Trends in Workers Compensation Costs in a Hotel-Operating Company Over a Six-Year Period

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A large Honolulu-based hotel-operating company reviewed its workers compensation costs over the last 6 years. Data retrieved from the company's computerized data base is used to describe trends in injury incidence rate, average cost per claim, average medical cost per claim, and medical expenses as a percentage of total costs. Factors that might have influenced these parameters include company reorganization, employee training and safety programs, changes in the economy, company morale, aggressive case management, and the quality of the adjusting services hired. Cause-and-effect relationships, although suggested, cannot be proven. The data is presented, in this year of imminent workers compensation legislative reform, to increase the available factual data base on which rational and efficacious reform proposals can be developed.

Introduction

In recent years, Hawaii businesses have seen tremendous increases in the cost of workers compensation, and as a result there have been repeated calls for reform of the workers compensation system. Unfortunately, few employers have the experience and expertise to fully understand the intricacies of this system, and even fewer employers have reliable data on which to base their requests for change. Requests for legislative change are often proposed according to beliefs and assumptions rather than being founded on objective facts. It is imperative that before further reform is proposed, accurate and understandable data on the true costs of workers compensation be generated and distributed to the community. Only after such data is considered should reform measures be proposed. The following article describes the trends and distribution of workers compensation costs at the Hotel Operating Company of Hawaii (HOCOH). It is hoped that the information will be used by health care professionals, businesses, insurance companies, employer groups, and public employees to formulate a sound approach to reforming the workers compensation system.

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Source of the Data

HOCOH is a Hawaii-based hotel-operating company that currently has approximately 2,400 full-time employees working in the state. Like other companies in the visitor industry, most of HOCOH's employees work in positions that are relatively low risk for injury, such as housekeeping or office work.

All workers compensation costs for the company are monitored through a central risk management office that maintains detailed records of every claim. The company is "self-insured" for workers compensation claims below $250,000 or an aggregate yearly cost of $2,000,000. Adjusting services are contracted yearly and insurance policy periods run from October 1 to September 30 of each calendar year.

In the last 6 years, the Risk Management Department has worked aggressively to control workers compensation costs and has created a comprehensive computer data base that can be accessed for review. In addition to having case records of every on-the-job injury, HOCOH is connected by computer modem to the insurance carrier, and through this connection it is possible to electronically review every check paid by the insurance adjuster.

Methods

Using the data base, all workers compensation claims filed between the years 1988 and 1993 were reviewed. Injury incidence rates were calculated according to Occupational Safety and Health Administration (OSHA) reporting guidelines to show the incidence rate per 100 employees per 12-month period. In calculating the total cost of workers compensation per year, all costs, both medical and indemnity, were included. The company's cost of maintaining a Risk Management office was excluded from all calculations. In determining the distribution, the costs were categorized as "medical" or "nonmedical." Medical expenses included payments to all health care providers including physicians, physical therapists, hospitals, chiropractors, massage specialists, naturopaths, osteopaths, and acupuncturists. Nonmedical costs included lost wages, disability settlements, adjusting costs, and legal expenses. For cases that were still open, ie, the injured employee had not yet reached medical stability and payments were still ongoing, the medical and nonmedical "reserves" were used for calculations since the reserves represent the most accurate estimate of future payments. In determining the yearly average medical cost per claim, costs were adjusted by the State of Hawaii Consumer Price Index to 1984 values.

Discussion

Table 1 lists the yearly injury incidence rate during the 6 years. In 1988 the incidence rate was 12.19 injuries per 100 workers per year, which is unusually high compared to other service industries in Hawaii.[3] The definitive reason for this high rate cannot be proven, but it is noted that this was also a period of extremely rapid growth within the company, many new employees were hired, and the Personnel and Risk Management departments were reorganized. We believe these factors contributed to the high injury rate.

Table 1.—Injury Incidence Rate

Year	No. Employees	No. Claims	Hours Worked	Incidence Rate*
1988	2594	302	4,954,723	12.19
1989	2722	209	4,747,278	8.01
1990	2838	275	5,551,176	9.91
1991	2880	259	5,459,418	9.94
1992	2670	185	4,583,925	8.07
1993	2600	140	4,338,649	6.45

* Incidence Rate = $\frac{\text{(No. Claims) (200,000)}}{\text{No. Hours Worked}}$
= The incidence of injuries per 100 full time workers per year

Table 2.—Average Cost per Claim and Average Cost per Employee

Year	Cost/Claim*	Cost/Employee**
1988	6,008.74	544.35
1989	4,292.57	419.48
1990	3,415.19	316.49
1991	6,503.04	474.18
1992	4,072.00	209.76
1993	3,214.60	165.68

* Cost/Claim = Total Cost/No. Claims
** Cost/Employee = Total Cost / No. of Employees

Table 3.—Distribution of Costs

Year	% Medical*	% Non-Medical**
1988	31.35	68.65
1989	30.35	69.65
1990	37.48	62.52
1991	38.08	61.92
1992	41.88	58.12
1993	46.30	53.70

*% Medical = $\frac{\text{(Medicals Paid + Medicals Reserved) (100)}}{\text{Total Cost}}$
**% Nonmedical = $\frac{\text{Indemnity Paid + Adjustment Costs + Indemnity Reserved) (100)}}{\text{Total Cost}}$

Since 1989, the injury incidence rate has been comparable to or below the average for service industries in Hawaii as a whole. For example, the private sector service industry injury incidence rate in Hawaii was 8.9 in 1992 while HOCOH's rate was just slightly lower at 8.07.[3] Since 1989, HOCOH has had a stable organizational structure and a continued emphasis on safety and training programs. In addition, since 1989 the morale of the employee work-force has been excellent despite the company facing some economically challenging years. Again, the cause-and-effect relationship between these factors and the incidence rate cannot be proven in this study but the noted association is suggestive.

The data in Table 2 shows that the average cost of a workers compensation claim varied dramatically during the study period. Part of this variability can be explained by normal random fluctuations in the severity and cost of individual claims. Since the majority of the costs in any given year are attributed to a small percentage of large claims, and since the large claims occur randomly, we expect to see variable costs in a small sample size. It is our belief then, that part of the fluctuation in cost is explained by the random nature of accidents.

Of equal or more importance, however, we note that the cost per claim dropped in 1989, shortly after the company reorganized its Personnel and Risk Management offices in 1988. This demonstrates to us how internal company organizational factors are important in the cost containment of workers compensation claims. Properly organized and functioning Personnel and Risk Management Departments are a crucial component of cost control.

In 1991, the average cost per claim increased dramatically to a high of $6,503 per claim. Two events occurring simultaneously that might have influenced the cost per claim: In 1991 the visitor industry as a whole, and HOCOH in particular, experienced an economically challenging year. It is possible that this change in economic climate influenced the handling and outcome of workers compensation cases, driving up the cost of claims. For example, during this economically slow period, it was more difficult for the company to accommodate injured workers with modified duty positions; thus injured workers stayed off work for longer periods increasing the indemnity costs. Further, in 1991 the company changed the adjusting service providers for a one-year period. When HOCOH reverted

Table 4.—Average Medical Cost per Claim

Year	Medical Cost/Claim*
1988	1,897.38
1989	1,405.46
1990	1,365.12
1991	2,853.82
1992	1,788.89
1993	1,712.95

*Medical Cost/Claim = $\frac{\text{Medicals Paid + Medicals Reserved}}{\text{No. Claims}}$
Note: Medical costs adjusted by State of Hawaii Consumer Price Index to 1984 values.

to its original adjuster in 1992, the average cost per claim returned to a more normal and expected level. This observed temporal relationship strongly suggests that the quality of adjusting services that are hired greatly influences the average cost per claim.

Table 2 shows that the average cost of workers compensation per employee has been variable. HOCOH has been extremely aggressive in monitoring workers compensation claims, often duplicating the services of a typical adjuster. The internal costs of tracking claims and assisting in their rapid resolution has been considerable and is not reflected in the presented data. Allowance for these costs would greatly change the absolute numbers but not the trends, as the internal costs have remained stable over the studied time period. Since HOCOH's internal costs are not presented in this data, the absolute cost per claim or cost per employee should not be compared to the State or any other employer's cost experience as it would not be an accurate comparison. The trends in costs, however, are accurate and show that HOCOH has had good but variable success in controlling the cost of workers compensation injuries.

Table 3 shows that medical expenses, as a percent of the total workers compensation cost, have increased steadily during the study period. This trend has been well documented in other studies. For example, in 1973 medical costs accounted for only 26.8% of the total workers compensation benefits.[2] Today this figure has risen to 42.5% for the state as a whole.[6] The reason for this continued increase both though out the state and at HOCOH is unclear. One possible explanation is that health care cost inflation has been greater than inflation in the rest of the economy and, therefore, treating injured workers has become relatively more expensive. Although this is an intuitively logical explanation, it is not supported by this company's data. Table 4 shows that, except for 1991, the average medical cost per claim, when adjusted to the State of Hawaii Consumer Price Index, has remained relatively stable throughout the study period. An alternative explanation is that the company's efforts to control costs have had proportionately greater success in limiting nonmedical costs compared to medical costs. This is not unexpected as the company has available many effective ways to control nonmedical costs, such as limiting temporary disability payments by accommodating injured workers in a modified work position, but relatively little influence over physicians' behavior.

As previously discussed, HOCOH's cost of workers compensation increased greatly in 1991. We now see in Table 4 that the average medical cost per claim also increased dramatically (109%) this year. This demonstrates how medical costs increase concomitantly with nonmedical costs when workers compensation gets out of control.

In summary, the data describes HOCOH's experience with workers compensation over the last 6 years. In general, the experience has been good although in 1988 the injury incidence rate was higher than expected, and in 1991 costs were greater than expected. We note that the high injury incidence rate occurred during a period of rapid growth and company reorganization. The elevation in costs seen in 1991 coincided with a challenging economic year and a temporary change in adjusting service providers. Although these relationships are suggestive, they cannot be proven as cause and effect. The most striking relationship is that between the changing of adjusting service providers in 1991 and the escalation of costs seen that year. In our opinion, this strongly suggests the average cost per claim is greatly affected by the quality of adjusting services hired.

Medical expenses, as a percentage of total cost, have increased steadily throughout the study period while the medical cost per claim has remained relatively stable. This trend may be the result of aggressive case management which appears to be been more successful in limiting nonmedical costs compared to medical costs. With less successful case management, as seen in 1991, both medical and nonmedical costs increase.

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