analyze any other utilization data."

#### Quality of Care, Satisfaction Remain High

Although patient survey response rates varied, members enrolled in 2003, 2004 and 2005 reported being highly satisfied with the chiropractic quality of care (96%, 94% and 91% satisfaction rates, respectively). This trend also can be seen in the data from 1999-2002 (100%, 89%, 91% and 90% satisfaction rates, respectively). As compared to HMO satisfaction rates, which were not disclosed, the AMI members "consistently rated their experience more positively than the conventional medical IPA network average."

Based on an analysis of 50 questions on the annual member survey, the AMI IPA received "blue ribbon status" from the HMO's independent quality control division each of its seven years in existence. With annual audit scores between 97% and 100% from 2002-2005, the IPA far exceeded the HMO required score of 90%.

These reports confirm that an integrative medical model which combines conventional and CAM-oriented treatments, supervised by a licensed health care professional with expertise in both areas, is

a new approach with great potential. Other research by AMI has suggested that the integrative medical strategies "seem to be generalizable to other populations, such as Medicaid/Medipass and targeted disease states in a more classic disease management model."

While the authors note several study limitations, including lack of randomization, lack of statistical analysis and potential bias, they concluded: "The IPA model presented here is correlated with a decrease in clinical utilization and cost outcomes, compared with conventional medical strategies, over an extended period and in a safe and highly regulated environment. The consistent decrease in cost and care utilization achieved by AMI's integrative medical management strategy over a 7-year time frame warrants larger independent third-party funding for multicenter, randomized controlled trials."

#### Comments From the Principal Authors

In 2004, *Dynamic Chiropractic* interviewed Drs. Sarnat and Winterstein following the publication of their initial research. Their observations are as relevant to the follow-up research as they were to the original study.

When asked what he hoped members of the chiropractic and medical professions would take from the study, Dr. Sarnat, a medical doctor, commented:

"The study really shows the enormous power and benefit of two things: 1) the utilization of chiropractic in a primary care setting; and 2) the magnitude of outcomes, both clinical and cost, that can be achieved when all members of the health sciences work together as a team for the betterment of the patient, putting aside all professional rivalries. Hopefully, these results are so dramatic that they will 'wake up' the health care system (or lack thereof) to the immediate need for true integration among all qualified health care providers."

In response to the question, "Comparing the AMI model to the other HMOs in the analysis, what was the most surprising outcome of the study - reduced hospital stays, fewer surgical procedures, reduced use of pharmaceuticals, or something else?" Dr. Sarnat said:

"I have always believed that the overutilization of pharmaceuticals and surgery, and the underutilization of more natural healing techniques, such as chiropractic, has been the cause of great suffering. Yet, I had no idea that the magnitude of both clinical improvements and cost effectiveness would approach 50% in both cases. Previous studies have shown these types of savings when chiropractic has been used as a first-line treatment for NMS ailments, instead of conventional medical care. But to see this level of effectiveness across the board for literally all types of clinical presentations within a primary care setting is surprising to me, and good news for the rest of the world."

Dr. Winterstein, president of National University of Health Sciences, was asked to what extent he could envision doctors of chiropractic as a true gatekeeper of other CAM therapies. He replied:

"In those integrated practices of which I am aware, referral by chiropractic practitioners to other CAM practitioners is a routine matter. Unfortunately, what I see developing at

the present time is a whole new turf battle. It is not enough that DCs and MDs have engaged in this turf war for a century; now we have new entities beginning the same thing. This is why, after reading Warren I. Salmon, PhD, *Alternative Medicines* (1984), I concluded that we must find a way to work in concert with other CAM providers and become colleagues, rather than competitors.

"Fortunately, the Board of Trustees of National University of Health Sciences saw this as well, and the result is that we changed National College of Chiropractic into National University of Health Sciences, precisely so that we could form an environment in which various CAM providers could learn together and could develop a collegiality.

"Will it work? I can only hope so, for it is the patient we must be most concerned with, and I do not think competition among various types of providers serves patients well."

### *References*

1. "DCs as Primary Care Providers: New Managed Care Study Finds Improved Patient Outcomes and Significant Cost Savings With DC Gatekeepers." *Dynamic Chiropractic*, Sept. 1, 2004. [www.chiroweb.com/archives/22/18/16.html](http://www.chiroweb.com/archives/22/18/16.html).
2. Sarnat RL, Winterstein J, Cambron JA. Clinical utilization and cost outcomes from an integrative medicine independent physician association: an additional 3-year update. *Journal of Manipulative and Physiological Therapeutics*, May 2007.

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