

## New Study Looks at Appropriate Use of Chiropractic

Dynamic Chiropractic Staff

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The July issue of the Annals of Internal Medicine features "The Congruence between Decisions to Initiate Chiropractic Spinal Manipulation for Low Back Pain and Appropriateness Criteria in North America." The authors of the paper are well-known to chiropractic: Paul Shekelle, MD, PhD; Ian Coulter, PhD; Eric Hurwitz, DC, PhD; Barbara Genovese, MA; Alan Adams, DC; Silvano Mior, DC; and Robert Brook, MD, ScD.

The reason for the study is presented in the abstract:

"Recent U.S. (AHCPR) practice guidelines recommend spinal manipulation for some patients with low back pain. If followed, these guidelines are likely to increase the number of persons referred for chiropractic care. Concerns have been raised about the appropriate use of chiropractic care, but systematic data are lacking."

The authors used a retrospective review of chiropractic office records to "determine the appropriateness of chiropractors' decisions to use "spinal manipulation" for patients with low back pain." They compared a "preset criteria for appropriateness" to the actual chiropractic patient records. The appropriateness criteria used was that established in the RAND study<sup>1</sup> for low back pain using a multidisciplinary panel.

The authors selected 131 chiropractic offices randomly sampled from San Diego, California; Portland, Oregon; Vancouver, Washington; Minneapolis-St. Paul, Minnesota; Miami, Florida; and Toronto, Ontario, Canada. In addition, they chose offices in the rural areas around Portland, Minneapolis-St. Paul, and Toronto.

From each office they randomly selected 10 records of patients presenting with low back pain. Of the total number of 1,310 patients, 1,088 (83%) received some form of spinal manipulation. Of these, 859 (79%) had patient records containing sufficient information to determine whether care was congruent with the RAND appropriateness criteria.

The following table was presented as a breakdown of their findings:

Table 3. Classification of Care by Appropriateness Category According to Type of Treatment Received		
Appropriateness Classification	Patients Who Received Spinal Manipulation (n=859) [95% CI]	Patients Who Did Not Receive Spinal Manipulation (n=148) [95%CI]

Appropriate	396 (46%)	56 (38%)
Uncertain	211 (25%)	21 (21%)
Inappropriate	252 (29%)	61 (41%)

As the table shows, chiropractic care received by the low-back pain patients was considered appropriate 46 percent of the time. The conclusion of the authors was:

"The proportion of chiropractic spinal manipulation judged to be congruent with appropriateness criteria is similar to proportions previously described for medical procedures; thus, the findings provide some reassurance about the appropriate application of chiropractic care."

On the negative side, the chiropractic care delivered was considered inappropriate in 29 percent of the cases and uncertain in 25 percent. The authors note "parallels" between these results and those for conventional medical procedures:

"When studied a decade ago by use of identical methods, the rates of appropriate and inappropriate use for carotid endarterectomy were 35% and 32% and the rates for coronary artery bypass graft surgery were 56% and 14%."

The authors provided examples of patient presentations that would be considered appropriate, inappropriate and uncertain. Broadly speaking, patients with "acute low back pain with no neurologic findings and no sciatic nerve irritation" were considered appropriate for spinal manipulation. Those judged inappropriate or uncertain were "generally mixtures of subacute and chronic back pain syndromes, some of which were not assessed with lumbosacral radiography."

In their discussion, the authors directed their attention to medical referrals:

"Our study has clinical implications for internists. Patients with low back pain may be independently and concurrently seeing chiropractors, and not all of this care is uniformly appropriate or inappropriate. Patients with indications that are inappropriate for spinal manipulation should be advised of this. Similarly, for patients with appropriate indications, internists should offer spinal manipulation as therapeutic option of accepted efficacy; in many settings, referral to a chiropractor is the most practical way of achieving this. Others have published suggested criteria for primary care physicians to use in identifying chiropractors who would be suitable for such referrals. An additional clinical implication of our study is that the use of so-called rigorous as those used to evaluate medical practices."

In a corresponding news release issued by the RAND Corporation, primary investigator Dr. Paul Shekelle made these comments:

"The message of our new study is a mixed one. First, everybody needs to stop treating chiropractors as if they are quacks. An appropriateness rate of roughly half is in the same ballpark as the findings for certain medical procedures when appropriateness measures were introduced a dozen years ago. Chiropractors are appropriately treating some patients, and those patients are likely to benefit as a result of their care."

"At the same time, chiropractors need to recognize that one of the missions of a health profession is to pursue and incorporate research on quality. Clearly, a 29 percent inappropriateness rate is too high and should be decreased."

### *Reference*

1. Shekelle PG, Adams AH, Chassin MR, Hurwitz EL, Phillips RB, Brook RH. The Appropriate Use of Spinal Manipulation for Back Pain: Indicators and Ratings by a Multidisciplinary Expert Panel. Santa Monica, CA: RAND; 1991.

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