

Medical Cost Trend Analysis: Data from Three Workers' Compensation Insurance Carriers, 1991 – 1998

The 1998 *Annual Statistical Bulletin* published by National Council on Compensation Insurance (NCCI) shows that the costs of workers compensation claims in Texas are significantly higher than the national average.¹ Upon closer analysis, it appears that medical costs are the main determinant of higher costs in Texas: medical costs are 49 percent higher in Texas than the national average, while indemnity costs are only one percent above the national average. The purpose of this study is to conduct an exploratory examination of the data and attempt to verify the trend identified by the NCCI report.

The ROC asked several insurance carriers to submit claim cost information in order to determine the trends in the medical costs of claims in Texas.² Data were obtained from three sources: a political subdivision,³ and two large commercial insurance carriers. One of the two carriers has provided data on their costs for their operations outside of Texas in addition to data on Texas claims.

The data from the multi-state carrier support the findings of NCCI. The average medical costs for all claims⁴ are higher in Texas than for its out-of-state operations (see Figure 1). Some other trends are evident from the data as well:

- Average medical costs for all Texas claims, according to data from the multi-state insurer, decreased from 1992 to 1994, and began to increase again in 1994.
- The increases in medical costs for all claims after 1994 appear to be growing faster for Texas claims than for those out of state.

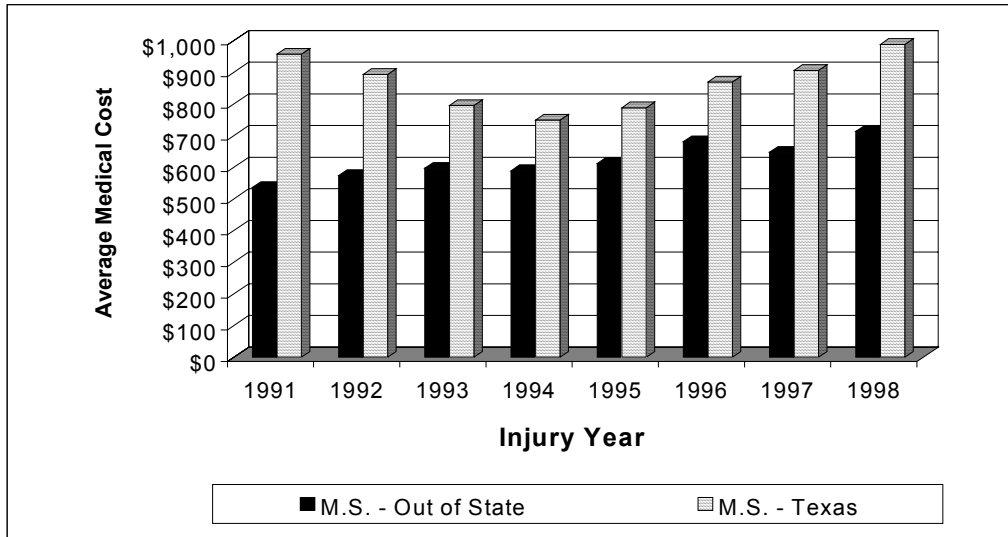
¹ This national average excludes states such as California, Massachusetts, Minnesota, New Jersey, and New York. See National Council on Compensation Insurance, *Annual Statistical Bulletin*, 1993 and 1998 editions; and Research and Oversight Council on Workers' Compensation, *Biennial Report of the Research and Oversight Council on Workers' Compensation: December 31, 1998* (1999).

² Medical cost averages in this report are calculated from the injury date to the valuation point. All averages are calculated on actual paid losses.

³ In the Texas system, a political subdivision (e.g., schools, counties, and municipalities) has the option to self-insure instead of purchasing workers' compensation insurance policy. See Sec. 504.011 of the *Texas Labor Code*.

⁴ All claims include both medical-only and medical/indemnity claims (i.e., claims that include income replacement benefits in addition to medical benefits).

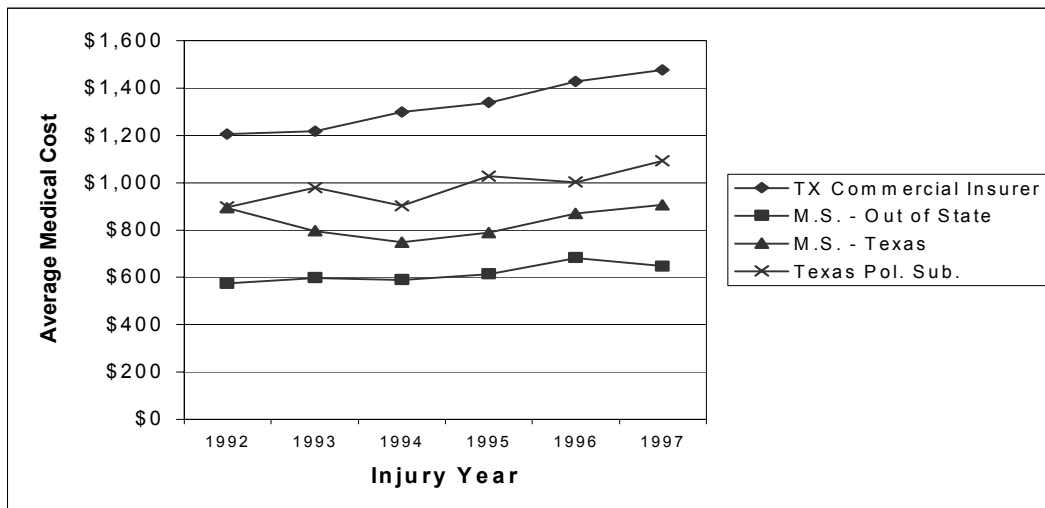
**Figure 1: Average Medical Costs for All Claims
Multi-State Insurer -- 6 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

The experience of the other two insurers is similar, showing medical costs that are higher on average in Texas than the multi-state carrier's out-of-state data (see Figure 2).

**Figure 2: Average Medical Costs for All Claims
6 Month Valuation**

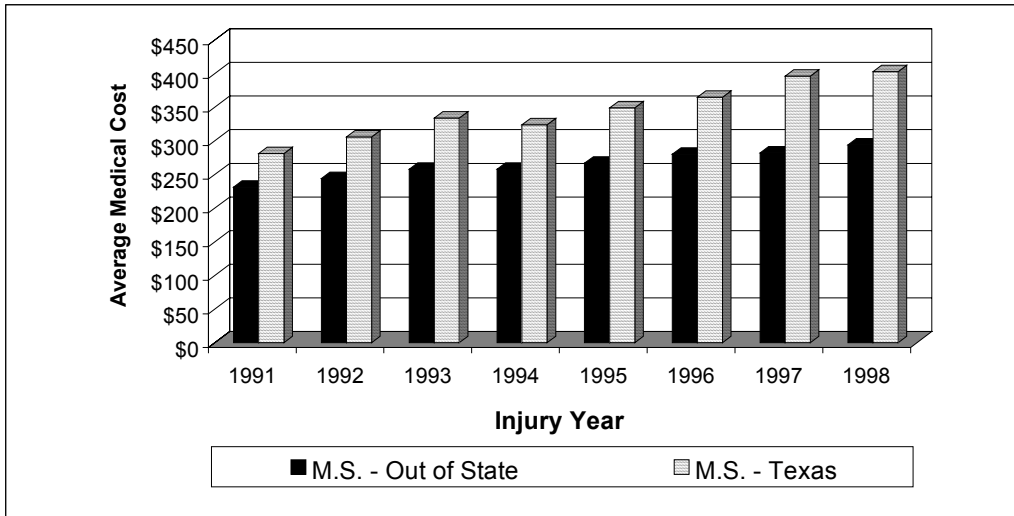


Source: Research and Oversight Council on Workers' Compensation, 1999.

When the data for the multi-state insurance carrier are separated into medical-only and claims in which income benefits were paid, other trends surface (see Figures 3 and 4):

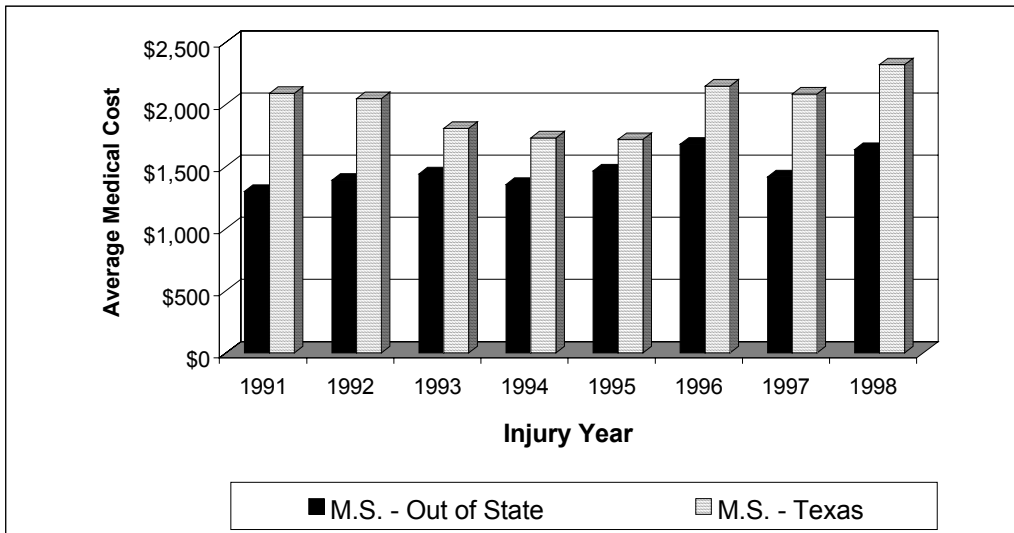
- The medical costs of both medical-only and medical/indemnity claims are higher in Texas than the multi-state carrier's out of state operations.

**Figure 3: Average Medical Costs for Medical-Only Claims
Multi-State Insurer -- 6 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

**Figure 4: Average Medical Costs for Medical/Indemnity Claims
Multi-State Insurer -- 6 Month Valuation**

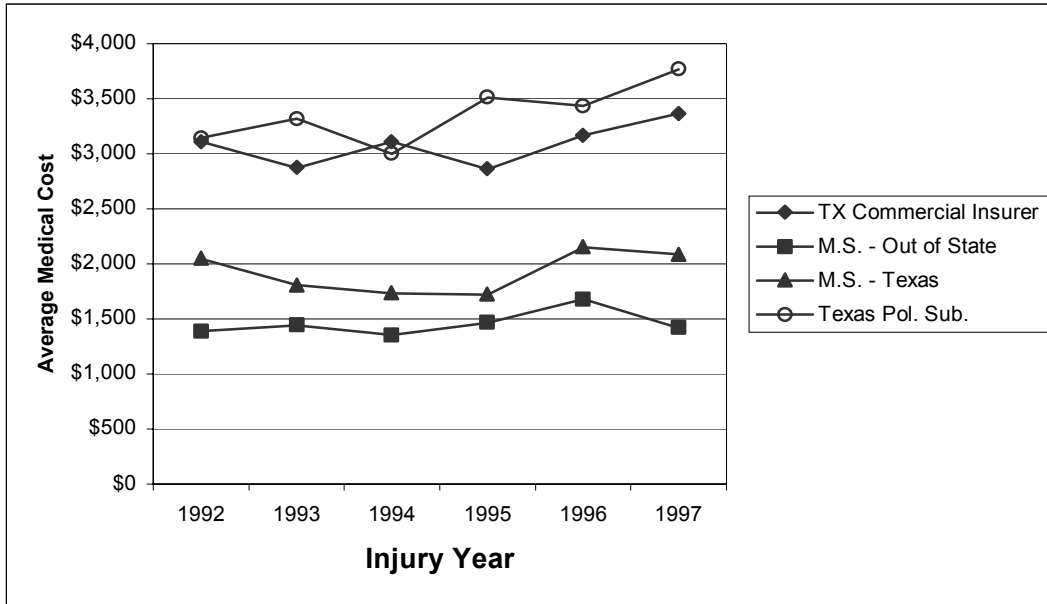


Source: Research and Oversight Council on Workers' Compensation, 1999.

- The average cost of medical-only and medical/indemnity claims is generally increasing.
- The medical cost of medical-only claims is increasing steadily over the period of study, unlike the medical cost of medical/indemnity claims.
- The average costs for medical-only and medical/indemnity claims are increasing at a faster rate in Texas than out of Texas.

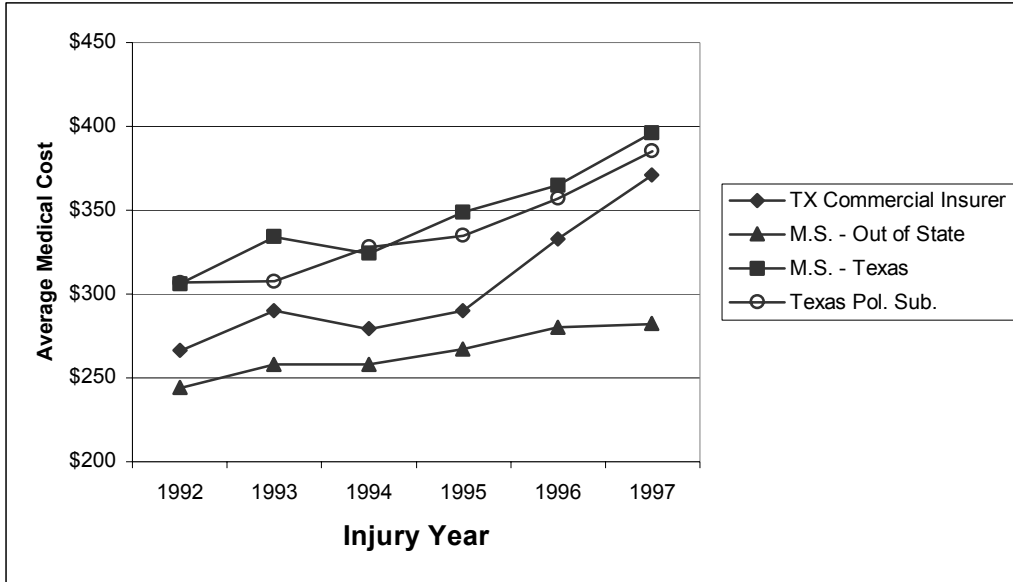
Again, the trend appears to be similar for the other insurers in the analysis. The other Texas insurers have average medical costs that are higher than the out-of-state medical costs of the multi-state carrier (see Figures 5 and 6). In addition, the average cost of medical-only and medical/indemnity claims for Texas carriers is increasing at a faster rate than that of the out-of-state carrier.

**Figure 5: Average Medical Cost of Medical/Indemnity Claims
6 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

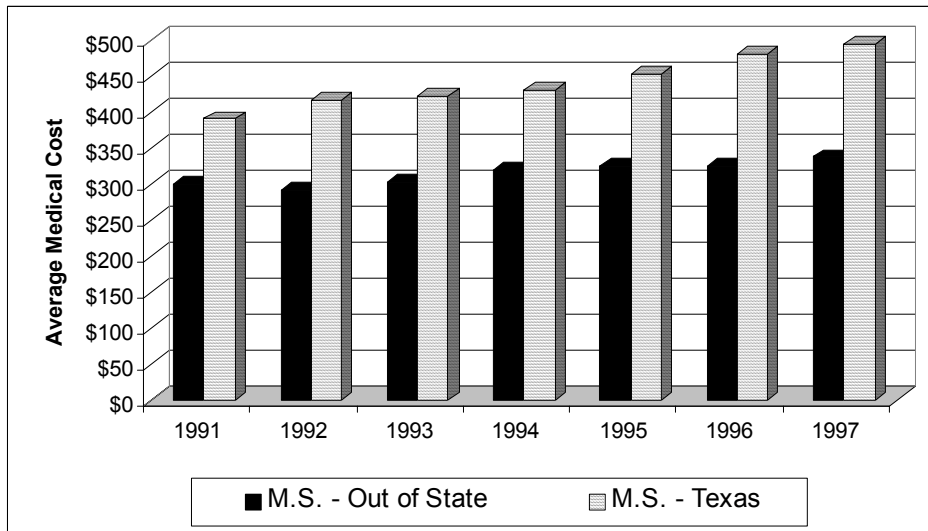
**Figure 6: Average Cost of Medical-Only Claims
6 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

Data on average medical costs were also collected beyond the six-month valuation point.⁵ Figures 7 and 8 show trends in medical costs for medical only and medical/indemnity claims for the multi-state insurance carrier at the eighteen-month valuation point.

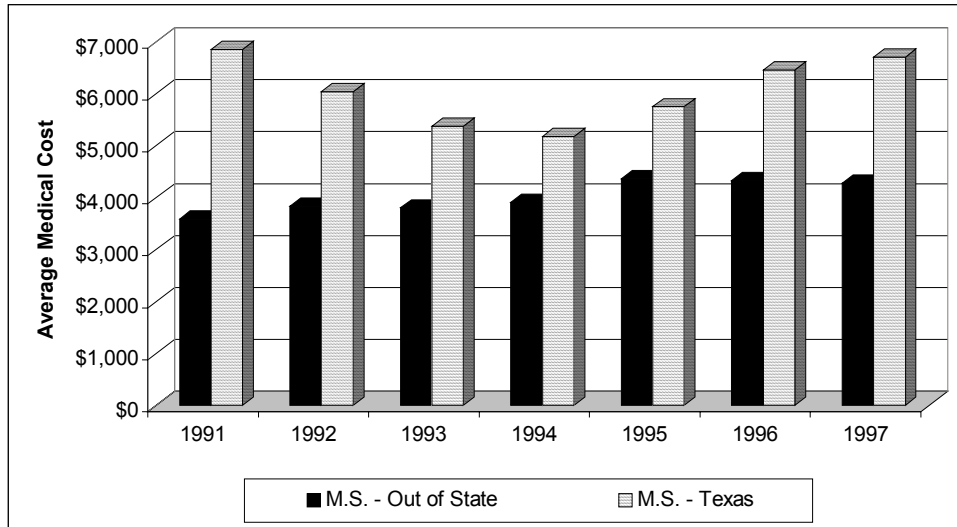
**Figure 7: Average Medical Costs of Medical-Only Claims
Multi-State Insurer -- 18 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

⁵ Insurance companies provided average medical cost information on claims from the six-month to six-year valuation points where applicable.

**Figure 8: Average Medical Costs of Medical/Indemnity Claims
Multi-State Insurer -- 18 Month Valuation**



Source: Research and Oversight Council on Workers' Compensation, 1999.

The trends in average medical costs at the later valuation points for the multi-state carrier are essentially identical to trends at the six-month valuation point: costs are higher for Texas than for its out-of-state operations. Again, medical costs for both medical-only and medical/indemnity claims appear to be increasing at a faster rate in Texas. Additionally, the trends in medical costs at the eighteen-month valuation point for the other two carriers mirror the trends above.

Conclusion

In summary, this exploratory study supports the NCCI finding that workers' compensation medical costs are higher in Texas compared to other states. Additionally, two other trends are evident:

- The average medical cost of workers' compensation claims in Texas is increasing over time.
- The average medical cost of workers' compensation claims in Texas is increasing at a faster rate relative to the experience of other states.

The process driving these trends is complex and involves all participants in the workers' compensation community: insurance companies, health care providers, employers and injured workers. Other jurisdictions have incorporated components of managed care into their workers' compensation systems to aid in controlling medical costs, which may also help explain the differences between Texas and other states.

However, it should be noted that this examination is based on experiences of only three carriers, and may not be representative of all carriers. Without a representative sample of insurance carriers, it is difficult to say with any certainty if the medical costs of workers' compensation claims are higher for all carriers in Texas. The complexity of the process and the limitations of this study point to the need for a more comprehensive analysis of medical costs in Texas.

Appendix A: Data Used for Figures

Figure 1. Multi-State Insurer: 6 Month Valuation of All Claims

	1991	1992	1993	1994	1995	1996	1997	1998
M.S. – Out of State	\$536	\$574	\$597	\$589	\$612	\$681	\$647	\$713
M.S. - Texas	\$957	\$893	\$795	\$749	\$788	\$869	\$906	\$988

Figure 2. Average Medical Costs for All Claims: 6 Month Valuation

	1992	1993	1994	1995	1996	1997
TX Commercial Insurer	\$1,205	\$1,217	\$1,299	\$1,338	\$1,429	\$1,476
M.S. - Out of State	\$574	\$597	\$589	\$612	\$681	\$647
M.S. - Texas	\$893	\$795	\$749	\$788	\$869	\$906
Texas Pol. Sub.	\$896	\$980	\$903	\$1,027	\$1,002	\$1,093

Figure 3. Multi-State Insurer: 6 month Valuation of Medical-Only Claims

	1991	1992	1993	1994	1995	1996	1997	1998
M.S. - Out of State	\$231	\$244	\$258	\$258	\$267	\$280	\$282	\$294
M.S. - Texas	\$281	\$306	\$334	\$324	\$349	\$365	\$396	\$403

Figure 4. Multi-State Insurer: 6 Month Valuation of Medical/Indemnity Claims

	1991	1992	1993	1994	1995	1996	1997	1998
M.S. - Out of State	\$1,300	\$1,390	\$1,441	\$1,357	\$1,466	\$1,681	\$1,418	\$1,639
M.S. - Texas	\$2,089	\$2,048	\$1,808	\$1,731	\$1,719	\$2,149	\$2,085	\$2,320

Figure 5. Average Medical Cost of Medical/Indemnity Claims: 6 Month Valuation

	1992	1993	1994	1995	1996	1997
TX Commercial Insurer	\$3,108	\$2,873	\$3,113	\$2,863	\$3,171	\$3,365
M.S. - Out of State	\$1,390	\$1,441	\$1,357	\$1,466	\$1,681	\$1,418
M.S. - Texas	\$2,048	\$1,808	\$1,731	\$1,719	\$2,149	\$2,085
Texas Pol. Sub.	\$3,147	\$3,321	\$3,002	\$3,512	\$3,439	\$3,770

Figure 6. Average Cost of Medical-Only Claims: 6 Month Valuation

	1992	1993	1994	1995	1996	1997
TX Commercial Insurer	\$266	\$290	\$279	\$290	\$333	\$371
M.S. - Out of State	\$244	\$258	\$258	\$267	\$280	\$282
M.S. - Texas	\$306	\$334	\$324	\$349	\$365	\$396
Texas Pol. Sub.	\$307	\$308	\$328	\$335	\$357	\$385

Figure 7. Multi-State Insurer: Average Cost of Medical-Only Claims - 18 Month Valuation

	1991	1992	1993	1994	1995	1996	1997
M.S. - Out of State	\$299	\$291	\$302	\$319	\$325	\$325	\$338
M.S. - Texas	\$391	\$417	\$424	\$431	\$453	\$482	\$496

Figure 8. Multi-State Insurer: Average Cost of Medical/Indemnity Claims - 18 Month Valuation

	1991	1992	1993	1994	1995	1996	1997
M.S. - Out of State	\$3,592	\$3,839	\$3,809	\$3,914	\$4,366	\$4,337	\$4,285
M.S. - Texas	\$6,865	\$6,049	\$5,379	\$5,186	\$5,758	\$6,463	\$6,713