Dynamic Chiropractic

EDUCATION & SEMINARS

Chiropractic Research at the RAND Corporation

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Editor's Note: Dr. Paul Shekelle is a Phi Beta Kappa graduate of the University of Illinois, has his medical degree from Duke University, completed his internship and residency in internal medicine and is board certified in internal medicine, has a master's of public health degree in Health Services and Research at University of California, Los Angeles (UCLA), and is one of the co-principle investigators on the Chiropractic Standards of Care project.

I would like to take this opportunity to inform the chiropractic profession of the chiropractic research ongoing at the RAND Corporation. There are currently three different research projects. The first project is an analysis of existing data in the RAND Health Insurance Experiment supported in part by the PCCR for information regarding the use of chiropractic.

The second project involved the development indications and appropriateness ratings for the use of spinal manipulation for patients with low back pain. This project was in collaboration with the Pacific Consortium for Chiropractic Research (PCCR).

The third project, an extension of the second, will try to answer questions about the current use of chiropractic and also the use of spinal manipulation for low back pain.

The Health Insurance Experiment analysis attempts to answer some questions on utilization which had not been answered in the literature before this. These questions are: How many people use chiropractors; what are the demographics of these people; what symptoms and diagnoses are they seen for; what services are used; are there geographic variations in use; and how does insurance affect the use?

Some of the results from this study, which will be published in a forthcoming issue of the American Journal of Public Health, were that 7.5% of the community-based population saw a chiropractor during the course of the Health Insurance Experiment over three to five years; there were 41 visits per 100 persons a year; (which means that for every 100 persons, one chiropractor in one year should get 41 visits from those persons) and that users relative to non-users were more likely to be white, middle-aged, and high school educated. No difference in gender or income was seen between users and non-users.

Additional results were that back pain accounted for 42% of the visits and manipulation accounted for 61% of the services. Regional variations in use were seen, with no clear, discernible, geographic pattern. The largest difference in services were between two sites in South Carolina that were only 90 miles apart.

Insurance cost sharing strongly affected the use of services. Any amount of cost sharing decreased the use of chiropractic care two-fold, compared to free care.

Our work on the analysis of the Health Insurance Experiment led to our second project, which is the development of indications for the appropriate use of spinal manipulation for low back pain.

The project used a method established by RAND to rate the appropriateness of surgical and

medical procedures. It involves a systematic literature review, the development of a clinically detailed indications list, the selection of an expert panel, and then a two-step consensus process. This project was partially supported by the California Chiropractic Foundation and was done in collaboration with the PCCR.

Our literature review was systematic and thorough. We included sources from the MEDLINE and bibliography of those MEDLINE articles. We also had orthopedic surgeons, chiropractors, and internists review our bibliography and suggest additions. This process identified 76 sources, 33 of which were research studies, and 22 of these were controlled trials.

We additionally included 21 reviews, 9 text books, and 4 case reports. This information was synthesized by myself and Eric Iturwitz, D.C. M.P.H., into a 32-page literature review.

We then developed a preliminary structure of the indications. This was done by observing clinicians in their practice, questioning experts, and analyzing the literature. From this we created 1,500 clinically separate indications for spinal manipulation for back pain.

We then precisely defined necessary terms -- what is acute pain, what is mobilization, what is a response to manipulation, what is sciatica, etc.

We next selected an expert panel in keeping with the guidelines developed for this method. The panel had nine members, who were a mixture of academic and private clinicians. They were geographically balanced, and a mixture of those who do the procedure (manipulation/adjustment) and those who do not.

Panel members were selected through consultations with leading clinicians in the various professions. The panel consisted of three chiropractors, two orthopedic surgeons, one osteopath, one internist, one family practitioner (who is trained in manipulation and has performed up to 20 manipulations a day), and one individual with a D.C., an M.D., and a Ph.D., who practices as a neurologist.

In terms of practitioners, we had four persons who manipulate in their practice. Two additional persons, the osteopath and the neurologist, are trained in manipulation but don't do the procedure. The three allopathic physicians are all back pain specialists who don't manipulate and aren't trained in manipulation, but who have a knowledge of manipulation through their practice patterns and referral patterns.

The consensus process began with a mailing of the literature review, the indications, and the definitions to the panelists. They rated these on a nine-point scale for appropriateness and returned them to RAND. We tabulated and summarized the rating. All the panelists then met at the RAND corporation on April 20, 1990. We had a round-table discussion of each definition and indication after which panelists re-rated (in private) the indications for appropriateness.

The next step is to examine the actual use of spinal manipulation by practicing clinicians. To do this, we will need to study chiropractors in their offices. We want to study who uses chiropractors and why; for what clinical presentations are chiropractors performing spinal manipulation; and how many manipulations and other services are used.

We would like to study chiropractors selected randomly from around the country, but first we need to be sure it is feasible. Therefore, we will start with a sample located in California.

Prior to this, we will also be covening a second consensus panel on spinal manipulation. This new panel will consist of nine chiropractors. We will compare the results of this panel with our

multidisciplinary panel. Both sets of results will be used during the field study of practicing chiropractors.

What does all this mean for the clinician in private practice? Health care delivery is in the midst of a revolution centered on appropriateness and effectiveness. Chiropractic needs to begin these kinds of studies or be left behind. Without these studies, third-party payers will make decisions on coverage for chiropractic based on anecdote and bias. With studies like this, third-party payers, health policy analysts, the chiropractic profession, and the health care community can begin to understand the appropriate use of chiropractic.

This is your chiropractic research at RAND. Thank you very much.

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