Workers’ Compensation in California and in the
Nation: Benefit and Employer Cost Trends, 1989 – 2005

By Ishita Sengupta, Virginia Reno, Christine Baker and Lachlan Taylor*

California’s workers’ compensation system has been the center of intense debate and legislative activity over the past several years. The dramatic reforms of California workers’ compensation in 2003-2004 sought to reduce utilization of medical care through evidence-based medical treatment guidelines and the creation of a system of medical provider networks, establish time limits on temporary disability benefits, establish a more objective permanent disability schedule, and provide for transparent fee schedules for out-patient surgery centers, hospitals, and pharmaceuticals. This brief compares experience in California with the rest of the nation from 1989 through 2005 – a time of rapid change in workers’ compensation spending nationwide and in California, in particular. It examines trends in benefits and employer costs through 2005, the latest year for which complete national data are available.

Workers’ compensation provides benefits to workers who are injured on the job or who contract a work-related illness. Benefits include medical treatment for work-related conditions and cash payments that partially replace lost wages. Temporary total disability benefits are paid while the worker recuperates away from work. If the condition has lasting consequences after the worker heals, permanent disability benefits may be paid. In case of a fatality, the worker’s dependents receive survivor benefits.

Temporary total disability benefits are paid when the worker is temporarily precluded from performing the pre-injury job or another job at the employer that the worker could have performed prior to the injury. Most states pay weekly benefits for temporary total disability that replace two-thirds of the worker’s pre-injury wage, subject to a dollar maximum that varies from state to state. Permanent partial disability benefits are paid when the worker has impairments that, although permanent, do not completely rule out the worker’s ability to

*Ishita Sengupta is the Workers’ Compensation Research Associate and Virginia Reno is the Vice President for Income Security at the National Academy of Social Insurance in Washington, DC. Christine Baker is the Executive Officer and Lachlan Taylor is a workers’ compensation judge on the staff of the California Commission on Health and Safety and Workers’ Compensation in Oakland, CA.

work. States differ in their methods for determining whether a worker is entitled to permanent partial benefits, the degree of partial disability and the amount of benefits to be paid (Barth and Niss, 1999; Burton, 2005). Cash benefits for permanent partial disability are frequently limited to a specified duration or an aggregate dollar limit.

Dramatic reforms of California workers’ compensation began in 2003 with the adoption of evidence-based medicine guidelines, the application of those guidelines through a mandatory utilization review process, the adoption of new medical fee schedules related to hospital, outpatient and pharmaceutical services, and the repeal of mandatory employer-financed vocational rehabilitation for workers unable to return to their prior jobs. These were rapidly followed by the adoption of time limits on temporary disability benefits, employer-selected medical provider networks, new return-to-work incentives, and a new approach to permanent disability evaluation. These changes were an effort to reduce inappropriate medical care, establish a more objective permanent disability schedule, reduce prolonged temporary disability payments, and provide for reasonable fee schedules for most commonly provided medical services.

This brief compares experience in California with the rest of the nation from 1989 through 2005, the latest year for which complete national data are available. It addresses the following questions:

- How did California’s spending for benefits and employer costs change in 2005 and how did those developments compare with the rest of the nation?
- What has been the long-term trend in workers’ compensation spending for the nation as a whole?
- How did California’s long-term experience compare with the rest of the nation in terms of employer costs, total benefits, and medical and wage-replacement benefits, respectively?

Spending changes in 2005 show the early effects of the 2003-2004 legislation, while historical trends provide context for how California developments differed from the rest of the nation prior to the legislative changes.

The National Academy of Social Insurance (NASI) produces the only uniform nationwide data on workers’ compensation benefits and costs in the United States. These data offer a unique opportunity to compare experience in individual states with trends in the nation as a whole.

NASI’s measures of benefits and costs differ in several ways from those often used to assess workers’ compensation insurance trends. First, NASI data include the experience of self-insured employers as well as those who buy insurance. Second, NASI measures focus on payments from the perspectives of two key stakeholder groups: workers who receive compensation and medical care for workplace injuries and employers who pay the bills.

Analyses of insurance trends typically focus on premiums levied and liabilities incurred by insurers on a policy- or accident-year basis. Those measures are important for assessing insurance trends and regulating premium rates. Such measures are examined by insurers, regulators, and rating bureaus, which provide analysis and advice for state regulators. NASI measures, in contrast, are used to track historical trends from the perspective of employers (annual payments made) and workers (annual benefits received). The impact of legislative changes may not be immediately apparent in calendar year paid data because benefits for workers injured before the new laws were enacted may not be affected by the reforms.
Finally, the NASI data measure direct payments in a calendar year: *benefits* are aggregate payments in the year for wage-replacement compensation to workers and medical payments to those who provide their medical care; *employer costs* are direct payments made by employers in the calendar year. Employer costs are measured differently for self-insured employers and those who buy insurance. For self-insured employers, costs are the benefits they pay in the year (wage-replacement and medical payments combined) plus an estimate of their administrative costs. For employers who buy insurance, costs are the premiums they pay in that year, plus any benefits they pay that year under deductible arrangements.² Note that the information included in this report reflects payments made during calendar year 2005. Thus, the information includes payments made in 2005 on injuries incurred prior to the time many of the reforms became effective. As a result, the report should be considered only a partial measure of the impact of the California reforms, some of which first became effective in 2005.

For more information on the data used in the report see NASI’s report *Workers’ Compensation Benefits Coverage and Costs, 2005* (Sengupta, Reno, Burton, 2007).

**Total Spending in 2005**

In California, spending for workers’ compensation benefits declined sharply in 2005 from $12.5 billion to $10.9 billion for wage replacement and medical benefits combined – an unprecedented drop of 12.2 percent from the prior year. The greatest decline was in medical payments, which fell by 16.0 percent, from $6.1 billion to $5.1 billion in 2005. Payments for wage-replacement for injured workers fell by 8.6 percent (Table 1).

**Table 1. Workers’ Compensation Spending, 2005**

<table>
<thead>
<tr>
<th>Type of spending</th>
<th>Billions of dollars</th>
<th>Percent change from 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>United States</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total benefits paid</td>
<td>$55.3</td>
<td>-1.4</td>
</tr>
<tr>
<td>Medical payments</td>
<td>26.2</td>
<td>-0.5</td>
</tr>
<tr>
<td>Cash wage-replacement benefits</td>
<td>29.1</td>
<td>-2.1</td>
</tr>
<tr>
<td>Employer costs</td>
<td>88.8</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>California</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total benefits paid</td>
<td>$10.9</td>
<td>-12.2</td>
</tr>
<tr>
<td>Medical payments</td>
<td>5.1</td>
<td>-16.0</td>
</tr>
<tr>
<td>Cash wage-replacement benefits</td>
<td>5.8</td>
<td>-8.6</td>
</tr>
<tr>
<td>Employer costs</td>
<td>20.4</td>
<td>-9.8</td>
</tr>
<tr>
<td><strong>United States Outside California</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total benefits paid</td>
<td>$44.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Medical payments</td>
<td>21.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Cash wage-replacement benefits</td>
<td>23.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>Employer costs</td>
<td>68.4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Source: National Academy of Social Insurance

² Under deductible policies written by private insurance companies, the insurer pays all of the workers’ compensation benefits due, but the employer is responsible for reimbursing the insurer for those benefits up to a specified deductible amount. Deductibles may be written into an insurance policy on a per injury basis, or an aggregate basis, or a combination of per injury basis with an aggregate cap.
The sharp decline in California spending affected national trends. National spending for workers’ compensation benefits declined by 1.4 percent. Outside California, however, benefit spending rose modestly. The 1.7 percent increase outside California was driven by a 4.1 percent increase in spending for medical care. Spending for wage-replacement benefits was almost unchanged outside California. It declined by just 0.3 percent.

Employer cost trends in California also deviated sharply from national trends in 2005. Spending by California employers fell by 9.8 percent. Nationally, employer costs rose by 2.3 percent. When California is excluded, employer costs outside the state rose by 6.5 percent in 2005.

**Spending as a Share of Covered Wages**
To standardize comparisons between jurisdictions of different sizes, it is useful to calculate spending relative to covered wages in each jurisdiction, as shown in Table 2.

While spending for benefits and employer costs fell sharply in California in 2005, benefits and employer costs remained larger shares of covered wages in California than in the nation as a whole, on average. Per $100 of covered wages:

- Total benefits were $1.59 in California, compared to $1.06 for the nation as a whole;
- Wage-replacement benefits were $0.85 in California, compared to $0.56 for the national as a whole;
- Medical payments in California were $0.74, compared to $0.50 for the nation; and
- Employer costs were $2.96 in California, compared to $1.70 for the nation.

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>California</th>
<th>United States Outside California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total benefits</td>
<td>$1.06</td>
<td>$1.59</td>
<td>$0.98</td>
</tr>
<tr>
<td>Medical payments</td>
<td>0.50</td>
<td>0.74</td>
<td>0.47</td>
</tr>
<tr>
<td>Cash wage-replacement benefits</td>
<td>0.56</td>
<td>0.85</td>
<td>0.51</td>
</tr>
<tr>
<td>Employer costs</td>
<td>1.70</td>
<td>2.96</td>
<td>1.51</td>
</tr>
<tr>
<td>Source: National Academy of Social Insurance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Calendar year benefits paid as a share of payroll in California are expected to continue to decline in future years as more of the cases are affected by the recent legislation.

**National Benefits and Costs, 1989 – 2005**
To compare trends over time, it is again useful to measure workers’ compensation spending relative to the aggregate wages of covered workers. In a steady state, one might expect benefits to keep pace with covered wages. This would be the case if there were no change in the frequency or severity of injuries, and if wage-replacement benefits to workers and
medical payments to providers tracked the growth of wages in the economy generally. When benefits or costs rise faster or slower than covered wages, the trends reflect developments beyond shifts in the size of the workforce and wage levels.

Figure 1 shows trends for the nation as a whole in workers’ compensation benefits and employer costs as a share of covered wages from 1989 through 2005. Both benefits and costs peaked in the early 1990s then declined until 2000. In particular:

- Benefits peaked at $1.64 per $100 of covered wages in 1991-1992 and then fell steadily to $1.06 per $100 of wages in 2000; and
- Employer costs followed a similar pattern. They peaked at $2.16 per $100 of covered wages in 1993 then declined each year to a low of $1.34 per $100 of covered wages in 2000.

After 2000, the national trends in benefits and employer costs diverged somewhat.

- Benefits rose gradually from $1.06 to $1.17 per $100 of wages by 2003 then fell back to their low point of $1.06 per $100 of wages in 2005; and
- Employer costs rose much more rapidly than benefit payments after 2000 but, unlike benefits, did not return to the low point that occurred at the turn of the century.

The decline in spending in the 1990s was due, at least in part to improved workplace safety. According to the U.S. Department of Labor, the number of workplace injuries that resulted in days away from work declined from 3.0 per 100 full-time workers in 1992 to 1.8 per 100 full-time workers in 2000 (Sengupta et al. 2007, U.S Department of Labor 2006).

---

3 Benefits are payments in the calendar year to injured workers and to providers of their medical care.
4 Costs for self-insuring employers are benefits paid in the calendar year plus the administrative costs associated with providing those benefits. Costs for employers who purchase insurance include the insurance premiums paid during the calendar year plus the payments of benefits under large deductible plans during the year. The insurance premiums must pay for all of the compensable consequences of the injuries that occur during the year, including the benefits paid in the current as well as future years.
lower injury rates coincided with lower spending as a share of covered payroll for workers’ compensation benefits. At the same time, favorable investment returns also enabled insurers to reduce premiums they charged employers for new policies; and employer costs as a share of wages also fell prior to 2000 (Yates and Burton, 2004).

**California Trends, 1989 – 2005**

Figure 2 shows long-term trends in workers’ compensation benefits and employer costs per $100 of covered wages in California.

As a share of covered wages of in California:
- Benefits peaked in 1992 at $2.26 per $100 of wages, and then declined to a low point of $1.53 in 1998.
- After 2000, benefits rose as a share of covered wages through 2003, and then dropped in both 2004 and 2005 following legislative changes.

Employer cost as a share of wages changed more sharply over time in California than for the nation as a whole. Between 1993 and 1999, employer costs declined precipitously from $3.29 to $1.75 per $100 of covered wages. Starting in 2000, employer costs for workers’ compensation began to rise in most parts of the country, but the rate of growth in California was far higher than anywhere else. In the space of only three years from 2000 to 2003, employer costs in California grew from 1.85 percent to 3.45 percent of payroll. Following reform, employer costs dropped to 2.96 percent of payroll in 2005.

The precipitous drop in employer costs during the 1990s coincides with the deregulation of insurance pricing followed by the rise of the economic bubble in which insurers could survive on investment returns despite underwriting losses. The sudden growth in costs in the early 2000s coincides with the end of the bubble, the insolvencies of more than two dozen insurers, and reduced competition in the insurance market. At the same time as the market shakeout, paid benefits in California rose more rapidly than the national average,
largely due to increases in medical spending. The next two sections describe the trends in cash and medical benefits in greater detail.

**Trends in Cash Benefits**

Figure 3 shows the long term trends in wage replacement benefits in California and in the rest of the nation outside California.

Outside California, aggregate wage-replacement benefits as a share of covered wages declined during the 1990s and generally remained a fairly stable share of covered wages after 2000.

In California, aggregate wage-replacement benefits declined as a share of wages in the 1990s. Then benefits rose as a share of wages from 2000 through 2003 and then fell as a share of California wages in 2005. In 2005, cash benefits per $100 of wages were at their lowest point in the past 17 years, at $0.85 per $100 of wages. Nevertheless, California cash benefits as a percentage of payroll in 2005 remained above the average of the rest of the country.

![Figure 3: Workers' Compensation Wage-Replacement Benefits per $100 of Payroll, 1989-2005, in California, and in United States outside California](image)

The overall downward trends since the early 1990s may be due to several factors, including the declining frequency of claims both in California and the nation. California’s liberal interpretation of compensability for industrial claims was narrowed in for psychiatric injuries, which in 1993 became compensable only if predominantly caused by actual events of employment excluding good faith personnel actions. Also in 1993, the California legislature enacted a system to limit the profusion of forensic medical evaluations and to prescribe minimum qualifications for medical evaluators. These and other downward forces contributed to the overall downward trend in California.

Like many other states, California pays temporary disability benefits equal to two thirds of the workers’ prior weekly earnings, subject to a cap. The dollar cap was adjusted upwards in 1990, 1991, 1994, 1995 and 1996 and then was not changed until 2003. The cap was
gradually raised for injuries occurring between 2003 and 2006 to reach the level of the average weekly wage in California -- $840 in 2006 -- and was indexed to keep pace with the average weekly wage thereafter (CHSWC 2008). Consequently, more injured workers in California could receive temporary benefits that actually replaced two thirds of their prior wages. The cap for permanent partial disability is much lower than for temporary total disability and varies by the degree of disability— from $270 a week for those with 70 percent or great disability to $220 a week for those with lower disability ratings in 2005.

The method for evaluating and rating partial disability changed dramatically in 2005 with the adoption of the American Medical Association (AMA) Guides to the Evaluation Permanent Impairment as the foundation of a new rating schedule (CHSWC 2008). For cases that are subject to the reforms taking effect in 2004 and 2005, ultimate permanent disability indemnity benefits are reduced by more than 60 percent (CHSWC 2006).

Benefits paid in 2005 (Figure 3) include payments to workers injured before the major reforms and therefore are not subject to the new payment rules. California cash payments as a share of covered wages may continue to move closer to the national average as the effects of these most recent changes affect more recipients.

**Trends in Medical Benefits**

Figure 4 shows the trend in medical benefits over the period 1989-2005. Outside California, medical benefits as a share of covered wages declined more slowly during the 1990s than did cash benefits. Between 1992 and 2000, medical payments outside California fell from $0.65 to $0.43 per $100 of wages. After 2000, medical spending stabilized at about $0.47 per $100 of wages.

In California, medical payments also fell as a share of wages in the 1990s. Between 1992 and 2000, medical benefits per $100 of wages fell from $0.95 to $0.72. Unlike the rest of the nation, however, medical spending after 2000 rose sharply to a new peak in 2003 of $1.03 per $100 of California wages. The increase in payments for medical care was driven in large part by high use of certain services (such as repeat visits for chiropractic or physical
therapy services), a generous fee schedule for pharmaceuticals, and the lack of a fee schedule for outpatient surgery centers. One reason often given for the increase in California’s medical payments is a statutory presumption of correctness in favor of the primary occupational medical provider, adopted in 1993. The presumption was increasingly interpreted by courts and doctors to limit payer’s ability to control utilization until the presumption was restricted in 2003.

The reform measures of 2003 and 2004 sought to substantially contain the sharply rising spending for workers’ compensation medical care in California. The new laws limited fees for outpatient surgery centers to 120 percent of Medicare payment rates and limited payments for most pharmaceuticals to rates allowed in the California Medicaid program. In addition, all payers were required to adopt utilization review procedures and to apply evidence-based medicine standards. These changes in payments for medical care applied to all open cases. In addition, for new cases in 2004 and thereafter, the new law capped the number of chiropractic and physical therapy visits, a change that dramatically reduced use of these services in some cases. Following these changes, California medical payments dropped sharply. Between 2003 and 2005 medical spending dropped from $1.03 to $0.74 per $100 of California wages. As with cash payments, differences between California medical payments per $100 of payroll and the average in other states may continue to narrow as the reforms affects more of the caseload.

The data for this report go through calendar year 2005 and reflect, in many cases, a gradual impact of reforms on employer costs and workers’ benefits as changes diffuse through the system. The introduction of utilization review requirements in 2004 had a rocky start because neither payers nor physicians were accustomed to the review process or to the guidelines of the American College of Occupational and Environmental Medicine (ACOEM), which were the guidelines initially required. Over the next couple of years, participants learned to work with the system, utilization review processes began to mature, and in the third year, the California Division of Worker’s Compensation (DWC) began introducing additional guidelines to augment the ACOEM guidelines.

A survey in 2006 (UCLA 2006) found 78 percent of patients satisfied with their overall care, virtually identical to the satisfaction rates (77 percent) in a 1998 study (DWC, 1998). Moreover, somewhat more workers report full recovery from their injuries (DWC 2007a). Studies are underway to develop improved tools to regularly monitor and evaluate quality of care provided to workers in the California workers’ compensation system (Dembe, 2006). The first post-reform study of return-to-work rates appears to suggest reductions in the duration of temporary disability and return to work beginning in 2005 (DWC 2007b). Most experts agree that getting workers back to appropriate employment is the most effective way to improve outcomes for workers and ultimately to save money for employers.
### Table A1: Workers’ Compensation Benefits, Employer Costs and Covered Wages in California and in the Nation

<table>
<thead>
<tr>
<th>Year</th>
<th>CALIFORNIA</th>
<th></th>
<th>UNITED STATES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Medical Benefits (in thousands)</strong></td>
<td><strong>Total Benefits (in thousands)</strong></td>
<td><strong>Employer Costs (in thousands)</strong></td>
<td><strong>Covered Wages (in millions)</strong></td>
</tr>
<tr>
<td>1989</td>
<td>2,050,558</td>
<td>5,241,891</td>
<td>9,414,000</td>
<td>313,946</td>
</tr>
<tr>
<td>1990</td>
<td>2,408,684</td>
<td>6,064,551</td>
<td>10,277,819</td>
<td>336,862</td>
</tr>
<tr>
<td>1991</td>
<td>2,891,794</td>
<td>7,247,896</td>
<td>10,484,270</td>
<td>340,434</td>
</tr>
<tr>
<td>1992</td>
<td>3,304,620</td>
<td>7,907,451</td>
<td>11,060,372</td>
<td>349,677</td>
</tr>
<tr>
<td>1993</td>
<td>2,851,046</td>
<td>7,176,813</td>
<td>8,419,817</td>
<td>380,560</td>
</tr>
<tr>
<td>1994</td>
<td>2,908,991</td>
<td>6,893,344</td>
<td>7,547,931</td>
<td>405,942</td>
</tr>
<tr>
<td>1997</td>
<td>3,957,106</td>
<td>8,866,119</td>
<td>9,242,657</td>
<td>528,468</td>
</tr>
<tr>
<td>1999</td>
<td>4,690,006</td>
<td>10,082,580</td>
<td>13,175,534</td>
<td>606,472</td>
</tr>
<tr>
<td>2000</td>
<td>5,504,014</td>
<td>10,974,355</td>
<td>16,257,930</td>
<td>601,288</td>
</tr>
<tr>
<td>2001</td>
<td>6,333,900</td>
<td>12,409,808</td>
<td>21,282,764</td>
<td>616,879</td>
</tr>
<tr>
<td>2002</td>
<td>6,072,536</td>
<td>12,459,589</td>
<td>22,598,563</td>
<td>653,145</td>
</tr>
<tr>
<td>2003</td>
<td>5,102,013</td>
<td>10,938,475</td>
<td>20,384,128</td>
<td>689,220</td>
</tr>
</tbody>
</table>
References


The Brief was produced jointly by the *California Commission on Health and Safety and Workers’ Compensation* in Oakland, CA, and the *National Academy of Social Insurance* in Washington, DC. Any views expressed in this Brief are those of the author(s) and do not represent an official position of the Academy, the Commission, or the funder.

**National Academy of Social Insurance (NASI)**
1776 Massachusetts Avenue, NW, Suite 615
Washington, DC 20036-1904
(202)452-8097 • (202)452-8111 Fax
e-mail: nasi@nasi.org • web:www.nasi.org

**Commission on Health and Safety and Workers' Compensation**
1515 Clay St., Room 901
Oakland CA 94612
(510)622-3959 • (510)622-3265 Fax
web: [http://www.dir.ca.gov/chswc/chswc.html](http://www.dir.ca.gov/chswc/chswc.html)

---

*This Brief was supported by the California HealthCare Foundation based in Oakland, CA.*

---

All National Academy of Social Insurance briefs and reports are available at [www.nasi.org](http://www.nasi.org).