



Research Update

California Workers' Compensation Claims Monitoring: Medical & Indemnity Development, AY 2005 – AY 2014

by Bob Young and John Ireland

Background

In the wake of the broad-based California workers' compensation legislative reforms enacted between 2002 and 2004, and the subsequent reforms enacted in 2012, CWCI conducted a series of studies that monitored claim development trends based on paid loss data from the Institute's Industry Research Information System (IRIS) database.¹ The most recent study, published in August 2015, analyzed average medical and indemnity payments at various levels of development for claims from accident year (AY) 2002 through the third quarter of AY 2014 with payments valued through December 2014.

This report updates that study by calculating and comparing average paid indemnity and medical losses on claims from AY 2005 through the end of AY 2014 at 6, 12, 24, 36, 48 and 60 months post injury, with payments valued through June 2015. To understand the impact of the various medical cost and medical cost containment (MCC) components, and the timing of the payments for those services within the life of a claim, the study tracks:

1. the average "medical loss" per claim, which includes payments for all medical treatment, drugs, durable medical equipment (DME) and medical-legal services, but excludes MCC payments (which are loss adjustment expenses);² and
2. the average amounts paid per claim for each medical loss component, and for MCC services.

The sample compiled from the IRIS database for this study includes medical and indemnity payment data from 1.8 million insured and self-insured claims from AY 2005-2014. Medical and indemnity payments on those claims totaled \$25.5 billion. The data set was evaluated and determined to be representative of California claims, so the study's findings offer an accurate portrayal of overall indemnity and medical benefit paid loss experience within the state. Because indemnity claims account for about one-third of all workers' compensation claims but more than 90 percent of the losses,³ this report focuses on results for indemnity claims, but to provide a broader view as well, average paid medical losses and year-to-year trends for all claims (indemnity claims and medical-only claims) are included as tables in the Appendix.

1. IRIS is CWCI's proprietary database. It contains detailed data on employee and employer characteristics, medical service data, benefits and administrative cost details on 4.75 million California workers' comp claims.

2. Medical losses and loss adjustment expenses are defined in the California Workers' Compensation Uniform Statistical Reporting Plan (USRP)

3. California Workers' Compensation Insurance Rating Bureau. WCIRB Summary of Policy Year Statistics - 2015 Release, Sept. 17, 2015.

Results

Average Paid Medical Losses, Indemnity Claims

To determine how medical losses on AY 2005 - 2014 indemnity claims have developed over time, the authors calculated the average paid medical loss per claim at 6, 12, 24, 36, 48 and 60 months post injury. The resulting amounts, displayed in Exhibit 1, represent the combined total payments for medical treatment – including pharmaceuticals and DME -- and medical-legal services for claims from each of the 10 accident years at each of the six valuation points.

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$2,910	\$4,776	\$7,920	\$10,847	\$13,132	\$14,927
2006	\$3,236	\$5,410	\$9,348	\$12,503	\$15,091	\$17,445
2007	\$3,437	\$5,998	\$10,022	\$13,666	\$16,800	\$19,354
2008	\$3,807	\$6,321	\$11,000	\$15,396	\$19,062	\$21,846
2009	\$4,100	\$6,952	\$12,402	\$17,203	\$21,283	\$24,279
2010	\$4,433	\$7,430	\$12,973	\$18,205	\$22,377	\$24,930
2011	\$4,059	\$7,230	\$13,313	\$18,582	\$21,770	
2012	\$4,042	\$7,291	\$13,663	\$18,522		
2013	\$4,240	\$7,493	\$13,496			
2014	\$4,680	\$7,958				
% Change in Two Latest Ays	10.4%	6.2%	-1.2%	-0.3%	-2.7%	2.7%
AY 05-End Point % Change	60.8%	66.6%	70.4%	70.8%	65.8%	67.0%

The most recent year for which 60-month data is available is AY 2010, which shows how much workers' compensation medical costs increase as claims age. Reading across the AY 2010 row shows that average paid medical losses more than quadrupled from \$4,433 at the 6-month benchmark to \$24,930 at the 60-month benchmark.

The dollar amounts shown within each column of the table reveal the growth in paid medical for claims from each of the 10 accident years at comparable points of development. For each of the valuation points, the percent change between the two most recent accident years for which data were available is noted in the second row from the bottom of the table. These results present a complex portrait of development, with average paid medical losses down slightly at 24, 36, and 48 months post injury, but up at the 6-, 12- and 60-month benchmarks. However, the bottom line in the table shows that at all six benchmarks, long-term growth in paid medical losses was noted from AY 2005 through the most recent years for which data were available, with increases ranging from 60.8 percent at 6 months post injury to 70.8 percent at the 36-month benchmark.

Average Paid on Indemnity Claims: Medical Loss Components and MCC

In addition to calculating average medical loss payments, results were broken out by medical loss component (medical treatment, pharmaceuticals and DME; and medical-legal services) and for MCC (Exhibits 2-5).

Exhibit 2: Average Paid for Medical Treatment @ 6, 12, 24, 36, 48 & 60 Months Post-Injury Indemnity Claims						
Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$2,711	\$4,291	\$6,759	\$9,036	\$10,804	\$12,172
2006	\$2,947	\$4,755	\$7,869	\$10,280	\$12,285	\$14,151
2007	\$3,113	\$5,252	\$8,353	\$11,167	\$13,606	\$15,658
2008	\$3,478	\$5,534	\$9,167	\$12,544	\$15,405	\$17,571
2009	\$3,721	\$6,054	\$10,208	\$13,883	\$17,008	\$19,252
2010	\$3,998	\$6,396	\$10,549	\$14,310	\$17,335	\$19,045
2011	\$3,630	\$6,183	\$10,603	\$14,293	\$16,305	
2012	\$3,566	\$6,093	\$10,514	\$13,766		
2013	\$3,732	\$6,221	\$10,357			
2014	\$4,173	\$6,607				
% Change in Two Latest AYs	11.8%	6.2%	-1.5%	-3.7%	-5.9%	-1.1%
AY 05-End Point % Change	53.9%	54.0%	53.2%	52.3%	50.9%	56.5%

The medical treatment category in this study does not include pharmaceutical/DME payments, which are broken out separately, but it does include items such as physician and non-physician provider fees, lab and pathology charges, hospital and ambulatory surgery center fees, medical transportation, etc.

Exhibit 2 shows the average paid for medical treatment on AY 2005-2014 claims at each benchmark, illustrating how the losses developed over time. For AY 2010 claims, average medical treatment payments grew from \$3,998 at 6 months to \$19,045 after 60 months – a 376 percent increase. The dollars shown in each column are average amounts paid at each benchmark for claims from each accident year, with the percentage increases between the two most recent accident years for which data were available, and from the first post-SB 899 year (AY 2005) to the most recent year noted below. The most recent short-term measurements of average medical treatment payments are mixed, with the latest changes in the 24-, 36-, 48-, and 60-month valuations all showing year-to-year declines, while first-year medical treatment payments were up (the average amount paid at 6 months rose 11.8 percent between AY 2013 and AY 2014, and the average paid at 12 months rose 6.2 percent), which may be due in part to the phase-in of the Resource-Based Relative Value Scale (RBRVS) fee schedule that began in 2014. The schedule's annual adjustment factor was expected to increase costs somewhat over time, but more significantly, the schedule was expected to redistribute physician fees, with more money going to primary care physicians who would be the majority of providers in the first 6 months and less going to specialists who would be more prevalent later in the life of the claim.⁴ On the other hand, long-term growth in medical treatment payments was similar at all six benchmarks, with increases ranging from 51 to 57 percent.

4. Medical care delivery in the early stages of claim development are more dependent on evaluation and management services and physical medicine procedures, two areas of the RBRVS fee schedule associated with higher reimbursement levels.

Average Pharmaceutical/DME Payments per Indemnity Claim

The Institute's 2014 analysis of medical and indemnity costs found that after declining between AY 2002 and AY 2005, prescription drug and DME payments began to increase rapidly, and had become the fastest growing medical expense category in California workers' compensation.⁵ The updated figures on the average amount paid for pharmaceuticals and DME per indemnity claim show the long-term growth trends for pharmaceuticals and DME have continued, with increases from AY 2005 to the most recent year available at the six different valuation points ranging from 157.2 percent (AY 2005 claims vs. AY 2010 claims at 60 months post-injury) to 260.5 percent (AY 2005 to AY 2012 at 36 months post-injury). While the long-term development showed triple-digit growth, the short-term results were mixed. For example, comparing average pharmaceutical/DME payments from the two most recent accident years for which data are available shows the average amount paid at 6 months post injury held steady near their record highs (declining only 0.5 percent between AY 2013 and AY 2014); while at the 12-month valuation average pharmaceutical/DME payments rose 3.9 percent to a new high of \$937; and at the 2-year benchmark they fell 5.4 percent between AY 2012 and AY 2013. In contrast, at the 36-, 48- and 60-month valuations, average pharmaceutical payments per indemnity claim were still rising at double-digit rates, increasing 15.3 percent, 14.4 percent and 27.3 percent respectively over the two most recent accident years.

Exhibit 3: Average Paid for Pharmaceuticals/DME @ 6, 12, 24, 36, 48 & 60 Months Post Injury Indemnity Claims

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$125	\$281	\$593	\$887	\$1,123	\$1,360
2006	\$156	\$350	\$731	\$1,071	\$1,372	\$1,641
2007	\$182	\$408	\$832	\$1,243	\$1,598	\$1,866
2008	\$193	\$431	\$939	\$1,421	\$1,844	\$2,198
2009	\$234	\$528	\$1,156	\$1,722	\$2,273	\$2,747
2010	\$295	\$650	\$1,414	\$2,327	\$3,056	\$3,498
2011	\$307	\$707	\$1,749	\$2,774	\$3,495	
2012	\$374	\$890	\$2,165	\$3,198		
2013	\$398	\$902	\$2,048			
2014	\$396	\$937				
% Change in Two Latest AYs	-0.5%	3.9%	-5.4%	15.3%	14.4%	27.3%
AY 05-End Point % Change	216.8%	233.5%	245.4%	260.5%	211.2%	157.2%

Each row in Exhibit 3 shows the development of pharmaceutical and DME losses as the claims from AY 2005 through AY 2014 have aged. AY 2010 claims are the most recent for which 60-month data are available, and for these claims, average payments for pharmaceuticals and DME increased nearly 12 fold between the 6-month and the 60-month benchmarks (from \$295 to \$3,498), with similar growth noted in each of the 5 prior accident years.

5. Ireland, J. California Workers' Compensation Medical and Indemnity Benefit Trends, AY 2002–2014, CWCI Research Update, November 2014.

Average Medical Cost Containment Payments per Claim

Several legislative reforms enacted between 2002 and 2004 mandated increased efforts to better manage workers' compensation medical care and contain costs. These included mandatory utilization review (UR) programs and the introduction of medical provider networks (MPNs). In addition, in 2012, SB 863 called for the adoption of independent medical review (IMR) and independent bill review (IBR) processes. IMR allows injured workers to dispute UR modifications or denials of treatment requests and to get an independent medical opinion on medical necessity. Following adoption of regulations, IMR took effect for AY 2013 claims on January 1, 2013, then took effect for all claims on July 1, 2013. IBR allows medical providers to dispute the amount paid for treatment and medical-legal services, and took effect for services on or after January 1, 2013.

Medical cost containment payments include UR, IMR, medical bill review, IBR, and MPN access fees.⁶ All of these programs have required an ongoing commitment of resources on the part of claims administrators, which is evidenced by the bottom row of Exhibit 4 which shows that the average amounts paid per indemnity claim for MCC expenses at all six valuation points have more than doubled between AY 2005 and the most recent year for which data were available, with increases ranging from 112 percent at the 60-month valuation to 157 percent at the 24-month benchmark. Note, however, that most of that growth occurred in the first 6 years after the 2002 to 2004 reforms were implemented, as MCC payments grew steadily from AY 2005 through AY 2010 at each of the valuation points, after which the rate of growth for these expenses slowed considerably. Exhibit 4 shows that at each of the six valuation points, average MCC payments more than doubled between AY 2005 and AY 2010, but between AY 2010 and the most recent years for which data are available, the growth rate for these payments has diminished. The latest measurements reveal year-to-year changes of less than 5 percent at five of the six valuations, with the only exception being an 11.4 percent increase between the 24-month benchmark values for AY 2012 and AY 2013.

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$358	\$647	\$1,002	\$1,213	\$1,358	\$1,472
2006	\$531	\$898	\$1,333	\$1,608	\$1,791	\$1,946
2007	\$619	\$1,057	\$1,583	\$1,907	\$2,141	\$2,295
2008	\$726	\$1,236	\$1,881	\$2,303	\$2,551	\$2,720
2009	\$800	\$1,382	\$2,151	\$2,577	\$2,861	\$3,052
2010	\$841	\$1,482	\$2,228	\$2,663	\$2,941	\$3,123
2011	\$847	\$1,444	\$2,217	\$2,698	\$3,035	
2012	\$783	\$1,458	\$2,313	\$2,761		
2013	\$850	\$1,572	\$2,577			
2014	\$892	\$1,586				
% Change in Two Latest AYS	4.9%	0.9%	11.4%	2.3%	3.2%	2.3%
AY 05-End Point % Change	149.2%	145.1%	157.2%	127.6%	123.5%	112.2%

6. As of January 2016, IMR and IBR are no longer classified as MCC for unit statistical report filings (Part 4, Section II, Rule 20).

The increases in average MCC payments on AY 2012 and AY 2013 claims at the 6-, 12- and 24- month valuations ranged between 7.8 percent and 11.4 percent, which coincides with the introduction of IMR in January 2013, but the latest figures show the average amounts paid per claim for MCC on AY 2014 claims were up only 4.9 percent at the 6-month valuation and 0.9 percent at the 12-month benchmark compared to AY 2013 payments at the same level of development.

Exhibit 4 indicates that most MCC payments have been made in the first 24 months post-injury. Among AY 2010 claims, the latest for which 60 months of data are available, these payments averaged \$1,482 in the first year, then rose another \$746 (50.3 percent) to \$2,228 after the second year, while in the third, fourth and fifth years, incremental amounts paid for medical cost containment trailed off to \$435, \$278, and \$182 respectively.

Average Medical-Legal Payments per Claim

Medical-legal evaluations prepared by forensic physicians have traditionally been used to resolve various claim issues in California workers' compensation, including disputes over treatment and the extent of an injured worker's impairment, and for more than two decades, payments for medical-legal services and reports have been subject to a fee schedule adopted by the state. However, a series of legislative reforms enacted between 2002 and 2004⁷ instituted major changes in California workers' compensation medical care delivery that beginning in 2005, also altered the medical-legal process. Among other things, these reforms introduced a number of managed care principles into workers' compensation, including MPNs, utilization review standards, the adoption of the AMA Guides for permanent impairment rating and the creation of new requirements for a single evaluator – either an Agreed Medical Evaluator or a Qualified Medical Evaluator – to resolve medical-legal issues. Additional changes were made in 2006 when the state revised the medical-legal fee schedule, increasing the conversion factor used to calculate medical-legal payments from \$10 to \$12.50; adding new billing requirements; and adopting new medical-legal billing codes, including new time-based codes for medical-legal testimony and supplemental reports, which became partially effective in July 2006 and fully effective in January 2007. More recently, 2012 reforms⁸ established a new process for resolving disputes over workers' compensation treatment requests, so as of January 1, 2013 for injuries occurring on or after that date, and as of July 1, 2013 for all dates of injury, disputes over the medical necessity of requested services have been adjudicated through IMR rather than the medical-legal process. Thus, since 2013, there has been a shift in the types of issues addressed in medical-legal evaluations, so these reports now focus primarily on disputes related to the compensability of the injury, the extent of the permanent disability, or apportionment of the permanent disability among occupational versus non-occupational causation factors. A CWCI analysis in February 2016⁹ revealed that although the percentage of indemnity claims involving medical-legal reports held steady in the wake of the 2006 fee schedule changes, the mix of medical-legal services immediately began to shift away from those reimbursed at a flat fee toward time-based evaluations categorized as “comprehensive... involving extraordinary circumstances...”, supplemental reports, and follow-up evaluations occurring within nine months of the physician's initial medical-legal evaluation, all of which are billed in 15-minute increments. This heavier concentration of higher-cost, time-based medical-legal services helped drive up the average amount paid for medical-legal services per claim.

7. AB 749 (2002); SB 228 (2003); and SB 899 (2004).

8. SB 863 (2012).

9. Jones, S. The Changing Nature and Cost of the Medical-Legal Process in California Workers' Compensation. CWCI Research Note, February 2016.

Exhibit 5 shows a sharp increase in average medical-legal payments occurred between AY 2005 and AY 2006 claims, with year-over-year increases at the six valuation points ranging from 18 percent at the 60-month benchmark to nearly 80 percent at the 6-month benchmark. In the eight years since then the average payments at the different valuation points have fluctuated as various reforms took effect, but at each of the six benchmarks the overall trends in average medical-legal payments between AY 2005 and the most recent year for which data are available have all been up, with increases ranging from 50 percent at the 6-month valuation to 103.4 percent at the 12-month valuation.

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$74	\$203	\$568	\$924	\$1,204	\$1,395
2006	\$133	\$305	\$748	\$1,153	\$1,433	\$1,653
2007	\$142	\$339	\$837	\$1,256	\$1,595	\$1,829
2008	\$136	\$356	\$894	\$1,431	\$1,813	\$2,078
2009	\$145	\$370	\$1,037	\$1,597	\$2,002	\$2,280
2010	\$140	\$384	\$1,011	\$1,567	\$1,985	\$2,386
2011	\$123	\$340	\$960	\$1,514	\$1,969	
2012	\$101	\$308	\$984	\$1,557		
2013	\$110	\$372	\$1,093			
2014	\$111	\$413				
% Change in Two Latest AYs	0.9%	11.0%	11.1%	2.8%	-0.8%	4.6%
AY 05-End Point % Change	50.0%	103.4%	92.4%	68.5%	63.5%	71.0%

While many indemnity claims involve an initial medical-legal evaluation within 12 months of the date of injury, most medical-legal services are rendered after the first year, with the majority of medical-legal payments made more than two years after the injury date as the number of follow-up reports and other evaluations continue to increase as the claims age. For example, Exhibit 5 shows that the average medical-legal payments on AY 2010 claims increased from \$384 in the first year post injury to \$1,011 at the 24-month benchmark, then continued to climb to \$2,386 at 60 months post injury.

Medical and MCC Payment Distributions

As shown in the prior exhibits, average amounts paid per indemnity claim for medical treatment, pharmaceuticals/DME, MCC, and medical-legal services have all increased since AY 2005, though at different rates, which has led to a shift in the distribution of the workers' compensation medical dollar. In addition, the volume of services in each subcategory varies as claims age, as some are used more heavily in the early stages of a claim while others tend to arise later in the life of the claim. This is evident in Exhibit 6, which compares the distribution of medical and MCC payments at 12 months post injury and at 60 months post injury for AY 2002 through the most recent year included in the study (AY 2014 for the 12-month data, AY 2010 for the 60-month data).

**Exhibit 6: Distribution of Medical Loss and MCC Payments at 12 and 60 Months Post Injury
AY 2005-2014 Indemnity Claims**

Accident Year	Medical Treatment		Rx/DME		Medical Cost Containment		Medical-Legal	
	12 Mo	60 Mo	12 Mo	60 Mo	12 Mo	60 Mo	12 Mo	60 Mo
2005	79.1%	74.2%	5.2%	8.3%	11.9%	9.0%	3.8%	8.5%
2006	75.4%	73.0%	5.5%	8.5%	14.2%	10.0%	4.8%	8.5%
2007	74.4%	72.3%	5.8%	8.6%	15.0%	10.6%	4.8%	8.4%
2008	73.2%	71.5%	5.7%	8.9%	16.4%	11.1%	4.7%	8.5%
2009	72.6%	70.4%	6.3%	10.1%	16.6%	11.2%	4.4%	8.3%
2010	71.8%	67.9%	7.3%	12.5%	16.6%	11.1%	4.3%	8.5%
2011	71.3%		8.2%		16.6%		3.9%	
2012	69.6%		10.2%		16.6%		3.5%	
2013	68.6%		9.9%		17.3%		4.1%	
2014	69.2%		9.8%		16.6%		4.3%	

Although average medical payments in all four subcategories continue to increase as claims age, medical treatment and MCC account for their largest share of the medical dollar in the early stages of the claim, then those proportions diminish as pharmacy/DME and medical-legal costs grow at a faster rate and consume an increasing share of the total medical expenditures as the claim ages. For example, for AY 2010 claims, payments for medical treatment fell from 71.8 percent of first-year medical expenditures to 67.9 percent at five years post injury, while MCC payments fell from 16.6 percent to 11.1 percent. On the flip side, during this same period pharmacy/DME payments jumped from 7.3 percent to 12.5 percent of total medical spend and medical-legal costs increased from 4.3 percent to 8.5 percent.

Comparing the payment distributions at 12- and 60-months post-injury across the 10 different accident years tracks the experience that followed the implementation of various reforms and system changes since 2005. Medical treatment, for example, fell from 79.1 percent of first-year paid medical losses on AY 2005 claims to 69.2 percent of the first year medical losses on AY 2014 claims. Likewise, at the 60-month benchmark, medical treatment payments declined from 74.2 percent of the medical dollar in AY 2005 to 67.9 percent in AY 2010. Over the most recent decade, MCC as a proportion of first-year medical expenditures rose from 11.9 to 16.6 percent, though most of that increase occurred in the first few years following the enactment of the managed care mandates included in the 2002 to 2004 reforms as claims administrators expanded their UR programs and

developed their MPNs. Conversely, from AY 2008 through AY 2014, the proportion of the first-year medical dollar going toward MCC has shown little change, despite the introduction of IMR. The more developed data from the 60-month valuation also show the growth in MCC costs in the post-reform period, as MCC expense climbed from 9 percent to 11.1 percent of total medical payments between AY 2005 and AY 2008, though here too MCC as a proportion of total medical has been relatively flat in recent years, holding steady at just over 11 percent on AY 2008, AY 2009 and AY 2010 claims, even though IMR took effect for claims from all accident years as of July 2013. The lack of any increase in MCC's share of total workers' compensation medical spend following the introduction of IMR may reflect a scarcity of IMR payments processed prior to 2014, as well as the relatively small proportion of workers' compensation medical services that involve IMR, as prior Institute research estimated that more than 94 percent of medical services in the system are approved either by a claims administrator, nurse or other non-physician, or a UR physician, leaving less than 6 percent of all services eligible for IMR.¹⁰

10. David, R., Jones, S., Ramirez, B., Swedlow, A. Independent Medical Review Outcomes In California Workers' Compensation. CWCI Research Update, April 2015.

Average Indemnity Payments per Indemnity Claim

Indemnity benefits consist of payments for temporary disability (TD), permanent partial or permanent total disability (PPD or PTD), the supplemental job displacement benefit (SJDB), life pensions, and death benefits. TD benefits are tax-free payments provided to injured workers while they recover from their job injuries. State law sets the amount of these payments at two-thirds of the worker's at-injury wages, subject to minimums (\$169.26 per week for 2016) and maximums (\$1,128.43 per week for 2016) that are adjusted annually based on increases in the state average weekly wage. TD is due if a worker is off work for more than three days or hospitalized due to their injury. For most injuries, TD can continue for up to 108 weeks while the injured worker is recovering, so TD is the most common type of indemnity payment and accounts for most of the indemnity that is paid in the early stages of a claim. In contrast, it usually takes longer for a worker to become eligible for the other types of indemnity benefits, most of which are not determined or paid out until after the worker's medical condition is determined to be permanent and stationary, which is usually in the later stages of a claim.

The most recent claims in the study sample that had 60 months' worth of indemnity payment data were from AY 2010. As noted in Exhibit 7, indemnity payments on these claims averaged \$3,264 at 6 months post-injury, most of which were TD payments, while indemnity payments on these claims averaged \$21,548 at the 60-month valuation, when there was a broader mix of indemnity benefits, including permanent disability payments.

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$2,667	\$4,785	\$8,800	\$11,562	\$13,500	\$14,774
2006	\$3,040	\$5,444	\$9,701	\$12,518	\$14,579	\$16,319
2007	\$3,024	\$5,450	\$9,952	\$13,157	\$15,815	\$17,719
2008	\$3,109	\$5,682	\$10,622	\$14,763	\$17,766	\$19,788
2009	\$3,098	\$5,830	\$11,794	\$16,173	\$19,403	\$21,715
2010	\$3,264	\$6,196	\$11,950	\$16,391	\$19,667	\$21,548
2011	\$3,128	\$5,997	\$11,936	\$16,523	\$18,635	
2012	\$3,218	\$6,334	\$12,582	\$16,486		
2013	\$3,547	\$6,950	\$13,478			
2014	\$4,108	\$7,677				
% Change in Two Latest AYs	15.8%	10.5%	7.1%	-0.2%	-5.2%	-0.8%
AY 05-End Point % Change	54.0%	60.4%	53.2%	42.6%	38.0%	45.9%

Prior CWCI research found that average first-year indemnity payments declined after the passage of SB 899 in 2004, but after hitting a post-reform low in AY 2005, they increased for five years, declined slightly in AY 2011, then increased again in AY 2012 and AY 2013.¹¹ The latest data show the same trend, and that average first-year indemnity payments per lost-time claim continued to rise in AY 2014, registering a 1-year increase of 10.5 percent, pushing the average to a record \$7,677, up 60 percent from a decade earlier.

11. Ireland, J. California Workers' Compensation Medical and Indemnity Benefit Trends, AY 2005-2014. CWCI Research Update, August 2015.

At the longer term valuations (36-, 48- and 60-months post injury), which are more heavily influenced by PD payments, the average amounts of indemnity paid per lost-time claim rose steadily from AY 2005 through AY 2009 before leveling off at near-record levels beginning in AY 2010. However, the impact of the PD benefit increases and changes in the weekly PD rates included in the 2012 reforms have yet to be reflected in these longer term results as the legislation called for these changes to begin with AY 2013 claims (few of which would yet involve PD), with some continuing to be phased in for injuries on or after January 1, 2014.

Average TD Payments Before and After the TD Cap

As noted, TD is paid at a weekly rate until a physician determines that the injured employee can return to work or has reached maximum medical improvement, or until the TD time limit set by the state is reached, and the weekly TD rate set at two-thirds of the employee's gross earnings, subject to the minimum and maximum amounts set by law. Over the past 15 years, the Legislature has enacted several reforms that have impacted TD benefits:

- In 2002, state lawmakers enacted AB 749 increasing the maximum weekly TD rate over three years, after which both minimum and maximum weekly TD payments on claims for injuries occurring in 2006 and each year thereafter were tied to increases in the state's average weekly wage. As a result, the maximum weekly TD rate increased from \$490 in AY 2002 to \$1,074.64 in AY 2014 (the most recent year included in this study).
- Prior to the passage of SB 899 in 2004, temporary partial disability (TPD) payments for most single injury claims were capped at 240 compensable weeks within 5 years of the date of injury. SB 899 expanded that cap to include temporary total disability payments and to revise the time limit to 104 weeks of paid TD within two years of the first TD payment date.
- Three years later, state lawmakers again altered the cap as part of AB 338, allowing up to 104 weeks of TD to be paid within five years of the injury date, beginning with AY 2008 claims.

Prior CWCI claim monitoring reports measured both the average amount of TD paid and the average number of TD days before and after SB 899 and its 104-week cap on TD payments took effect in April 2004, with the most recent analysis using IRIS data on claims from AY 2002 through AY 2013. This study updates those analyses using IRIS data on a sample of more than 500,000 TD claims with January 2002 through June 2014 dates of injury. For this part of the study, these claims were grouped into pre-SB 899 and post-SB 899 subsamples based on the month and year of the injury.

The IRIS data contain policy and claim detail including the dates of all disability payments, accumulated TD payments and associated disability days. The final data set allowed the authors to calculate average TD dollars paid as well as the average number of paid TD days per claim for each accident year. To control for the statutory increases in TD benefit levels that occurred from 2002 through 2014, all TD payments in the study sample were adjusted to current TD rates.¹² The adjusted average payments for both subsamples, broken out by accident year, are noted in Exhibit 8.

¹² The authors used the following Workers' Compensation Insurance Rating Bureau TD adjustment factors to adjust average TD benefits to the current level: 2002 – 1.175; 2003 – 1.091; 2004 – 1.069; 2005 – 1.054; 2006 – 1.043; 2007 – 1.037; 2008 – 1.030; 2009 – 1.025; 2010 – 1.020; 2011 – 1.020; 2012 – 1.015; 2013 – 1.004; 2014 – 1.003.

Exhibit 8: Pre- and Post-SB 899 Adjusted TD Payments and Average TD Days				
Pre-SB 899				
Accident Year	Adjusted Average TD Payments		Average Paid TD Days	
	12 Months	24 Months	12 Months	24 Months
2002	\$6,422	\$8,803	85.1	114.8
2003	\$5,986	\$8,559	82.0	116.0
2004	\$6,496	\$8,801	87.0	116.3
Pre-SB 899 Subtotal	\$6,249	\$8,701	84.0	115.5
Post-SB 899				
Accident Year	Adjusted Average TD Payments		Average Paid TD Days	
	12 Months	24 Months	12 Months	24 Months
2004	\$5,778	\$7,806	79.9	107.9
2005	\$5,772	\$8,262	75.2	107.2
2006	\$6,285	\$8,807	78.8	111.0
2007	\$6,302	\$8,940	77.8	110.5
2008	\$6,587	\$9,704	79.6	115.8
2009	\$6,882	\$10,757	82.1	127.0
2010	\$7,223	\$10,736	89.9	130.1
2011	\$6,870	\$10,626	83.3	122.9
2012	\$7,136	\$11,010	85.6	128.1
2013	\$7,578	\$11,323	88.6	125.7
2014	\$7,865		89.0	
Post-SB 899 Subtotal	\$6,419	\$9,272	81.1	116.3
Post-SB 899 Difference	2.7%	6.6%	-3.5%	0.7%

Following the implementation of the SB 899 TD changes in April 2004, adjusted TD payments remained below pre-reform levels through AY 2006, after which they surpassed pre-reform levels by as much as 26 percent in 2013 and 2014. Comparing the pre- and post-reform results overall shows average first-year adjusted TD payments rose 2.7 percent under the reforms (from \$6,249 on AY 2002 - 2004 claims to \$6,419 on AY 2004 - 2014 claims), while the average paid at 24 months increased 6.6 percent (from \$8,701 on AY 2002 - 2004 claims to \$9,272 on AY 2004 - 2013 claims). The average number of TD days at 12 months declined 3.5 percent (from 84.0 days in AY 2002 - 2004 to 81.1 days in AY 2004 - 2014), while at 24 months the average number of TD days showed almost no change, increasing only 0.7 percent (from 115.5 days in AY 2002 - 2004 to 116.3 days in AY 2004 - 2012).

Summary

This analysis provides an updated look at California workers' compensation medical and indemnity loss trends, confirming and quantifying the growth in the average amounts paid for medical treatment, pharmaceuticals and DME, medical-legal services, medical cost containment, and indemnity benefits from the post-SB 899 lows of AY 2005 through the most recent results available for AY 2014 (using payment data through June 2015).

Among the key findings:

- The most recent data show average paid medical losses decreased modestly at 24, 36, and 48 months post injury, yet increased at the 6-, 12- and 60-month development level. Initial results on AY 2014 indemnity claims show average paid medical losses per claim at 6 and 12 months were up 10.4 percent and 6.2 percent respectively compared to AY 2013 claims – the second year in a row that average medical loss payments within the first year of a claim increased. Compared to a decade earlier, average paid medical losses at 6 months post injury were up 60.8 percent, while at 12 months post injury they were up 66.6 percent.
- Since AY 2005, the long-term growth in the average amounts paid per indemnity claim for the medical treatment component (which excludes pharmacy, DME and medical-legal services) have been similar at the 6-, 12-, 24-, 36-, 48-, and 60-month benchmarks, ranging from 50.9 percent to 56.5 percent. The latest results, however, have varied as average medical treatment payments at the 24-, 36-, 48-, and 60-month valuations showed declines over the two most recent accident years, while average first-year payments increased. The average paid at 6 months was up 11.8 percent between AY 2013 and AY 2014, and the average paid at 12 months was up 6.2 percent, which may reflect the phase-in of the RBRVS physician fee schedule that began in January 2014.
- Since AY 2005, average amounts paid for pharmaceuticals and DME measured at the six levels of development increased between 157.2 percent and 260.5 percent, but the short-term results were mixed. Comparing average pharmaceutical/DME payments on claims from the two most recent accident years for which data are available at the six different levels of development shows the amount paid at 6 months post injury fell only 0.5 percent between AY 2013 and AY 2014 and remained near the record high; while at the 12-month valuation average pharmaceutical/DME payments rose 3.9 percent to a new high of \$937; and at the 2-year benchmark the average amount paid fell 5.4 percent between AY 2012 and AY 2013. In contrast, at the 36-, 48- and 60-month valuations, average pharmaceutical payments per indemnity claim were still rising at double-digit rates, increasing 15.3 percent, 14.4 percent and 27.3 percent respectively over the two most recent accident years.
- Though recent results show average payments for initial medical treatment excluding pharmaceuticals, DME and medical-legal services are up, medical treatment as a proportion of total medical loss and MCC payments declined to less than 70 percent at 12-months post injury on AY 2012, AY 2013 and AY 2014 claims, and less than 68 percent on AY 2010 claims at the 60-month benchmark.
- Medical treatment and MCC payments account for their largest share of the medical dollar in the early stages of the claim, but their share of the medical dollar diminishes as claims age and pharmacy/DME and medical-legal costs grow at a faster rate and consume an increasing share of the total medical expenditures. For AY 2010 claims, medical treatment payments fell from 71.8 percent of total medical spend at 12 months post injury to 67.9 percent at 60 months, and MCC payments fell from 16.6 percent to 11.1 percent, while at the same time, pharmacy/DME payments rose from 7.3 percent to 12.5 percent of the total medical spend and medical-legal costs increased from 4.3 percent to 8.5 percent.

- Average MCC payments more than doubled between AY 2005 and AY 2010, but between AY 2010 and the latest years for which data are available, the growth rate for MCC payments has diminished, ranging from a 3.2 percent increase at 48 months post injury to a 15.7 percent increase at 24 months. MCC as a percent of first-year medical loss and MCC payments increased from 11.9 percent in AY 2005 to 16.6 percent in AY 2009 as claims administrators developed UR programs and established MPNs following the 2002 to 2004 reforms, while at 60 months, MCC payments rose from 9.0 percent to 11.1 percent. Payments related to IMR and IBR, which took effect in 2013 and impacted up to an estimated 6 percent of workers' compensation medical service requests, appear to have had a negligible impact on the MCC payments in this study, but will bear watching as the claims mature.
- Average amounts paid for medical-legal services at the various valuation points have fluctuated since AY 2005 as fee schedule revisions and other reforms took effect, though, the overall trends in medical-legal payments at each of the six valuation points were all up between AY 2005 and the most recent year for which data were available, with increases ranging from 50 percent at the 6-month valuation to 103.4 percent at the 12-month valuation. These increases are likely linked to a greater concentration of higher-cost, time-based medical-legal services as documented by the Institute's February 2016 study.
- The latest data show continued growth in average indemnity benefits paid per lost-time claim in AY 2014, with the average paid at 12-months post-injury rising to \$7,677, up 10.5 percent from the AY 2013 level, and up 60.4 percent from a decade earlier. At the longer term valuations (36-, 48- and 60-months post injury), which are more heavily influenced by permanent disability payments, the average indemnity paid per lost-time claim increased steadily from AY 2005 through AY 2009 before leveling off at near-record levels beginning in AY 2010. The impact of PD benefit increases and changes in the weekly PD rates included in the 2012 reforms, however, have yet to be fully reflected in these longer term results, as these changes began with AY 2013 claims and are continuing to be phased in for injuries on or after January 1, 2014.
- After SB 899 capped TD at 104 weeks in April 2004, average first-year TD payments, adjusted to account for statutory benefit increases, remained below pre-reform levels through 2006, but after trending up over several years, they surpassed pre-reform levels by as much as 26 percent in 2013 and 2014. Comparing adjusted TD payments from the overall pre- and post-reform periods shows that the average first-year payments rose 2.7 percent under the reforms (from \$6,249 on AY 2002 - 2004 claims to \$6,419 on AY 2004 - 2014 claims), while the average paid at 24 months increased 6.6 percent (from \$8,701 on AY 2002 - 2004 claims to \$9,272 on AY 2004 - 2013 claims).

Appendix 1

The following tables show the average medical payments for all 1.8 million claims (medical-only plus indemnity claims) in the study sample rather than just the indemnity claim results that were noted in Exhibits 1 through 6. Medical-only claims are simpler, shorter-term claims in which the injured worker is treated and returns to work with no lost-time or indemnity payments, so all of the payments on these claims are medical, most of which is typically incurred shortly after the date of injury.

Medical-only claims represent about 2/3 of all California workers' compensation claims, but less than 10 percent of all losses, so while including them in the average medical benefit calculations provides a comprehensive view of the average medical payments per claim within the system, they skew the averages to the low side. As a result, the average amounts paid for all claims including the medical-only claims, which are noted in Exhibits 9 through 13, are significantly less than the averages for indemnity claims, which are the primary focus of this report, and which also have been the primary focus of California workers' compensation medical reforms. In addition, Exhibit 14 compares the distribution of medical and MCC payments for all claims at 12 months post injury and at 60 months post injury for AY 2002 through the most recent year included in the study (AY 2014 for the 12-month data, AY 2010 for the 60-month data).

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$1,231	\$1,874	\$2,893	\$3,825	\$4,548	\$5,116
2006	\$1,322	\$2,032	\$3,242	\$4,194	\$4,972	\$5,680
2007	\$1,436	\$2,290	\$3,555	\$4,681	\$5,646	\$6,434
2008	\$1,608	\$2,454	\$3,948	\$5,335	\$6,495	\$7,385
2009	\$1,796	\$2,795	\$4,614	\$6,202	\$7,564	\$8,569
2010	\$1,978	\$3,055	\$4,964	\$6,755	\$8,187	\$9,032
2011	\$1,855	\$3,017	\$5,167	\$7,011	\$8,143	
2012	\$1,878	\$3,110	\$5,437	\$7,099		
2013	\$1,902	\$3,112	\$5,407			
2014	\$1,941	\$3,136				
% Change in Two Latest AYs	2.1%	0.8%	-1.0%	1.3%	-0.5%	5.4%
AY 05-End Point % Change	57.7%	67.3%	86.9%	85.6%	79.0%	76.5%

**Exhibit 10: Average Paid for Medical Treatment @ 6, 12, 24, 36, 48 & 60 Months Post Injury
All Claims**

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$1,152	\$1,696	\$2,497	\$3,221	\$3,780	\$4,213
2006	\$1,207	\$1,798	\$2,754	\$3,481	\$4,084	\$4,645
2007	\$1,304	\$2,019	\$2,995	\$3,864	\$4,614	\$5,246
2008	\$1,471	\$2,164	\$3,323	\$4,387	\$5,291	\$5,983
2009	\$1,630	\$2,448	\$3,834	\$5,049	\$6,091	\$6,843
2010	\$1,792	\$2,655	\$4,083	\$5,370	\$6,408	\$6,970
2011	\$1,671	\$2,607	\$4,171	\$5,461	\$6,179	
2012	\$1,667	\$2,627	\$4,240	\$5,343		
2013	\$1,684	\$2,610	\$4,200			
2014	\$1,737	\$2,631				
% Change in Two Latest AYs	3.1%	-0.8%	-0.9%	-2.2%	-3.6%	1.9%
AY 05-End Point % Change	50.8%	55.1%	68.2%	65.9%	63.5%	65.4%

**Exhibit 11: Average Paid for Pharmaceuticals/DME @ 6, 12, 24, 36, 48 & 60 Months Post Injury
All Claims**

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$51	\$103	\$204	\$297	\$372	\$447
2006	\$63	\$126	\$243	\$346	\$436	\$517
2007	\$76	\$149	\$282	\$409	\$519	\$602
2008	\$81	\$160	\$322	\$474	\$607	\$721
2009	\$103	\$205	\$414	\$601	\$784	\$942
2010	\$126	\$251	\$514	\$825	\$1,073	\$1,221
2011	\$131	\$276	\$641	\$997	\$1,248	
2012	\$163	\$355	\$814	\$1,167		
2013	\$168	\$351	\$776			
2014	\$157	\$345				
% Change in Two Latest AYs	-6.5%	-1.7%	-4.7%	17.1%	16.3%	29.6%
AY 05-End Point % Change	207.8%	235.0%	280.4%	292.9%	235.5%	173.2%

**Exhibit 12: Average Paid for MCC @ 6, 12, 24, 36, 48 & 60 Months Post Injury
All Claims**

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$145	\$243	\$359	\$426	\$472	\$509
2006	\$207	\$325	\$459	\$542	\$597	\$644
2007	\$245	\$388	\$554	\$654	\$727	\$775
2008	\$291	\$461	\$667	\$800	\$879	\$933
2009	\$332	\$533	\$790	\$932	\$1,027	\$1,092
2010	\$359	\$588	\$845	\$995	\$1,091	\$1,153
2011	\$370	\$589	\$863	\$1,033	\$1,150	
2012	\$348	\$601	\$916	\$1,072		
2013	\$364	\$631	\$1,021			
2014	\$357	\$613				
% Change in Two Latest AYs	-1.9%	-2.9%	11.5%	3.8%	5.4%	5.6%
AY 05-End Point % Change	146.2%	152.3%	184.4%	151.7%	143.6%	126.5%

**Exhibit 13: Average Paid for Medical-Legal Services @ 6, 12, 24, 36, 48 & 60 Months Post-Injury
All Claims**

Accident Year	Avg Paid @ 6 Months	Avg Paid @ 12 Months	Avg Paid @ 24 Months	Avg Paid @ 36 Months	Avg Paid @ 48 Months	Avg Paid @ 60 Months
2005	\$28	\$74	\$193	\$307	\$396	\$457
2006	\$52	\$109	\$244	\$367	\$452	\$518
2007	\$56	\$121	\$278	\$408	\$513	\$586
2008	\$57	\$130	\$303	\$474	\$596	\$681
2009	\$62	\$142	\$366	\$552	\$689	\$783
2010	\$60	\$149	\$367	\$560	\$706	\$841
2011	\$54	\$134	\$355	\$553	\$715	
2012	\$48	\$129	\$382	\$589		
2013	\$50	\$152	\$431			
2014	\$47	\$159				
% Change in Two Latest AYs	-6.0%	4.6%	12.8%	6.5%	1.3%	7.4%
AY 05-End Point % Change	67.9%	114.8%	123.3%	91.9%	80.6%	84.0%

**Exhibit 14: Distribution of Medical Loss and MCC Payments at 12 and 60 Months Post Injury
AY 2005-2014 All Claims**

Accident Year	Medical Treatment		Rx/DME		Medical Cost Containment		Medical-Legal	
	12 Mo	60 Mo	12 Mo	60 Mo	12 Mo	60 Mo	12 Mo	60 Mo
2005	80.2%	74.9%	4.9%	7.9%	11.5%	9.0%	3.5%	8.1%
2006	76.3%	73.1%	5.3%	8.2%	13.8%	10.2%	4.6%	8.2%
2007	75.4%	72.8%	5.6%	8.4%	14.5%	10.8%	4.5%	8.1%
2008	74.2%	71.9%	5.5%	8.7%	15.8%	11.2%	4.5%	8.2%
2009	73.6%	70.8%	6.2%	9.8%	16.0%	11.3%	4.3%	8.1%
2010	72.9%	68.4%	6.9%	12.0%	16.1%	11.3%	4.1%	8.3%
2011	72.3%		7.7%		16.3%		3.7%	
2012	70.8%		9.6%		16.2%		3.5%	
2013	69.7%		9.4%		16.9%		4.1%	
2014	69.7%		9.1%		16.2%		4.2%	

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Bob Young is the Communications Director at the California Workers' Compensation Institute and John Ireland is the Associate Research Director at the California Workers' Compensation Institute. The authors would like to thank their fellow members of the Institute's senior staff for their input and technical contributions in the drafting and preparation of this report.

California Workers' Compensation Institute

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