

# California Workers' Compensation Reform Outcomes

## Part 1: Changes in Medical Cost Containment Payments Accident Years 2002 – 2007

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### EXECUTIVE SUMMARY

Medical cost containment (MCC) is a process that seeks to monitor and manage the unit price of medical services<sup>1</sup>, and where feasible and appropriate, the use and volume of specific services based on clinical efficacy and need. Two key elements of recent legislative reforms that most directly impacted medical cost containment payments were:

- the repeal of the treating physicians' presumption of correctness in favor of utilization review to ensure compliance with a medical treatment utilization schedule; and
- the provision allowing employers to establish medical provider networks (MPNs) to direct their injured workers' medical care on or after January 1, 2005.

This report, which updates CWCI's March 2008 analysis, uses claims with 2002 to 2007 injury dates to track medical cost containment expenses at 6, 12 and 24 months post injury, and is the first report in CWCI's latest reform analysis series. The results show continued growth in MCC expense payments, but preliminary results from AY 2005 – AY 2007 show the post-reform decline in overall medical payments ended in AY 2005, and since then, total medical benefit payments per claim have increased sharply.

### Key findings include:

- **For all claims:** the ratio of medical cost containment payments to total medical benefits at 12 months post injury doubled from 5.0 percent for AY 2002 claims to 10.0 percent for AY 2006 claims. Meanwhile, the ratio measured at 24 months post injury rose from 5.0 percent for AY 2002 claims to 8.9 percent for AY 2005 claims.
- **For medical-only claims:** the ratio of medical cost containment payments to total medical benefits at 12 months post injury nearly tripled from 3.4 percent for AY 2002 claims to 9.6 percent for AY 2006 claims. At 24 months post injury, the ratio increased from 3.5 percent for AY 2002 claims to 8.3 percent for AY 2005 claims.
- **For indemnity claims:** the ratio of medical cost containment payments to total medical benefits at 12 months post injury rose from 5.4 percent of AY 2002 claims to 10.1 percent for AY 2006 claims. At 24 months post injury, the ratio increased from 5.2 percent for AY 2002 claims to 9.0 percent for AY 2005 claims.
- Despite ongoing increases in the amounts paid for medical cost containment, all of the post-reform reductions in overall medical payments per claim occurred between AY 2002 and AY 2005. Since then, overall medical payments per California workers' compensation claim have increased \$248, or 18 percent at 6-months post injury, and \$241, or 11.4 percent, at 12-months post injury.

<sup>1</sup> Setting the unit price depends on the rules and regulations of a health care system. Workers' compensation provides treatment reasonably required to cure or relieve the injured worker from the effects of the injury with no out-of-pocket expense to the worker. In health care, coverage depends on the health plan which defines the level of benefit as well as demand-side cost controls such as co-payments or deductibles. Those without group health insurance either purchase an individual plan or pay for services directly with the provider or hospital or receive care through a patchwork of state and federal programs.

## BACKGROUND

The workers' compensation reform legislation signed into law between 2002 and 2004 contained provisions to control the growth of medical cost. Perhaps the most prominent provision of reform directly impacting medical cost was the partial repeal of the primary treating physician's (PTP) presumption of correctness in matters of medical treatment. Several studies have shown associations between the presumption and increasing medical utilization and cost. Logic dictated that a repeal of the presumption would, in turn, reduce medical utilization and cost. To replace the opinion of the PTP as presumptively correct, reform laws also called for the implementation of utilization controls featuring evidence-based medical treatment guidelines (beginning with the ACOEM Guidelines) as well as 24-visit caps for physical therapy, occupational therapy and chiropractic manipulation.

To help ensure that these significant changes to the workers' compensation system would have the desired effect, Senate Bill 228 (the 2003 workers' compensation reform bill) enacted several additional changes to the system designed to ensure appropriate application of reform. These changes allowed an increased emphasis on traditional medical cost containment processes and assumed that, despite the additional expense, the increased cost controls would be efficacious. Increased medical cost containment efforts included repeal of the voluntary utilization review (UR) system and enactment of a mandatory UR model with an interim presumption of correctness given to the American College of Occupational and Environmental Medicine (ACOEM) guidelines until the Administrative Director of the Division of Workers' Compensation promulgated a medical treatment utilization schedule. The MCC effort also included a second opinion program for spinal surgery, initially designed to be effective through 2007.

By late 2003, the state adopted emergency regulations to implement mandatory utilization review and the second opinion program for spinal surgery effective for all treatment on or after January 1, 2004.

In 2004, state lawmakers also passed Senate Bill 899, calling for additional changes to California's worker's compensation system. The element of SB 899 most closely associated with medical cost containment was the introduction of Medical Provider Networks (MPNs), which were phased into operation beginning in January 2005. For employers that offer

MPNs to their employees, SB 899 extended medical control from the pre-reform 30-day window to the life of the claim. This change increased continuity of medical care to injured workers and increased the likelihood that treatment would be well coordinated, remaining within the evidence-based guidelines established by the Division of Workers' Compensation.

Part Three of the Institute's 2007 – 2008 research series, "Medical Provider Networks and Medical Benefit Delivery," found that the network utilization rate for California workers' compensation medical treatment increased nearly 90 percent after MPNs began operations in 2005. That study showed that in the first year following injury, nearly 62 percent of physician-based outpatient visits for work injuries in 2006 were to network providers, compared to one out of three visits before MPNs became available. Use of network providers are often accompanied by network access fees, an element of medical cost containment payments. It is reasonable to expect an increase in the number of fees associated with network access as the use of network providers increase.

Since January 2005, the California Division of Workers' Compensation has approved approximately 1,400 MPNs.

## DATA & METHODS

Using the ICIS database, the Institute compiled a sample of 1,319,727 open and closed California workers' compensation claims that had both medical benefit and medical cost containment (MCC) payment data. The sample included claims from five different accident years (dates of injury ranged from January 2002 through June 2007) and payment transactions were measured through November 2007. The data sample contained medical payments of \$4.7 billion, and medical cost containment payments of \$349 million.

The Institute measured medical benefit payments and medical cost containment payments at 6 months post-injury for AY 2002 – 2007 claims; 12 months post injury for AY 2002 – 2006 claims; and 24 months post injury for AY 2002 – 2005 claims. The analysts then calculated the average amount paid per claim at each valuation point. The results were used to determine the ratio of medical cost containment payments to total medical benefit payments (which contain medical cost containment fees) for each accident year at the 6-, 12- and 24-month valuation points.

## ABOUT CWCI

The California Workers' Compensation Institute, incorporated in 1964, is a private, non-profit organization of insurers and self-insured employers conducting and communicating research and analyses to improve the California workers' compensation system. Institute members include insurers that collectively write more than 87 percent of California workers' compensation direct written premium, as well as many of the largest public and private self-insured employers in the state.

## RESULTS

### All Claims

Table 1 shows the changes in the medical cost containment and total medical payments per claim at 6, 12 and 24 months post injury for all claims (medical-only and indemnity). For example, the average amount paid per claim for medical cost containment at 12 months post injury climbed from \$137 for AY 2002 claims to \$234 for AY 2006 claims, an increase of \$97, or 71 percent.

**Table 1: MCC and Total Medical Payments Per Claim**  
AY 2002 - 2007 – All Claims

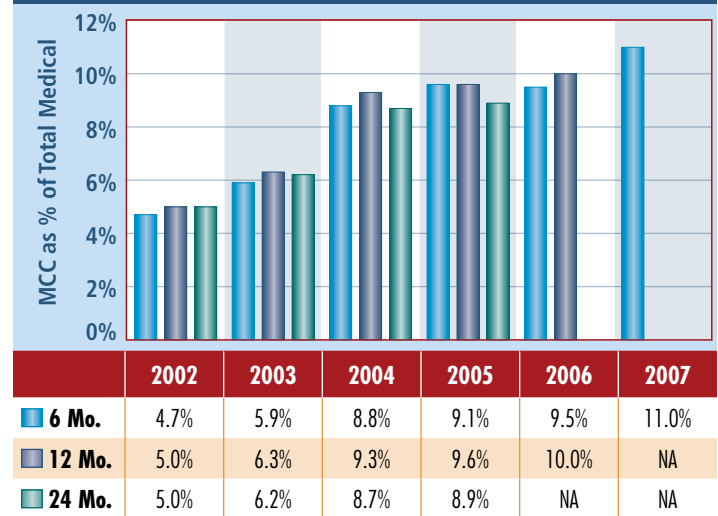
AY	MCC @ 6 Months	MCC @ 12 Months	MCC @ 24 Months	Medical Payments @ 6 Months	Medical Payments @ 12 Months	Medical Payments @ 24 Months
2002	\$80	\$137	\$210	\$1,683	\$2,712	\$4,208
2003	\$88	\$168	\$270	\$1,487	\$2,671	\$4,340
2004	\$130	\$210	\$289	\$1,480	\$2,255	\$3,327
2005	\$125	\$202	\$288	\$1,377	\$2,110	\$3,253
2006	\$145	\$234	NA	\$1,521	\$2,351	NA
2007	\$179	NA	NA	\$1,625	NA	NA

At the same time, however, total medical payments per claim at 12 months of development declined by \$361 from \$2,712 to \$2,351, a reduction of 13 percent. The more developed data show similar changes, with average medical cost containment payments at 24 months post injury increasing \$78 (37 percent) from \$210 for AY 2002 claims to \$288 for AY 2005 claims, while total medical benefits paid per claim fell \$955 (nearly 23 percent) from \$4,208 to \$3,253.

Notably, all of the post-reform decline in average medical benefit payments across all claims occurred between AY 2002 and AY 2005. The latest data show that between AY 2005 and AY 2007, total medical payments per claim have risen by \$248 (+18 percent) at 6 months post injury and they have risen by \$241 (+11 percent) in the first 12 months post injury.

Chart 1 shows the average amount paid per claim for medical cost containment as a proportion of the overall medical payments at 6, 12 and 24 months post injury for the claims in the study sample.

**Chart 1: MCC to Total Medical Payment Ratios**  
AY 2002 - 2007 – All Claims



The ratio of medical cost containment payments to total medical payments at 12 months post injury doubled from 5.0 percent for AY 2002 claims to 10.0 percent for AY 2006 claims. Similarly, at 24 months post injury, MCC measured as a percentage of total medical rose from 5.0 percent for AY 2002 claims to 8.9 percent for AY 2004 claims, a relative increase of 78 percent.

Prior to AY 2005, the increases in average MCC payments combined with the reductions in total medical payments per claim led to rapid growth in the ratio of MCC to total medical payments. The 6- and 12- month valuation data for AY 2006 and AY 2007 show the ratio has continued to grow since AY 2005, even though total medical payments per claim are no longer declining. This is simply because under the reform, the growth rate for average MCC payments has outpaced the growth rate for overall medical benefit payments.

## Medical-Only Claims

In medical-only claims, the injured worker receives treatment and returns to work with no lost time, making these the least severe, and typically, the least expensive claims in the workers' compensation system. Table 2 displays the average amounts paid for medical cost containment and total medical benefits for medical-only claims at 6, 12 and 24 months post injury by accident year.

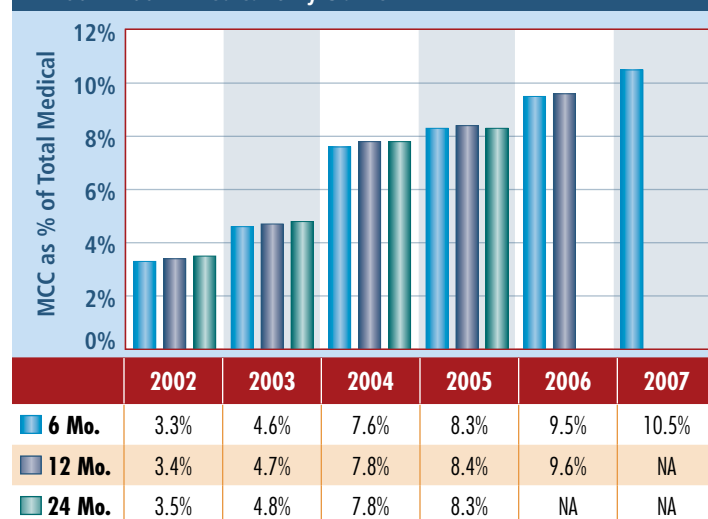
**Table 2: MCC and Total Medical Payments Per Claim**  
AY 2002 - 2007 – Medical Only Claims

AY	MCC @ 6 Months	MCC @ 12 Months	MCC @ 24 Months	Medical Payments @ 6 Months	Medical Payments @ 12 Months	Medical Payments @ 24 Months
2002	\$18	\$23	\$28	\$553	\$678	\$797
2003	\$24	\$32	\$40	\$519	\$685	\$837
2004	\$42	\$52	\$60	\$560	\$669	\$766
2005	\$44	\$55	\$64	\$535	\$655	\$767
2006	\$59	\$73	NA	\$616	\$764	NA
2007	\$76	NA	NA	\$728	NA	NA

For medical-only claims, average medical cost containment payments at 12 months post injury more than tripled from \$23 for AY 2002 claims to \$73 for AY 2006 claims. At the same time, the average amount paid for total medical benefits at 12 months post injury on these claims rose \$86 (less than 13 percent) from \$678 for AY 2002 claims to \$764 for AY 2006 claims. At 24 months post injury, average MCC payments on medical-only claims more than doubled from \$28 for AY 2002 claims to \$64 for AY 2005 claims, while the average amount paid for all medical benefits declined by \$30 (just under 4 percent) from \$797 to \$767, reflecting the fact that in most medical-only cases, treatment terminates soon after the date of injury.

Once again, even though MCC payments continued to rise through AY 2007, all of the post-reform decline in overall medical payments per claim for medical-only cases occurred between AY 2002 and AY 2005. The latest data show that between AY 2005 and AY 2007, the total amount paid for medical benefits per claim has risen by \$730 (+23 percent) at 6 months post injury, and by \$954 (+17 percent) at 12 months post injury.

**Chart 2: MCC to Total Medical Payment Ratios**  
AY 2002 - 2007 – Medical Only Claims



Among medical-only claims in the study sample, the ratio of medical cost containment payments to overall medical payments at 12 months post-injury nearly tripled from 3.4 percent for AY 2002 claims to 9.6 percent for AY 2006 claims. Similarly, at 24 months post injury, the ratio increased from 3.5 percent for AY 2002 claims to 8.3 percent for AY 2005 claims (+137 percent).

## Indemnity Claims

Indemnity claims are more serious cases in which the injured worker is admitted into the hospital; is unable to return to work within three days of the injury; and/or is permanently disabled. They include both temporary disability as well as permanent disability claims. Table 3 displays the average amounts paid for medical cost containment and overall medical benefits for indemnity claims at 6, 12 and 24 months post injury by accident year.

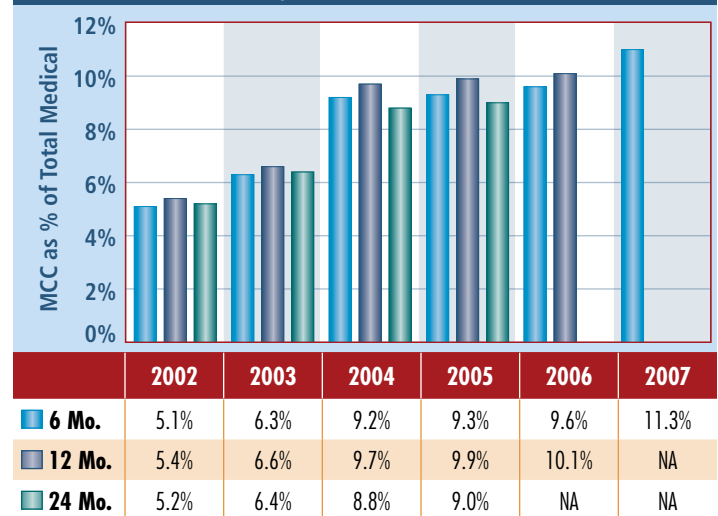
**Table 3: MCC and Total Medical Payments Per Claim  
AY 2002 - 2007 – Indemnity Claims**

AY	MCC @ 6 Months	MCC @ 12 Months	MCC @ 24 Months	Medical Payments @ 6 Months	Medical Payments @ 12 Months	Medical Payments @ 24 Months
2002	\$201	\$360	\$567	\$3,907	\$6,712	\$10,916
2003	\$205	\$417	\$690	\$3,259	\$6,303	\$10,751
2004	\$324	\$563	\$801	\$3,537	\$5,798	\$9,049
2005	\$315	\$550	\$821	\$3,377	\$5,564	\$9,154
2006	\$372	\$658	NA	\$3,897	\$6,518	NA
2007	\$470	NA	NA	\$4,167	NA	NA

The pattern for indemnity claims is similar to the pattern noted for all claims. For example, average MCC payments at 12 months post injury climbed from \$360 for AY 2002 claims to \$658 for AY 2006 claims, an increase of \$298, or 83 percent. At the same time, total medical payments per claim at 12 months declined \$194, or about 3 percent, from \$6,712 to \$6,518. At 24 months post injury, average medical cost containment payments for these claims increased by \$254 from \$567 for AY 2002 claims to \$821 for AY 2005 claims (+45 percent), while the average amount paid for all medical benefits declined by \$1,762 from \$10,916 to \$9,154, a 16 percent reduction.

As was the case for the overall claim sample and for the medical-only claims, all of the post-reform decline in total medical payments per claim for indemnity cases occurred between AY 2002 and AY 2005. The latest data show that between AY 2005 and AY 2007, the average amount paid for total medical on indemnity claims has risen by \$790 (+23 percent) at 6 months post injury. Between AY 2005 and AY 2006 average total payments on indemnity claims rose by \$954 (+17 percent) in the first 12 months post injury.

**Chart 3: MCC to Total Medical Payment Ratios  
AY 2002 - 2007 – Indemnity Claims**



The ratio of medical cost containment payments to overall medical payments for indemnity claims at 12 months post injury rose from 5.4 percent for AY 2002 claims to 10.1 percent for AY 2006 claims, a relative increase of 87 percent. At 24 months, the ratio increased from 5.2 percent for AY 2002 claims to 9.0 percent for AY 2004 claims, a relative increase of 73 percent.



## CONCLUSION

Over the last 20 years, California workers' compensation payors have adapted medical cost containment strategies to the changing nature of legislative statutes and administrative rules and regulations. In the late 1980s and 1990s, repricing medical procedures to the changing fee schedules via medical bill review was the most prevalent form of cost containment. In 1995, the Minniear decision's extension of the primary treating physician's presumption of correctness limited the effectiveness of the payors' utilization review processes. Prior to 2005, payors could channel care to physician networks only within the first 30 days after an injury.

Recent reforms have once again affected a change to medical cost containment strategies through medical fee schedule modifications, the adoption of a mandatory utilization review schedule, and by extending employer medical control (and the utilization of network physicians) through the introduction of Medical Provider Networks. Implementation of these expanded medical controls came at a cost. Average MCC payments per claim at 12 months post injury rose from \$137 in AY 2002 to \$234 in AY 2006, an increase of \$97, or 71 percent. However, this \$97 increase contributed to a \$361 decrease in total medical payments between 2002 (\$2,717) and 2006 (\$2,351), a 13% reduction.

The data used for this analysis did not allow the Institute to quantify the exact amount that each individual MCC component contributed to the increase in the average amount paid per claim, but understanding how the various components work does provide a sense of the relative contributions of each of the leading MCC components. For example, one of the key elements of MCC affected by reforms was medical bill review. Bill review expenses are a function of how many medical services are submitted for repricing. Billed medical service codes are reviewed for accuracy and for authorization status, and the charge for each procedure is compared to the fee schedule amount or the contracted rate, then adjusted accordingly. Typically, medical bill review organizations charge a fee for each bill and/or a line-item charge for each procedure reviewed. Prior CWCI reports<sup>2</sup> showed a marked decrease in medical services following the adoption of the reforms – most

notably, physical therapy and chiropractic manipulation services, which have been associated with high utilization levels and accelerating medical costs between 1993 and 2003. With the decline in utilization of these services under the reforms, bill review charges are likely to account for a smaller percentage of the total amount paid for MCC. On the other hand, mandatory utilization review resulting from the application of evidence-based medical treatment guidelines and the removal of the primary treating physician's presumption of correctness is widely thought to have led to a significant increase in UR services and the associated MCC expenses. Likewise, the increased reliance on network providers following the introduction of MPNs in 2005 undoubtedly resulted in increased payments for access to physician networks, which typically charge either a flat fee or set their fees as a percentage of savings – an amount that would have increased with greater access to discounted provider networks.

While increases in MCC payments were associated with significant reductions in medical care payments through AY 2005, the most recent data show that the average amounts paid for workers' compensation medical treatment increased in 2006 and 2007. These increases may be a short-term anomaly, or they may be the beginning of a reversal of the effectiveness of recent reforms. A subsequent report on medical utilization – to be published later in this series – will offer additional insights into the underlying components of the recent increase in medical payments.

## RESEARCH SERIES

This research update is part of an annual series of analyses initiated by CWCI in 2006 to track changes in various aspects of the California workers' compensation system following the implementation of the 2002-2004 legislative reforms. The current 4-part series will examine the following topics:

- **Part I: Medical Cost Containment**
- **Part II: Medical Provider Networks**
- **Part III: Temporary Disability**
- **Part IV: Medical Utilization**

2 Swedlow, A., Ireland, J. Analysis of California Workers' Compensation Reforms Medical Provider Networks and Medical Benefit Delivery. CWCI. February 2008



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