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The Workers' Compensation Crisis in California

A Primer

By David Neumark

SUMMARY

Between 1999 and 2003, Workers' Compensation (WC) premium costs for California employers nearly tripled, rising to an average of over 6 percent of payroll costs—a cost run-up that was unique to California. What accounts for this escalation in costs? The increases were not driven by more workplace injuries or illnesses because these have actually declined. Nor is there any clear indication that the WC crisis stemmed from deregulation of the California WC market in 1995. The two most important contributors to the WC crisis appear to be rising medical costs and increasing numbers of major permanent partial disability (PPD) cases. Even though WC benefits paid out by insurers each year have not risen nearly as sharply as the premium costs charged to employers, premium costs may have risen because insurers expected a continuing increase in future medical costs and major PPD cases.

In response, two major pieces of legislation reforming WC were passed in 2003 and 2004. Although we noted above two possible reasons for rising costs, WC is a remarkably complex system. It is difficult to pinpoint the driving forces behind this crisis and the likely effects of policy changes. The best estimates currently available suggest that the combined effects of the 2003 and 2004 reforms should reduce costs by around 20 percent. However, there are important reasons to be cautious in concluding that these reforms have "solved" the WC crisis. They include uncertainty over the effects of the legislation, the possibility of continuing high growth rates in WC costs, inability to fully account for the cost run-up in the first place, and concerns that cost reductions not impair appropriate medical care and indemnity benefits (i.e., payments to replace lost earnings) for injured workers. The process of reforming WC is by no means complete. Fine-tuning and advancing these reforms to arrive at a system that adequately meets the sometimes competing needs of employers and workers will require many years of monitoring, research, and evaluation.

California Economic Policy *is a quarterly series analyzing and discussing policy issues affecting the California economy.*

Introduction

The Workers' Compensation crisis that emerged in this decade in California is, in a nutshell, an unprecedented run-up in employers' WC costs. Between 1999 and 2003, these costs nearly tripled, rising to an average of over 6 percent of payroll costs. At the same time, national WC costs rose much more modestly. Numerous factors have been suggested as sources of the state's WC crisis, including

- rising statutory benefits enacted by the legislature;
- escalating medical costs and disability claims;
- the deregulation of California's WC insurance market in 1995 (which allowed insurance companies to compete in setting premium rates, or "open rating"); and
- declining investment returns on funds set aside by insurance companies for future WC liabilities, as a result of the collapse of the stock market boom of the 1990s.

In response to the alarming increase in WC premiums, lawmakers in Sacramento passed two major pieces of legislation—SB 228 in 2003 and SB 899 in 2004.

The goal of this issue of *California Economic Policy* is to examine the potential reasons for the WC crisis in California, to explain the policy responses, and to discuss the relationship between the apparent sources of this crisis and these policy responses. Much of the material presented below will be familiar to those intimately involved with the state's WC crisis and subsequent reform efforts. Our intention here is to provide an opportunity for those who are less well-versed to get up to speed on the problem and the policy responses it elicited. Future work at PPIC will move beyond establishing the context and begin to contribute new research on WC in California.

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An Overview of California's WC System

WC is a no-fault system of insurance in which workers give up the ability to sue their employers for workplace-related injury (or illness) in exchange for possibly reduced—but more certain—medical and indemnity benefits when they suffer such an injury. These benefits fall into five main categories: medical benefits; temporary disability benefits; permanent disability benefits; vocational rehabilitation benefits; and death benefits. With certain limitations, injured workers are entitled to all medical care that is necessary to cure or relieve the effects of a workplace injury, with no deductible or co-payment. Many injuries are minor; approximately two-thirds of all WC claims are medical-only and result in no indemnity payments for lost wages. But a smaller number of cases account for a large share of costs; for example, 80 percent of all medical benefit dollars go to workers whose injuries are severe enough to result in permanent disability, as do a large share of indemnity benefit dollars.[1]

Workers who miss more than three days of work as the result of workplace illness or injury are entitled to temporary disability (TD) benefits. TD benefits are calculated as two-thirds of the worker's usual wage, subject to a maximum ($728 per week in 2004). They are payable until the worker's condition has stabilized and he is judged to be either permanently disabled or able to return to work. In 2003, TD accounted for the largest share of paid indemnities (43.2%).[2]

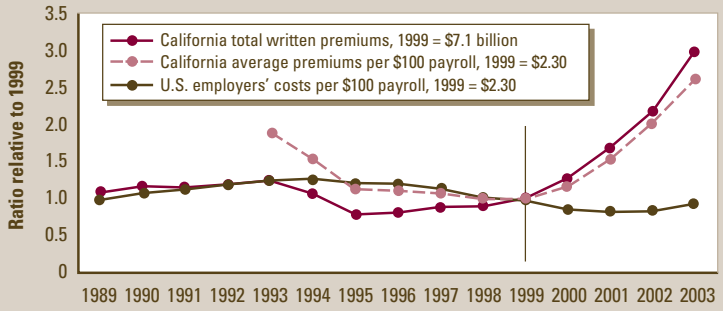
Most workers who are permanently disabled are classified as having a permanent partial disability—as opposed to a total disability—and are assigned a disability rating of between 1 percent and 99.75 percent, corresponding to their remaining capacity to work. PPD payments accounted for 40.9 percent of all WC indemnity payments in California in 2003. However, PPD cases loom larger in terms of total indemnity payments. This is because permanently disabled workers may receive TD benefits for an extended time until their situation has sta-

bilized and they have been evaluated for a disability rating, at which point they begin to draw PPD benefits.[3]

When a worker is injured or becomes ill as a result of his job, he is diagnosed and treated by an employer-chosen provider (unless the employee has predesignated a provider). After 30 days, workers may have the right to change to a medical provider of their own choice.[4] In the majority of WC cases—typically less serious ones—benefits are delivered automatically without serious dispute or delay. However, approximately 20 percent of claims end up in WC courts with disputes regarding the degree to which an injury or illness is work-related; the status or rating of the disability; or the necessity, duration, or kind of medical treatment. Litigation is particularly common in cases of serious injury and permanent disability.[5]

Most employers in California provide benefits to injured workers by purchasing insurance from a private insurance company or from the State Compensation Insurance Fund (SCIF). The SCIF was created in 1913 to compete with private insurers and to serve as the "insurer of last resort."[6] Insurance prices were originally regulated by the Minimum Rate Law, but in 1995 the market was deregulated and private companies were largely free to price insurance as they chose.[7] Large private companies (or groups of companies) exceeding specified minimum financial requirements may self-insure for WC liability, as may public employers. Although fewer than 1 percent of California employers self-insure, self-insured employers paid 28 percent of all calendar year WC benefits in 2001 because of their larger average size and higher average wages.[8]

Figure 1. Workers' Compensation Costs Have Risen Faster in California Than in the United States



Sources: California total written premiums and California average premiums per $100 payroll (WCIRB, 2004b); U.S. employers' costs per $100 payroll (Burton, 2003a, Table 1).
Notes: California average premiums for 2002 and 2003 are averages of two half-year estimates. The 2003 figure for total written premiums is an estimate.

The WC Crisis: Cost Increases

Employer Costs in California and the Nation

The WC crisis in California is—at its core—a function of sharp run-ups in employer premium costs beginning in about 2000. Figure 1 displays information on two WC cost measures for California and a roughly comparable measure for the United States as a whole. The data are divided by their 1999 values (the approximate beginning of the crisis), so that values for other years measure the ratio of costs to those in 1999. California "total written premiums" captures total expenditures in the state on WC insurance for California employers who purchased insurance from private insurers or from the State Fund.

In the early 1990s, after rising to a high of about $8.9 billion (1.25 times the 1999 value), total written premiums fell to $5.7 billion in 1995 and then increased gradually to $7.1 billion in 1999. Then the WC crisis set in, with the next four years witnessing cost increases averaging over 30 percent per year. In 2003, costs were three times as high as in 1999, an increase of 200 percent. The second measure in the figure is employers' costs per $100 of payroll; these costs are not directly affected by rising employment or wages. This data series includes employers covered by the State Fund and private insurers but excludes self-insured employers. It shows a drop of 47 percent from 1993 to 1999, after which costs accelerated rapidly, more than doubling by 2002 and then rising to over $6 billion in 2003, approximately 2.6 times the level in 1999. Thus, the two alternative measures tell a very similar story, as do a variety of other measures.

What has been happening to WC costs in the rest of the nation? The final series plotted in Figure 1 measures WC costs per $100 of payroll nationally. This series shows only a slight increase from 2000 to 2003. Thus, while WC costs were skyrocketing in California, in the rest of the nation they were rising at a far more moderate rate.

Incidence

The most pervasive fear regarding rising WC premiums is that they raise labor costs and will thus lead to employment declines. However, the effect of higher premiums on employment depends on labor demand and supply conditions. For example, if labor supply is highly responsive to wages, then employers cannot cut wages too sharply without driving away employees. Thus, employers cannot shift the cost of higher premiums to current workers by lowering their wages sharply and instead have to make up for the increased WC costs by reducing employment. In this case, the "incidence" of WC premiums falls mainly on employers. On the other hand, if labor supply is *not* very responsive to wages, then wages will fall by more and employment will fall by less, as workers bear more of the incidence in terms of lower wages. Thus, when the incidence falls more heavily on *employers*, greater job losses will ensue.

While WC costs were skyrocketing in California, in the rest of the nation they were rising at a far more moderate rate.

Past research on the incidence of WC premiums suggests that workers bear most of the incidence, in which case higher premiums would reduce wages but have modest employment effects.[9] This might suggest that the WC crisis in California will not have very adverse employment effects. However, the research that leads to this conclusion is based on smaller changes in WC premiums than those in California and should not be extrapolated to the much larger premium changes that California witnessed in the early part of this decade. In sum, there is no well-established evidence on the wage and employment consequences of the state's WC crisis. In the absence of such evidence, the actual effects of the WC crisis on employment remain speculative.

Do Rising WC Benefits Explain the WC Crisis?

Injuries and Illnesses

An obvious first question is whether the increase in WC costs in California was driven by rising benefits resulting from more workplace injuries and illnesses. In fact, such was not the case. Figure 2 reports injury and illness rates per 100 workers from 1992 to 2002 for California and the nation. It shows that these rates dropped sharply in both California and the United States during this period.

There is also a question of whether severity has increased. At the national level, there are data on days away from work. Although these data indicate a rising share of cases with more than 30 days away from work, the absolute number of such cases has fallen sharply.[10] Given that for the United States as a whole there have been declines in injuries and illnesses with both more and fewer days away from work, and absent any reason to believe that changes in actual severity were much different in California, the most reasonable expectation is that these changes should have led, if anything, to declining WC premiums in California. Thus, the causes of the WC crisis must lie elsewhere.

Changes in Statutory Maximum TD Benefits

In 2002, AB 749[11] was passed, focusing in large part on increasing the generosity of indemnity benefits in California, which had fallen considerably relative to wages.[12] In particular, AB 749 mandated a series of increases in the weekly maximum for TD benefits out through 2006, followed by indexing these benefits to the average weekly wage beginning in 2006. However, the scheduled benefit increases are unlikely to account for the run-up in WC costs

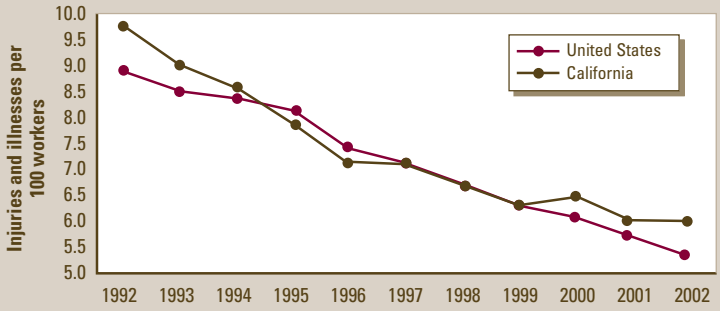
that began in about 2000: The benefit increases were not legislated until 2002, and the larger increases were not scheduled until 2004. Taking account of the higher benefits and their effects on utilization, as well as certain cost savings included in the bill, the WCIRB estimated that AB 749 would add about 6 percent to WC costs in 2003 and 2004 and about 2 percent in 2005 and 2006.[13] So even if these cost increases were in some sense anticipated in setting premiums, they cannot have played much of a role in the WC crisis.

Total Benefits—Calendar Year

Total WC benefits extend beyond TD benefits, to include medical expenses, payments for permanent disability, and so on. A key difficulty in measuring total benefits paid is that some benefits are paid relatively quickly following a claim, but others are paid over a much longer time horizon—for example, when a worker has a serious injury that requires treatment over many years, or when an injury results in permanent disability. As a consequence, benefits can be measured in two ways. *Calendar year benefits* are the sum of benefit payments made during the year, whether for current year injuries or for injuries sustained in prior years. *Incurred benefits* are the sum of both previously paid and future benefit payments for injuries sustained during a period. Because of such factors as unknown disability determinations and ratings, as well as unknown future medical costs, the benefits to be paid in the future are of necessity estimated, at least in part.

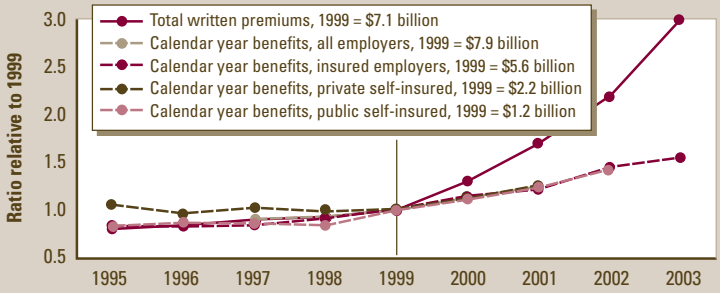
We first consider calendar year benefits. The dashed lines in Figure 3 display information on four measures of calendar year benefits, including measures for different groups of insureds and the self-insured. As in Figure 1, these are standardized to equal one in 1999, to ease comparisons of relative changes. The alternative benefits measures move in the same direction and overlap closely.[14] All of these measures increased after 1999 (by about 50% by 2002 or 2003) and most have increased since the mid-1990s. For example, benefits for all employers rose from $7.1 billion to $11.3 billion in California from 1997 through 2002. By way of comparison, for the United States the comparable benefits measure increased from $42 billion to $53 billion over this same period, a percentage increase under half that of California. The higher growth of benefits in California in part reflects faster payroll growth—but only in part. About $2.5 billion of the $4.2 billion increase in benefits from 1997 through 2002 is attributable to faster payroll growth in California, leaving $1.7 billion

Figure 2. Injuries and Illnesses Have Fallen Across the Board



Sources: The U.S. numbers are from the U.S. Bureau of Labor Statistics (BLS) (n.d.) and are for private industry. The California numbers are from CHSWC (2003, p. 118) and include state and local government (but the changes over time are the same for the shorter period for which private industry data are available from the BLS). The 1992 U.S. number includes fatalities.

Figure 3. Calendar Year Benefits Have Risen Much More Slowly Than Have Premiums



Sources: Calendar year benefits, all employers (NASI, 2003, Table 9); calendar year benefits, insured employers (WCIRB, 2004c, Exhibit 18); calendar year benefits, private and public self-insured (Office of Self Insured Plans (OSIP), n.d.(a) and n.d.(b), multiple years).
Note: The share of benefits paid by self-insured employers hovered near 30 percent for the period 1995–2001, declining slightly (NASI, 1997, Table 4; 2001, Table C1; and 2004, Tables D1–D4).

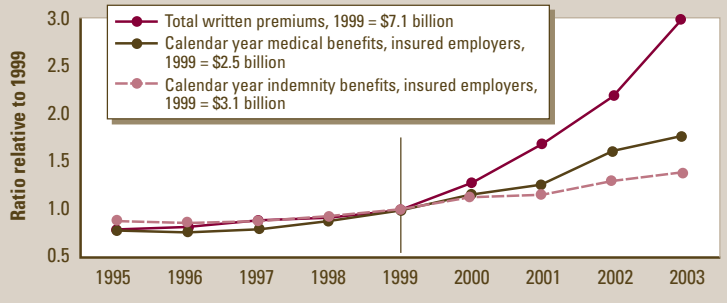
Increases in total calendar year benefits do not explain the run-up in WC costs in California, on average accounting for only about one-quarter of the increase from 1999 to 2003.

of the increase unattributable to payroll growth. In other words, benefits grew by 25 percent more in California than can be explained by payroll growth. In contrast, in the United States as a whole benefits actually grew slightly more slowly than did payroll.[15]

Most important, though, a comparison of the dashed lines with the solid line in Figure 3—which shows changes in premiums—indicates that the growth of WC premium costs far outpaced the growth of benefits since 1999. These figures indicate, then, that increases in total calendar year benefits do not explain the run-up in WC costs in California, on average accounting for only about one-quarter of the increase from 1999 to 2003.

Figure 4 provides information on medical and indemnity benefits for insured employers. The series on medical benefits for insured employers exhibits considerably faster growth, with medical benefits growing nearly twice as fast as indemnity benefits after 1999. This suggests that medical cost inflation played an important role in the WC crisis in California, a point we return to below.

Figure 4. Calendar Year Medical Benefits Ha e Risen More Sharply Than Have Calendar Year Indemnity Benefits



Sources: Calendar year benefits, all employers (NASI, 2003, Table 9); calendar year benefits, insured employers (WCIRB, 2004c, Exhibit 18); calendar year benefits, private and public self-insured (Office of Self Insured Plans (OSIP), n.d.(a) and n.d.(b), multiple years).
Note: The share of benefits paid by self-insured employers hovered near 30 percent for the period 1995–2001, declining slightly (NASI, 1997, Table 4; 2001, Table C1; and 2004, Tables D1–D4).

Total Benefits—Incurred

Calendar year benefits provide an incomplete picture of projected WC payments because many payments related to current claims come due in the future. Similarly, it may be inappropriate to compare WC premium costs with calendar year benefits because premiums are intended to cover the projected future benefit payments associated with WC claims. If future benefits have been rising (or are projected to rise) faster than calendar year benefits, then increases in incurred benefits could have contributed to the run-up in WC costs in ways not reflected in calendar year benefits.

Incurred benefits are difficult to study because actual realizations (rather than estimates) are observed only with a long lag. A case in point: Some of the analyses in this subsection are based on WCIRB estimates of incurred benefits for claims with maturities of one through five years. For example, claims of five-years maturity in 2000 were initiated in 1995, when many of the costs incurred in 1998 and 1999 were not yet known. However, by 2000, most of the 1995 claims had been closed, most benefits had been paid, and any benefits as yet unpaid were largely known with certainty. For less mature claims, though, these calculations are based more on projected than realized benefits; and as claims mature, incurred benefits are revalued to reflect realized benefits. Consequently, there is a significant tradeoff between timeliness and accuracy in evaluating incurred benefits. As an example, if we want to focus on more mature claims (of, say, three years), then even if the data were instantaneously available, the most recent incurred benefits estimates would be for 2002 (covering 2002–2004). The situation is made worse because the data are collected and published with a lag.

A second limitation of incurred benefits is that they are, necessarily, in part estimated because until they are fully matured they are forward-looking. Thus, although we will see that rising incurred benefits help to explain the increase in WC premiums in California, it is possible that the predicted incurred benefit increases overstate the growth of the benefits that will actually occur. However,

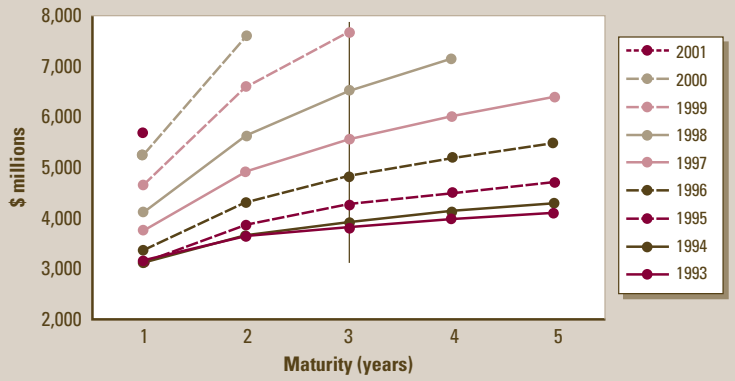
we should not expect that insurance companies can simply overstate the growth of incurred benefits to charge higher premiums. In a competitive market, there should be pressure for companies to avoid overinflating the growth of incurred benefits: Competitors would know that charging premiums based on lower—but more accurate—projections of incurred benefits would be a profitable strategy.

Figure 5 displays the available information from WCIRB on incurred benefits. These benefits begin with 1993 claims and currently extend through 2001 claims (for which claims of one-year maturity are available so far). In this graph, each line plots the value of incurred benefits for claims beginning in the indicated year, as they mature. Consider, for example, the graphed line for 1994. Incurred benefits when claims are relatively immature (at one year) are estimated at about $3.1 billion. The next year, these claims have a two-year maturity and, in this case, the incurred benefits for claims beginning in 1994 rise to about $3.6 billion. If incurred benefits were accurately estimated when claims first begin, these graphed lines would be flat. The upward slope implies that these estimates are revised upward each year as claims mature.

The figure reveals two major changes in incurred benefits. First, if we were to draw a vertical line at any given year of maturity through all of the sloping lines representing calendar years (as shown by the line drawn in maturity-year three in this figure), we would see that benefits are rising with time. These increases are consistent with the rising calendar year benefits we see in Figure 4.

The second and more striking feature of Figure 5, however, concerns revisions in incurred benefits as claims mature, revealed in the increasing slope of the graphed lines. The lowest curve is for claims initiated in 1993. Each subsequent calendar year is associated with not only a higher line but a steeper one. This steepening of the graphed lines implies that incurred benefits are rising faster over the course of the claims' maturity as we get closer to the year 2000, when the WC crisis emerged. In particular, the upward revisions in the previous few years are increasingly large. For example, for claims filed in 1998, there is more than a 50 percent increase in incurred benefits from the first to the third year of the claim. Because of data limitations, we have no way of knowing whether this pattern of escalating incurred benefits continued, stabilized, or reversed after 2001. However, Figure 5 indicates that, although there was always some tendency to revise these estimates upward as claims matured, toward the latter part of the decade the rate of increase in incurred benefits over the course of claims rose substantially.

Figure 5. Total Incurred Benefits Have Increased at Each Year of Maturity (Across Profiles) and Have Grown at an Accelerating Rate with Years of Maturity (Along Profiles)



Sources: WCIRB (2001, 2002b, 2003a, 2004c).

The growing rate of increase in incurred benefits can potentially help explain why premium costs rose so much faster than calendar year benefits (shown in Figure 4). In particular, beginning in the latter part of the 1990s, insurers may have begun to anticipate—presumably based in part on experience—considerable increases in benefits paid out as claims matured, and faster increases in these benefits over the life of claims for the coming years—increases that would not have been fully reflected in calendar year benefits.

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The run-ups in incurred benefits over the life of claims are not stemming from medical costs to the exclusion of indemnity costs. However, at each year of maturity, the percentage increases in medical benefits are generally larger. This trend indicates that increasing medical costs have contributed significantly to rising WC costs.

uestions remain as to why projected longer-run WC benefits began to rise so much in the late 1990s and whether they rose even more sharply in the 2001–2003 period, when premiums skyrocketed. If there were a trend toward continued steepening of the profiles shown in Figure 5, then insurers may have had good reason to increase WC premiums sharply. Given what the data have shown thus far, it would appear that this sort of scenario is needed to rationalize the sharp increases in premiums. There is additional evidence confirming that accelerating increases in incurred benefits help to explain the WC crisis in California: Data from another source, the Workers Compensation Research Institute (WCRI), indicate that incurred benefits rose particularly sharply in California from 1999 through 2002.[16]

Why Did Incurred Benefits Start to Grow So Rapidly?

In trying to understand what spurred the rapid growth in incurred benefits, we focus on two "suspects" that have captured the most attention in the debate: medical costs and utilization, and permanent disability benefits.

Medical Costs and Utilization

In the absence of rationing, injured workers who face no out-of-pocket expense for additional medical services may tend to overuse them because they are likely to perceive at least some extra benefit. Similarly, medical providers have little incentive to restrain services. WCRI data indicate that, as of a few years ago, injured workers in California had much higher utilization rates per claim than workers in other states. Specifically, for claims with more than seven lost workdays, initiated in 1999 and evaluated in 2002, the average number of medical services per claim was 139 percent higher in California than the median for a 12-state comparison group,[17] and the average number of visits per claim was 104 percent higher.[18] Medical costs, however, do not appear to be inordinately high in California. For the same claims discussed above, the average medical payment per claim was only 19.9 percent higher in California. The smaller difference in payments per claim despite the much higher utilization in California stems from both lower prices per service in California and from relatively heavy use of physical medicine in the state, which tends to be less expensive than medical intervention.[19] For example, the average number of chiropractor visits per claim with more than seven lost workdays was 160 percent higher in California than the 12-state median.

Figure 6 shows changes over time in medical and indemnity benefits in California and the United States. Strikingly, medical benefits in California increased between 1997 and 2002 at more than twice the rate of medical benefits in the United States as a whole. (Indemnity benefits also grew faster in California.)

We noted above that incurred benefits in California have been rising particularly sharply. WCRI data also provide specific information on incurred medical benefits.[20] For claims of one-year maturity, the average annual rate of increase for *paid* medical benefits per claim in California between 1996 and 2001 was 8.6 percent, a bit more than the 12-state median of 7.1 percent during the period. However, *incurred* medical benefits evaluated at one-year maturity rose 57 percent faster for California claims than for those of the 12-state median (10.8% vs. 6.9%). For claims of three-years maturity, the difference is more striking. Paid benefits rose 12.8 percent per year in California, compared to 6.3 percent for the 12-state group, whereas incurred benefits increased at a 15.3 percent rate compared to 6.0 percent for the 12-state comparison group.

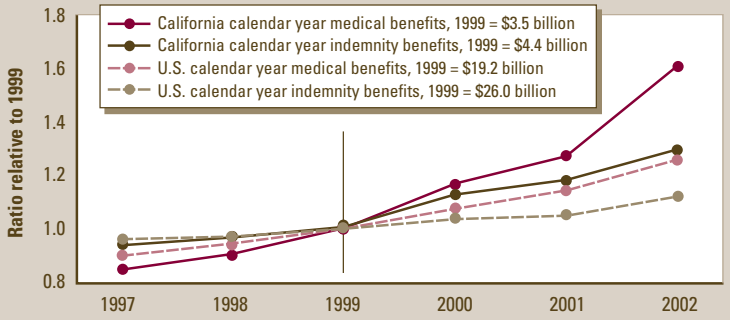
Above, we examined WCIRB's reports of estimated incurred benefits as they develop over time and noted that estimates for more recent years

have been subject to more extreme upward revaluations as they mature (Figure 5). WCIRB also publishes these totals broken down into indemnity and medical benefits for a subset of the years and claims maturities shown in Figure 5, and these are reported in Figure 7. The graphs suggest that the increases in incurred benefits have been driven by both indemnity and medical benefits because both show increases at given years of maturity (that is, if we draw a vertical line at each year of maturity, we can see that costs are higher for each successive calendar year). In both cases, benefits are also driven by accelerating growth of incurred benefits with years of maturity (indicated by the increasing slopes of each calendar series). Certainly the run-ups in incurred benefits over the life of claims are not stemming from medical costs to the exclusion of indemnity costs. However, at each year of maturity, the percentage increases in medical benefits are generally larger. This trend indicates that increasing medical costs have contributed significantly to rising WC costs.

Permanent isability enefits

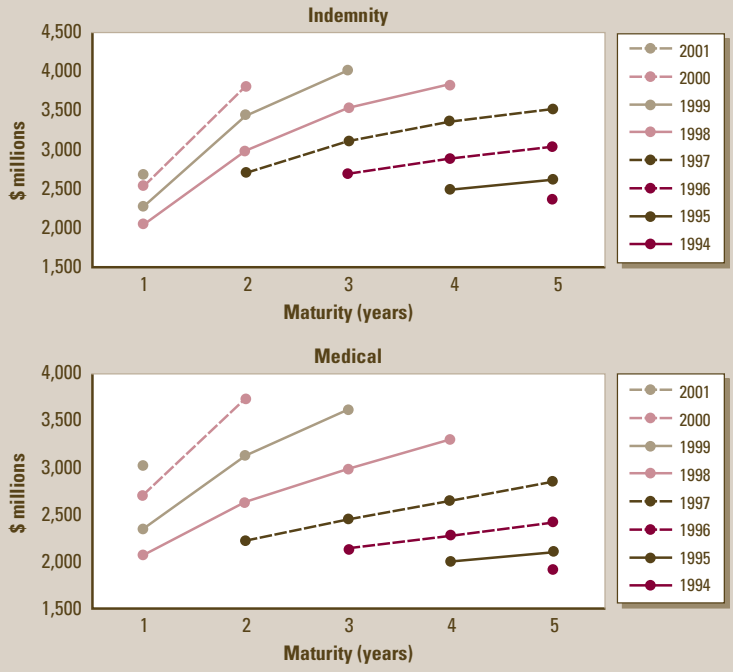
The other major suspect in rising WC costs is permanent disability benefits, particularly PPD benefits.[21] For PPD claims, WCRI computes average total payments per claim, average medical payments per claim, average indemnity payments per claim, and average TD and PPD benefits paid per claim in nine states, based on 1999 and 2001 claims evaluated in 2002.[22] These values are computed for California and for the median of both "impairment states" and "nonimpairment states." Impairment states base PPD ratings exclusively on the degree of medical impairment. Nonimpairment states (including California) use other criteria such as loss of wage-earning capacity, by itself or in addition to an impairment-based approach. For claims evaluated at one-year maturity, California had the third-highest total cost per PPD claim, and it ranked highest for claims evaluated at three-years maturity. California ranks a bit higher on indemnity payments and not quite as high on medical payments. More important, the WCRI data indicate that between 1996

Figure 6. Calendar Year Medical and Indemnity Benefits in California Have Grown Especially Quickly



Sources: NASI (2003, Tables 8 and D1–D4; 2004, Table 9).
Notes: The figure includes benefits for the insured and the self-insured. Although NASI includes self-insured employers, the increases for California are very similar to those reported by WCIRB for insured employers only, with medical benefits in California growing at approximately twice the rate of indemnity benefits.

Figure 7. Incurred Indemnity Benefits and Medical Benefits Have Increased at Each Year of Maturity (Across Profiles) and Have Grown at an Accelerating Rate with Years of Maturity (Along Profiles)



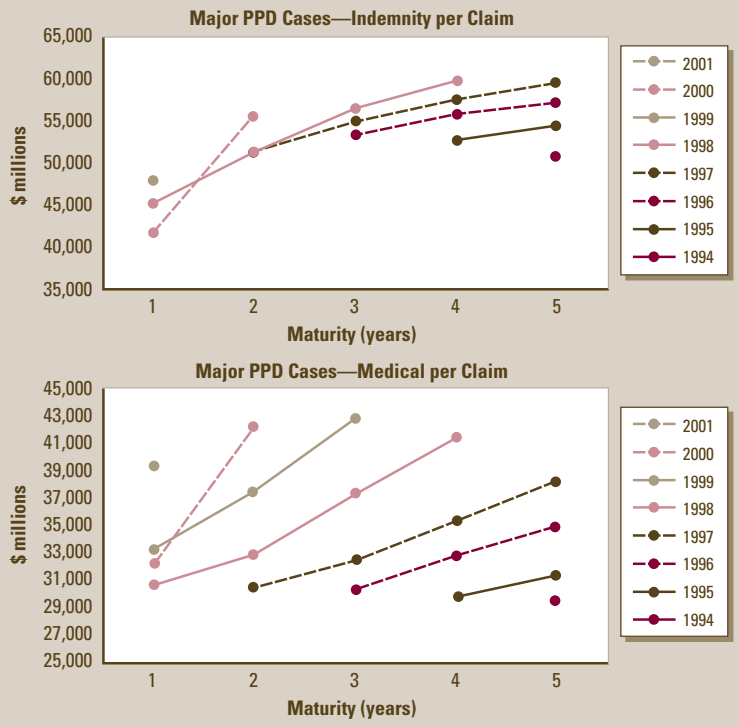
Sources: WCIRB (2001, 2002b, 2003a, 2004c).

and 1999, California's medical and indemnity benefits for mature PPD claims (three years) all rose faster than in any of the nine comparison states.

The patterns of increases in incurred indemnity and medical benefits were driven by increasing numbers of major PPD cases.

The WCIRB data on incurred indemnity and medical benefits per major PPD claim provide a somewhat more complete picture. These data cover *major* PPD claims, which are those with a disability rating of 25 percent or greater; those with a lower rating are labeled minor. As shown in Figure 8, the profile of incurred indemnity benefits for major PPD cases is quite stable across calendar years. Medical benefits reflect a pattern of rising benefits over the course of a claim, perhaps at a slightly increasing rate, but relatively little upward drift over time in benefits for a given year's maturity, with the exception of 2001. Thus, these data do not point to any major *acceleration* of incurred indemnity or medical benefits associated with PPD cases.

Figure 8. Incurred Indemnit and Medical Bene ts per Claim for Major PPD Cases Have Been More Stable



Qurces: WCIRB (2001, 2002b, 2003a, 2004c).

However, Figure 8 refers to benefits per PPD claim. If California has a higher share of PPD cases, or if this share is growing, then this could contribute substantially to WC benefit payments or increases in WC benefit payments. Data from the WCIRB provide the most complete picture regarding PPD cases, in particular regarding the evolution of claims as they mature. Figure 9 graphs major PPD cases by year and maturity. Note that the vertical axis now measures number of cases rather than the value of benefits as in the previous similar figures. What is striking in Figure 9 is the steepening of the profiles in the figure over most of the sample period (until the 2000 claims). Figure 9 generally implies an escalating rate of reclassification of claims as *major* PPD cases as these claims mature. Indeed, this figure looks quite similar to the top and bottom panels of Figure 7, which showed, respectively, total incurred indemnity and medical benefits. The similarity suggests strongly that the patterns of increases in incurred indemnity and medical benefits were driven by increasing numbers of major PPD cases.

The WCIRB data also show that total TD and minor PPD indemnity and medical benefits did not increase over the course of claims and that the rates of claims shifting out of the minor PPD category and into the major PPD category increased over this period. Both of these findings reinforce the conclusion that the changes in Figures 5 and 7 are driven by major PPD cases.[23]

Deregulation and Lowered Investment Returns

In the immediate aftermath of deregulation in 1995, competition between insurers led to price wars, pricing below cost, and the failure of a number of carriers. In addition, because insurance companies invest in financial markets between receipt of premiums from employers and payout of

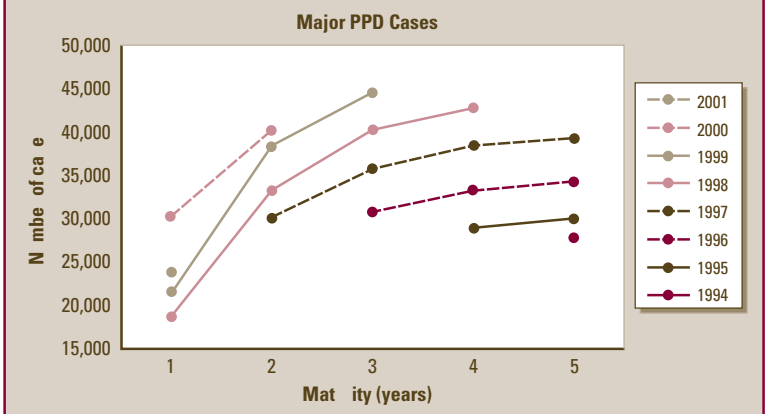
benefits to workers, lower investment returns after 2000 put additional pressure on insurers.[24]

Did lower investment returns or deregulation play a role in the WC crisis? The decline in investment returns may have created pressure for insurers to raise premiums to restore their reserves. However, the decline in returns was a national phenomenon, yet WC premiums nationally rose quite modestly whereas California's skyrocketed, suggesting that this did not contribute importantly to the run-up in WC costs in California.

The dynamics of insurance prices since deregulation have contributed to some interest in reregulating the WC market.[25] The critical question is whether deregulation somehow led to the cost run-ups in WC in California and, perhaps more important, whether deregulation has led to permanently higher costs. The price wars that occurred after deregulation suggest that the immediate postderegulation period was one of excess supply of insurers in the market in which losses were rampant. As this excess supply was eliminated, we might have expected costs to employers to rise somewhat and in particular to rise faster than benefits. However, the pattern of cost changes in Figure 1 does not seem to fit a simple pattern of price reductions immediately following deregulation, followed by a restoration of the earlier prices. In addition, in a competitive market there is no reason why insurers who lost money earlier should have been able to raise prices to recover these losses, as newer competitors could charge lower prices and still earn a profit.

Attributing the rate increases to deregulation is also problematic because of the absence of similar WC crises in other states. As of 2000, 37 states had replaced their previous administrative pricing systems with open rating, most of them before California adopted open rating. If open rating is the cause of high premiums and insurance market instability in California, we might have expected similar price wars followed by cost run-ups in other states. Yet this does not seem to have occurred, at least not to anywhere near the same degree. In fact, estimates indicate that deregulation, at least when it is relatively comprehensive (as it was in California), tends to reduce employers' WC costs.[26] It is nonetheless possible that deregulation set off a different dynamic in California's WC market, although to the best of our knowledge no one has identified if it did and, if so, why.

Fig e 9. Claim Have Been Cla i ed a Majo PPD Ca e at an Accele ating Rate



Qurces: WCIRB (2001, 2002b, 2003a, 2004c).

Recent Reforms

In response to the WC crisis in California, two sets of reforms were passed—the first under the Davis administration and the second under the Schwarzenegger administration. This section discusses these recent reforms and how they might be expected to address the main sources of cost increases in the California WC system. The reform legislation includes numerous components. Here we focus on medical costs and utilization and PPD.

S 228 (Chapter 639, 2003)

In September 2003, California's legislature passed SB 228 in direct response to the continuing WC crisis in the period leading up to the recall election.[27] SB 228 attempted to standard-

In September 2003, California's legislature passed SB 228 in direct response to the continuing WC crisis in the period leading up to the recall election. SB 228 attempted to standardize medical care.

ize medical care in two principal ways. First, before SB 228, predesignated physicians were granted the "presumption of correctness," which made it difficult for insurers or employers to challenge their medical opinions.[28] SB 228 repealed this presumption for cases that fall under treatment utilization guidelines that were to be developed—and until they were developed under the guidelines of the American College of Occupational and Environmental Medicine (ACOEM).[29] SB 228 also addressed medical costs in other ways. Perhaps most important, it capped medical fees for outpatient surgery and treatment at 120 percent of Medicare payments for the same classes of service. Caps were also imposed on pharmaceutical costs, mandating a new fee schedule for pharmaceuticals based on the Medi-Cal fee schedule. In addition, in response to the greater number of medical services used by WC claimants in California, SB 228 mandates the development of "evidence-based" standards of care to use in the development of schedules for medical treatments.[30] It also requires that employers adopt utilization review standards consistent with this schedule and ACOEM guidelines. Finally, SB 228 capped the number of chiropractic and physical therapy visits to 24 each for any single claim.

SB 899, enacted on April 19, 2004, continues to try to rein in medical costs. . . . the bill allows employers to establish networks of occupational and nonoccupational physicians, and it grants to the employer (or the insurer) the sole right to decide which medical providers are in the network.

SB 899 (Chapter 34, 2004)

SB 899, enacted on April 19, 2004, continues to try to rein in medical costs. Perhaps most important, the bill allows employers to establish networks of occupational and nonoccupational physicians, and it grants to the employer (or the insurer) the sole right to decide which medical providers are in the network. This potentially changes the right of the worker to choose a physician after the first 30 days because this rule no longer applies if a network is established that complies with the law. However, the bill continues to grant workers the right to predesignate physicians under certain conditions, the most important being that the physician was previously the worker's primary provider of medical care. On net, though, workers will have less scope to choose their physician, and the ability to seek out a new physician after an injury is likely to be curtailed most severely. The bill also requires that employers provide medical treatment after a WC claim, even if it has not yet been accepted by the insurance company, up to a limit of $10,000, and fully repeals the presumption of correctness of the treating physician. It also expands the potential use of carve-outs, which allow employers and unions to negotiate any aspect of the delivery of WC benefits if the employees are offered group health insurance and nonoccupational disability benefits. Finally, SB 899 strengthens SB 228's emphasis on evidence-based research, establishing that treatment guidelines that are developed can be rebutted based only on scientific medical evidence.

SB 899 also addresses issues of PPD. It links PPD payments to return to work, mandating higher benefits if the employer does not offer a return to work, and vice versa, and higher payments if the worker is terminated before all PPD payments are made. These both apply only to employers with more than 50 employees. In addition, the schedule that relates weeks of indemnity for which a worker is eligible to disability ratings was modified. The schedule has always provided higher benefits to those with a higher disability rating. However, SB 899 changed the schedule so that those with ratings of 72 percent or below receive lower benefits, and those with ratings above 72 percent receive higher benefits. The changes at the extremes of the disability ratings are sizable. Finally, the PPD rating system was changed: The work capacity index—based mainly on the ability to do one's previous job—was replaced by "diminished earning capacity." Ratings of this capacity were to be based on the "nature of the physical injury or disfigurement," incorporating American Medical Association (AMA) guidelines for both descriptions of

impairments and the percentages of impairments attached to these descriptions.

In addition to changing PPD payments, SB 899 may reduce litigation associated with PPD claims for two reasons: First, the lower payments entailed by the "diminished earning capacity" criterion may make litigation less attractive to attorneys. Second, increased objectivity in PPD ratings should reduce the disparities and arbitrariness in PPD ratings in California, which have been blamed for high litigation rates for PPD.[31]

Speculating About the Consequences of Recent WC Reforms

The medical cost-containment provisions (including fee schedules and utilization reviews) included in SB 228 are key components of the recent WC reforms. Are fee schedules and utilization reviews likely to reduce medical costs? Evidence suggests that providers do alter their behavior in response to price controls and rationing. In some cases, they do so by reducing medical costs, but in other cases, they find ways to obtain the same billing and perhaps provide the same services as before—for example, by "up-coding" procedures or increasing the number of visits. Physicians may also feel it necessary to exaggerate the severity of a condition or otherwise falsify the diagnosis to obtain quality patient care. As an example, studies of Medicare price reductions suggest that 50 percent of mandated price decreases are offset by provider behavior, either by changing the code under which services are billed or by increasing the volume of services.[32]

The use of treatment guidelines and the increased ability of employers and insurers to obtain their own evaluations or control the choice of medical provider (with SB 899) may help to counter practices such as those described above. For example, Harris and Swedlow (2004) attempt to estimate the possible medical utilization reductions stemming from SB 228's initial mandate to use ACOEM guidelines. They focus on lower back complaints because these represent a large share of claims and costs, are covered by ACOEM guidelines, and have varying treatments. Harris and Swedlow match WC health complaints to ACOEM guidelines based on primary diagnosis codes. For selected medical services related to low back complaints, they estimate the reductions in utilization associated with use of the guidelines. Their estimates are dramatic and—it is fair to say—controversial. For example, they estimate that only 4–8 percent of physical medicine and chiropractic visits for low back strain injuries are supported by ACOEM guidelines, and eight of nine back surgeries are not supported. These estimates surely represent upper bounds on the reductions that might occur in response to utilization reforms, but they nonetheless suggest considerable scope for treatment guidelines to reduce medical costs. At the same time, medical cost containment may be difficult even with established treatment guidelines: Previous reforms have already reduced medical costs where it was easiest to do so, and innovations in medical technology and pharmaceuticals that save lives and decrease suffering are likely to be costly.[33] Finally, it is important to recognize that utilization and fee schedules or other forms of managed care may reduce workers' choices or access to needed services. Studies show reduced worker satisfaction with managed care—which may come to characterize more WC medicine under SB 899—even when outcomes are improved and medical costs are reduced.[34]

It is difficult to project the cost savings from WC reform legislation before the fact, and not much easier to evaluate the cost savings after the fact. The difficulty stems from uncertainty about behavioral responses, the multidimensional nature of the reform legislation, and the inherent problem of attributing changes in premiums to the reform legislation per se rather than to other changes that can shift premiums. Nonetheless, various groups have tried to project the consequences of WC reforms for costs. These projections must be used cautiously for a number of reasons. These include the uncertainty on which they are based, their commingling with political debates over WC reforms, and the dynamics of a deregulated WC market. Ultimately, the best and perhaps only compelling evidence will

come from the evolution of actual WC insurance premiums as the reforms take hold.

Turning to these cost projections, the Department of Insurance estimated that SB 228 would lead to $5 billion in one-time savings and $5.6 billion in ongoing annual savings if the reforms were completely implemented.[35] Relative to 2003 premium costs of approximately $21 billion, these are dramatic cost savings. However, in a 2003 bulletin, CWCI noted that employer groups were skeptical that the 2003 legislation would deliver cost reductions this large.[36] Neuhauser (2003) estimates the effects on WC costs solely of the adoption of ACOEM guidelines, arriving at a midrange estimate of $3.1 billion in cost savings. This high estimate is driven, in large part, by his estimates that the cost differential between providing medical services under WC and in standard group health insurance settings is 100 percent, with about 70 percent of this driven by overutilization (and the rest by price differences). If so, then reductions in overutilization brought about by the ACOEM guidelines can deliver large cost savings.

Another way to gauge the potential cost reductions stemming from legislative reform is via the actions of the Insurance Commissioner and WCIRB. Under the open rating system in California, WCIRB publishes "pure" premium advisory rates (intended to include the actual costs of benefits plus expenses). These are then submitted to the Insurance Commissioner for approval. Although California insurers are largely free to choose their own rates, they may use these advisory rates as a benchmark. Regardless, the pure premium advisory rates are intended to take into account the best estimates of cost changes. For anuary 1, 2004, the Insurance Commissioner proposed a 14.9 percent decrease in pure premium rates from the previous year, based on SB 228. This decrease followed years of continuous increases and was a substantially sharper drop than the 2.9 percent decrease proposed by WCIRB.[37]

The WCIRB and the Insurance Commissioner are now in greater agreement on the combined cost-reduction effects of SB 228 and SB 899, proposing overall advisory rate reductions of 17.4 percent and 20.9 percent, respectively, for the same period.

There are, as yet, no direct estimates of cost reductions stemming from SB 899. However, the Insurance Commissioner issued an additional 7 percent reduction in pure premium advisory rates based on this legislation (effective uly 1, 2004). He also noted that WCIRB and the Insurance Commissioner are now in greater agreement on the combined cost-reduction effects of SB 228 and SB 899, proposing overall advisory rate reductions of 17.4 percent and 20.9 percent, respectively, for the same period.[38] Finally, it is important to note that these advisory rate reductions do not include potential savings from changes in the permanent disability system because of uncertainty regarding the effects of this component of SB 899.

In spite of these reductions in the pure premium advisory rates in 2004, WCIRB has announced that it will propose a 3.5 percent average increase in the rates for 2005, in large part reflecting the higher benefits mandated by AB 749, highlighting the difficulties of slowing the growth of WC costs.[39]

Conclusions

The WC crisis in California is a crisis of escalating employer costs. Over the early part of this decade, costs to employers nearly tripled. Perhaps more important, the level of WC costs has approached an average of about 6 percent of payroll costs, which, unless shifted to workers, might pose a serious "tax" on employment that could have adverse consequences for employment.

Increased WC costs were not driven by more workplace injuries or illnesses; rather, these have declined continuously. It is also difficult to blame the WC crisis on declining investment returns or deregulation because these changes occurred in other states as well without generating sharply rising WC costs, although the role of deregulation remains to be studied more fully.

The evidence suggests that both rising medical costs and increasing numbers of major PPD cases have contributed significantly to the WC crisis in California. The WC benefits *paid out on a calendar year basis* rose concurrently with premiums but not nearly as sharply as premium costs. A key force that helps to further explain rising premiums is the rapid increases in *incurred* benefits, which are driven by escalating medical costs and growing numbers of major PPD cases. To the extent that insurers expected the rate of increase in these factors to continue, there may have been a sound rationale for rapidly increasing WC premiums. However, it is difficult to quantify the relationship, given the long-term forward-looking nature of incurred benefits.

In 2003 and 2004, under both the Davis and Schwarzenegger administrations, legislation was enacted to try to rein in the costs of WC in California. There appears to be at least some consensus that the combined effects of these reforms should reduce costs, perhaps by as much as 20 percent. Given that the reforms did attack what appear to be the prime drivers behind the WC crisis, it is natural to conclude that they will lower WC costs, even if it is difficult to predict by how much. However, there are three important caveats to concluding that these reforms have "solved" the WC crisis.

First, the WC crisis in California has been characterized by rapid growth in WC costs. If the recent reforms serve only to lower the current level of WC costs but do not reduce their rate of growth, then we may find any cost reductions stemming from the recent reforms quickly overwhelmed by rapid growth from what will still remain a fairly high base.

Second, the real evidence of success in reining in spiraling WC costs in California will have to be measured in actual rate reductions, not estimated cost reductions. It will be some time before we can assess whether rates have fallen and whether the growth rate of premium costs has slowed. Moreover, whether this occurs in the context of continuing to provide adequate benefits, medical treatment, rehabilitation, and return to work—or in the context of sharp reductions in the quality of outcomes for workers (and businesses)—will condition how we view any cost reductions.

Finally, we do not fully understand what generated the sharp run-up in WC costs in the first place. In the face of that uncertainty, it would be unwarranted to confidently predict whether existing WC reforms are sufficient to eliminate escalating WC costs. Conversely, there could be declines in WC premiums that are not necessarily attributable to the reforms.

These caveats notwithstanding, however, credit should be given where credit is due. Despite a tortuous and highly political process, and despite the remaining uncertainties, the WC reforms enacted in 2003 and 2004 appear to address those central causes of the WC crisis that can be identified. Over the next few years, the best strategy for policymakers includes (1) ensuring that the reforms are enacted in a way that will bring about the intended cost reductions while still meeting the legitimate needs of both workers and businesses, (2) continuing research into the effectiveness of the reforms enacted thus far, and (3) fine-tuning the WC system to use what we learn from this research to further reduce WC costs that do not serve these legitimate needs. ❖

If the recent reforms serve only to lower the current level of WC costs but do not reduce their rate of growth, then we may find any cost reductions stemming from the recent reforms quickly overwhelmed by rapid growth from what will still remain a fairly high base.

Notes

[1] Workers' Compensation Insurance Rating Bureau (WCIRB) (2003a).

[2] WCIRB (2004a).

[3] Reville et al. (2003) explain the PPD rating system. The statistics are from WCIRB (2003b) and Peterson et al. (1998, p. 151).

[4] Under the most recent reforms, if the employer has established a qualified network provider for work-related medical care, the worker can choose his own provider outside the network only if he has predesignated a provider who is the primary treating physician in an employer-provided group health insurance plan for medical conditions unrelated to work. In the new networks for work-related medical care, however, the worker is allowed to choose a provider within the network after initial treatment.

[5] Pace and Reville (2003); Peterson et al. (1998).

[6] In 2002, most employers obtained their WC insurance from the private market, but State Fund policies accounted for 36 percent of premiums charged to insured employers, double its share in 1999 (California Commission on Health and Safety and Workers' Compensation (CHSWC), 2003, pp. 64, 109).

[7] Insurers are subject to the requirement that rates are adequate to cover losses and expenses and that the rates not tend to create a monopoly (AB 1985, 2002; California Code Sec. 11737).

[8] National Academy of Social Insurance (NASI) (2004, Table 9); Reville et al. (2001, p. xvii).

[9] Gruber and Krueger (1991).

[10] Of course, using days away from work as a measure of severity—rather than objective medical assessments—is tricky when increases in days away from work for less serious injuries or illnesses may be what is driving up WC costs.

[11] AB 749, Chapter 2, 2002.

[12] Kilgour (2003).

[13] WCIRB (2002a).

[14] Benefits for the insured and public and private self-insured do not add up exactly to the benefits for all employers shown in Figure 3 because of different measurement in alternative data sources.

[15] NASI (2003, Tables 3 and 9); NASI (2004, Tables 3 and 8).

[16] See Telles et al. (2004, Table 3.3). The analysis in this study compares 1999 claims evaluated in 2002 (three-years maturity) and 2001 claims evaluated in 2002 (one-year maturity) with previous years' claims evaluated at the same maturities, starting in 1996. The authors find that among 12 comparison states (see note 17), California had the highest rate of increase for average incurred benefits for both more and less mature claims over the period.

[17] WCRI collects and analyzes data for 12 large states: California, Connecticut, Florida, Illinois, Indiana, Louisiana, Massachusetts, North Carolina, Pennsylvania, Tennessee, Texas, and Wisconsin. For some comparisons with regard to PPD benefits, Louisiana, Massachusetts, and Pennsylvania are omitted because their benefit structure is very different.

[18] Eccleston et al. (2004, Table 4.1a and 4.2a).

[19] Physical medicine includes nonmedical interventions such as traction, ultrasound, and acupuncture; see Harris and Swedlow (2004).

[20] Telles et al. (2004, Table 3.5).

[21] Reville et al. (2003).

[22] Telles et al. (2004, Tables 2.10 and 2.11).

[23] In addition to the number of PPD cases and their medical and indemnity benefits, features unique to California's system of evaluating partial disabilities may tend to promote litigation (Reville et al., 2003, p. 7). However, looking at the change in claims with defense attorney involvement, a comparison of claims initiated in 1996 with those initiated in 1999, at three-years maturity, indicated faster growth in California (1.7 percentage points per year) than in all of the comparison states; the 12-state median was 0.5 percentage point (Telles et al., 2004, Table 3.11). This figure identifies a source of rising WC costs in California. However, Telles et al. also report on the change in defense attorney payments per claim with defense attorney involvement. These rose at a lower rate in California than in most of the other states, suggesting that litigation costs overall were not a major factor in the state's WC crisis, although they may have contributed.

[24] Burton (2001); Kilgour (2003, pp. 29–30).

[25] See, for example, California Labor Federation AFL-CIO (2004).

[26] Thomason et al. (2001).

[27] CHSWC (2003); California Workers' Compensation Institute (CWCI) (2003a).

[28] Before AB 749, all primary treating physicians were granted this presumption; AB 749 restricted the presumption to predesignated physicians.

[29] Kilgour (2003).

[30] CHSWC (2003, p. 20).

[31] Reville et al. (2003).

[32] Victor (2003, p. 14).

[33] Burton (2003b).

[34] Wickizer et al. (2001).

[35] Garamendi (2003). Similarly, CWCI (2003b) reports that the Conference Committee that oversaw development of the 2003 legislation projected one-time savings of $5.3 billion and ongoing savings of between $4.9 and $5.6 billion.

[36] CWCI (2003b). Senator Poochigian (2003b) notes that WCIRB estimated cost savings of $3.1 billion (WCIRB, 2003c) but did not include in that figure elements of SB 228 that could increase costs (such as new fees), and still projected overall WC costs to continue to increase after the legislation, and—after a one-year slowdown in the growth of costs—at a similar rate to projections before the legislation.

[37] California Department of Insurance (CDI) (2004). It is important to note, as the Insurance Commissioner does in this statement, that "the Insurance Commissioner does not set workers' compensation rates. Insurance companies are allowed by law to set any adequate rate they desire. However, the 2003 reform legislation includes a provision that requires insurers to file rates that include the savings that I determine are due to the reforms." How this plays out in practice is uncertain, however. Moreover, it has been reported that this estimate was overoptimistic, with few insurers implementing reductions this large (Dressler, 2004).

[38] CDI (2004). The Insurance Commissioner's initial proposed reduction of 14.9 percent, followed by a subsequent reduction of an additional 7 percent from the new lower base, amounts to a 20.9 percent overall reduction. (For example, a $100 premium is first reduced to $85.1, and then to $79.1, for a combined reduction of 20.9 percent.)

[39] See WCIRB (2004d, 2004e), and CDI (2004).

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