Workers Compensation
Research Institute

WCRI

955 Massachusetts Avenue
Cambridge, MA 02139
Tel: 617-661-WCRI (9274)
Fax: 617-661-9284
http://www.wcrinet.org

April 27, 2004

Jon Schnautz
Office of Senator Todd Staples
P O Box 12068
Capital Station
Austin, TX 78711

Dear Jon,

We received the two faxes that you sent. As requested, we have provided comments on each as discussed below. The first was a letter from Dr. Franz Klein of the Texas Chiropractic Association to Senator Staples, dated April 13, 2004. The second appears to be comments by Anthony Rosner (FCER) dated October 9, 2003.

The Committee should keep in mind:

- WCRI reports are exceptionally transparent as to methods and data used, and very self-conscious in disclosing potential and actual limitations or caveats that the reader should know about.
- WCRI studies are peer reviewed by researchers outside of WCRI. Publication is determined by the certification by these reviewers that the studies meet recognized social science research standards for public policy research.
- The data used by WCRI studies for Texas are reasonably representative of the population of claims in the state. WCRI has validated this against external data sources, as reported in detail in the study. Both Dr. Klein and Mr. Rosner regularly cite the WCRI report's discussion of *potential* limitations, but neither provides evidence to dispute the WCRI conclusions that the data are representative in practice and the findings are valid.
- Where WCRI has concerns about the representativeness of the data, it does not report results if the concerns are large, or it explicitly caveats specific results if the concerns are moderate.

Dr. Klein's letter corrects his previous testimony that WCRI reports use only "peer reviewed" data. He *selectively* cites passages from the methodology discussions in a WCRI study. These passages recognize that the study is based on a sample of cases – not the total population – and further that a sample, in concept, *may* not be representative of the total population. We say "selectively" because Dr. Klein omits key parts of the same paragraphs and pages where the authors make it clear that WCRI has tested for these potential biases and ruled them out.

For example, on page 2 of his letter, Dr. Klein quotes selectively from a paragraph on p. 215 of the report:

"Typically, the exclusion just described resulted in eliminating 40-55 percent of claims, typically the result of excluding entire data sources that were unable to provide detailed bill-review data."

The sentence is taken from a paragraph that assures that reader that the data used in the report are reasonably representative, with a few specific disclosed exceptions (none of which affect Texas). The full paragraph says:

"The baseline **data set is reasonably representative** of each state because it contains adequate data from insurers, state funds, self-insurers, and residual and voluntary markets. Typically, the exclusion just described resulted in eliminating 40-55 percent of claims, typically the result of excluding entire data sources that were unable to provide detailed bill-review data. We sought to preserve that representativeness in handling the missing medical bills and make further adjustments, as described in the next section. We believe **we have fully met this goal in most states**, especially for accident year 1998 (note this was the most recent year in the report). Areas where this is of some concern include 1996 and 1997 levels for Georgia, as well as 1996 levels for Pennsylvania and Wisconsin; therefore, we do not report all Georgia trend measures and the 1996-1997 trends for Pennsylvania and Wisconsin. These exclusions are described in more detail in the following sections and in Chapter 4" (emphasis added).

We hope that any committee member who may be concerned will review the other passages cited by Dr. Klein in their full context in the WCRI study.

The material from Anthony Rosner is similar to a critique of the WCRI studies that he published in the IAIABC Journal, entitled "Workers' Compensation Costs and Chiropractic: Taking a Position on Center Stage". The Journal's Editor solicited and published comments from WCRI. These are attached.

In addition to the observations made above, the reader should keep the following points in mind:

- Almost all of the points listed by Mr. Rosner are explicitly recognized by WCRI in its reports as *potential* limitations, although none were deemed sufficiently important, in practice, so as to materially affect the findings for Texas.
- Mr. Rosner asserts that "a vast body of more rigorously cost-effectiveness literature indicates that the majority of data point toward major cost savings when chiropractic services are substituted for the interventions of medical providers ..." Assuming that Mr. Rosner is referring to the studies summarized in the MGT report for the Texas Chiropractic Association, the assessment of this literature contained in the recent WCRI FlashReport report is relevant:

  "A cost-effectiveness study requires measures of (1) the costs of alternative treatments (2) to achieve a given outcome (3) for the same medical condition with similar severity. Most of the studies in the literature deal with costs, not cost-effectiveness. A few deal with outcomes, but not often with both costs and outcomes. Only the few randomized clinical trials cited adequately adjust for severity (and measure both costs and outcomes) so as to be entitled to characterize the results as cost-effectiveness studies. Even the subsequent WCRI study (Victor and Wang, December 2002) which examines both costs and outcomes and does the most rigorous case mix adjustment found in any of the studies, explicitly does not hold itself out as a cost-effectiveness study. "Cost-effectiveness" requires a much higher standard than most studies to date have met.

  "Although many studies have compared the costs and/or outcomes of physical medicine care, they are of uneven scope and rigor in their controls for confounding factors. The studies cited in the MGT study range from (1) descriptive analyses that compare average costs of chiropractic and physician directed cases with no case mix adjustments; to (2) similar studies with case mix adjustments of varying rigor; to (3) a few randomized clinical trials, few of which analyze both costs and outcomes. [The reader is referred to Victor and Wang, December 2002, for a review of many of the same studies.] *The studies that focus on workers' compensation cases are among those with the least rigorous statistical controls (emphasis added).*

  "The preferred approach is a randomized clinical trial, where patients are randomly assigned to either chiropractor or physician-directed physical medicine care. Such studies are relatively uncommon because they are costly and logistically difficult to conduct – especially in workers' compensation, where random assignment is often in conflict with state laws. We found three studies that used random assignment of patients and one that used random selection of providers. This limited evidence on cost-effectiveness is inconclusive.

"More importantly, *the studies cited – rigorous or not – are unlikely to be generalizable to Texas* where practice patterns hardly resemble those examined in the other studies – but where chiropractors, on average, use nearly double the number of visits as chiropractors in many other states to treat similar injuries and are involved in a much higher fraction of claims."

Very truly yours,

Richard Victor, J.D., Ph.D.
Executive Director

Workers Compensation
Research Institute

WCRI

955 Massachusetts Avenue
Cambridge, MA 02139
Tel: 617-661-WCRI (9274)
Fax: 617-661-9284
http://www.wcrinet.org

Observations on Rosner's Comments on WCRI Studies

By

Richard A. Victor

The Rosner article provides a rich review of the literature about the costs, patterns and impact of chiropractic care. The Editor of the IAIABC Journal asked us to offer some observations on the section of the Rosner article that discussed studies by WCRI. We found the section to be a fair and accurate representation of the scope and findings of the WCRI benchmark study of medical costs and utilization entitled "The Anatomy of Medical Costs of Utilization." Rosner did not discuss a second WCRI study – entitled Patterns and Costs of Physical Medicine: Comparison of Chiropractic and Physician-Directed Care -- that is highly relevant to his subject matter and which we summarize for the reader below We also offer some observations about several of Rosner's comments on the WCRI Anatomy of Medical Costs and Utilization study.

Omitted WCRI Study that Compares Chiropractic Care and Physician-Directed Physical Medicine Care

This study focuses on the two most common provider patterns for delivering physical medicine services in workers' compensation: (1) chiropractors as the sole treating provider and (2) physicians who provide the physical medicine services or who refer to other providers, most frequently physical therapists. Other combinations occur (and are discussed in the study), but are less common,

The study addresses some important policy questions. Among them are: How do costs of similar cases compare when a chiropractor provides physical medicine care and when a physician directs physical medicine care? Which provider pattern achieves a given outcome at the lowest cost?

This report analyzes similar cases in five states (California, Connecticut, Florida, Massachusetts and Texas) and focuses on a single outcome – the duration of temporary disability. Clinical efficacy, recovery of health and functioning, speed of return to work, and satisfaction of care are other important outcomes but are not addressed in this study.

Major Findings:

- To achieve a similar outcome (duration of temporary disability), total costs per claim for chiropractor provided physical medicine care are 30 percent higher than physician-directed physical medicine care for non-surgical back sprains and strains in California, Connecticut and Texas. In Florida, chiropractic-directed cases achieve the same outcome at 10 percent lower costs.

- Medical costs per claim in physician-managed cases are about 25 percent lower than chiropractic-directed cases to achieve a given duration of temporary disability. Indemnity costs per indemnity claim are about 20 percent lower for physician-directed cases in two states (Connecticut and Texas) but not in the others (California, Florida and Massachusetts). Total medical costs include payments for all medical services delivered in the case – office visits, physical medicine services, radiology, drugs, etc.

- The major driver of the difference in medical costs is payment for physical medicine services. Our analysis found that the higher physical medicine payment in chiropractic-directed care is driven by the higher number of visits per case. On average, chiropractors use 137-158 percent more visits that provide physical medicine services and 74-90 percent more visits for which office visits are billed than when physical medicine care is physician-directed.

- In Florida, chiropractor treated cases achieve the same outcome (duration of temporary disability) at a cost that is 10 percent lower than physician-directed care. This result is achieved partly because of regulatory restrictions placed on the number of chiropractic visits or weeks of chiropractic treatment, which must be reimbursed by the payor.

Rosner's Comments on WCRI Anatomy Study

In addition to his summary of the scope and selected findings of the Anatomy study, Rosner suggests some limitations of the study. Most of these limitations, and others, are listed in the report and explicitly acknowledged by the authors. If any of the limitations were believed to significantly affect the report's conclusions, the findings would not have been published.

Rosner's criticisms generally fall into three groups:

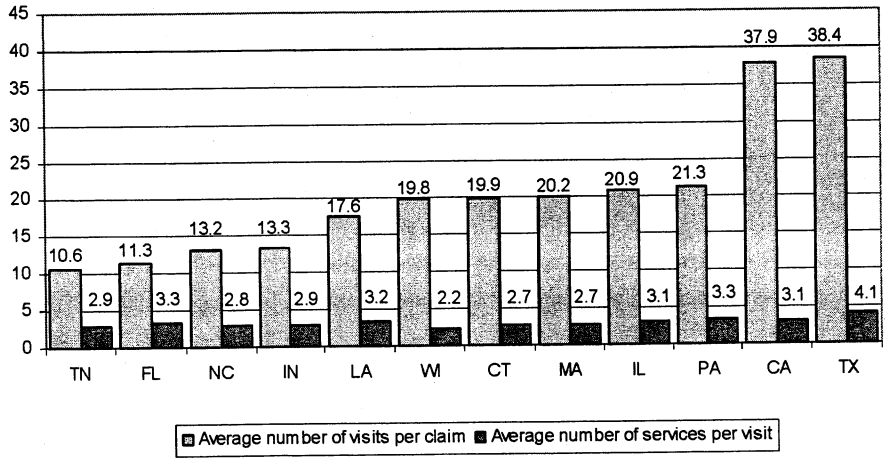
1. Rosner and the authors both point out that the empirical results are not fully case mix adjusted. This comment can be applied to all empirical studies on the subject, since no case mix adjustment is perfect, largely because medical severity of back pain cannot be consistently measured with precision. The case mix adjustment in the Anatomy study controls for the primary diagnosis and industry. The case mix adjustment in the WCRI chiropractic study summarized above contains controls that are among the most comprehensive ever done in such a study and controls for many different factors that are correlated with severity.

2. The Anatomy does not address the outcomes of care – also explicitly recognized in the report, and a concern about most studies included in Rosner's review article. However, the chiropractic study summarized above examines the costs to achieve a given level of one important outcome – the duration of temporary disability. More recent WCRI publications address outcomes directly, and we hope to extend these studies to address chiropractic care.

3. Billing data does not always tie directly to specific providers, but sometimes captures groups of providers. This is correct, but unlikely to be a serious problem for comparisons of chiropractic care across states – as in the Anatomy study. Where chiropractors are part of a group practice, more often than not it involves other chiropractors, rather than multi-specialty groups. Rosner does not present evidence that this is a serious problem.

Rosner also correctly observes that California has a much higher number of visits per claim than the typical state. However, he asserts without presenting any evidence, that the high average (mean) number of visits per claim in California (38 compared to18-21 in the typical state) is due to "3-5% of chiropractors are responsible for 80% of all costs". WCRI finds that the median number of visits in CA is 27 compared to 13-17 in the typical state. In order for this unusually high median number of visits to be driven by a small number of "outlier" providers, these few providers would have to be treating more than half of all cases in California – highly unlikely in such a geographically large and diverse state.

Figure 3.21 Interstate Comparison: Average Number of Visits per Claim and Services per Visit to Chiropractors for Claims with More Than 7 Days of Lost Time



Rosner also takes issues with the report's observation that there is less chiropractic care in states with caps on the number of visits. He cites Indiana which has low chiropractic involvement and no cap. In the WCRI study, the percent of cases with chiropractic care was unusually low in five states. All have either caps on the number of visits (Florida, North Carolina, Tennessee) or provide for employer control over the initial and ongoing choice of provider (Tennessee, Florida, North Carolina, Indiana, and Georgia) or both.

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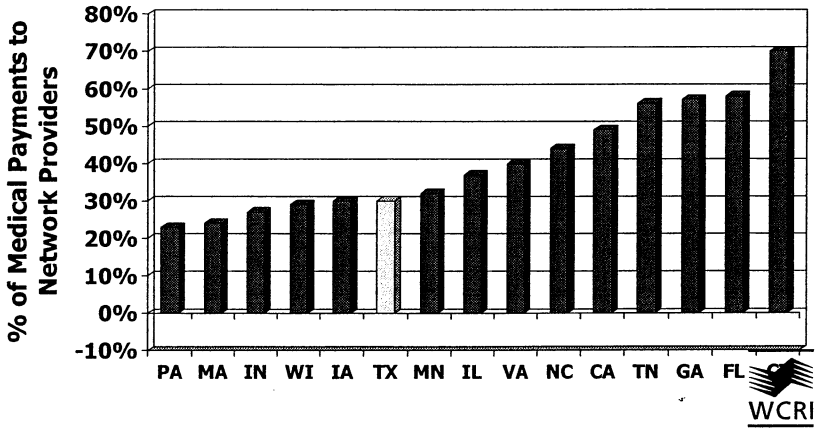
Network Penetration Rates, 2000



Growth in Network Penetration, 1996-2000