

California Workers' Compensation Reform Monitoring

Part 3: Temporary Disability Outcomes Accident Years 2002 – 2007 Claims Experience

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EXECUTIVE SUMMARY

In 2006, CWCI began collaborating with the California Workers' Compensation Insurance Rating Bureau (WCIRB) on a series of research studies to measure temporary disability (TD) outcomes – including TD duration -- following the enactment of SB 899, the reform legislation that was signed April 19, 2004 and took effect for injuries on or after that date. Last year, CWCI published a study on a large sample of pre- and post-reform claims with accident year (AY) 2002 to June 2006 dates of injury. That analysis showed that temporary disability reform was associated with lower average TD payments, fewer paid TD days, faster injury reporting, and fewer claims involving injuries that are exempt from the 2-year cap on TD payments. In late 2008, CWCI extended the analysis of temporary disability reform by adding AY 2007 TD claim data to a sample of pre- and post-reform claims with the following outcomes:

- 1) **Days to Employer and Carrier Notification:** Compared to pre-SB 899 TD claims, post-SB 899 TD claims averaged less time from the date of injury to employer notification (-33 percent) and carrier notification (-31 percent).
- 2) **Average TD Payments:** After controlling for benefit increases, first-year temporary disability payments on TD claims with post-SB 899 dates of injury averaged 2.6 percent less than those with pre-SB 899 injury dates, while at 24 months post injury, TD payments on post-SB 899 claims averaged 6.1 percent less.
- 3) **Average Duration (Paid TD Days):** TD claims with dates of injury after the SB 899 reforms averaged 100 days of paid TD within the first 12 months of payment, 2.3 percent less than the pre-SB 899 average. Average TD duration measured 24 months after the first TD payment fell 5.7 percent, from 128.9 days prior to SB 899 to 121.6 days after the reform.
- 4) **Exempt Injury Categories:** There has been no material change in the proportion of claims with medical diagnoses associated with the 2-year TD cap exemption.
- 5) **TD Payments Beyond Two Years:** The proportion of non-exempt TD claims in which temporary disability is paid beyond the 2-year cap fell from 9.1 percent in 2002 (pre-SB 899) to 3.1 percent in 2004 (post-SB 899).

ANALYSIS OF TEMPORARY DISABILITY REFORM

Temporary disability benefits are paid at a weekly rate during the time when a physician determines that an injured worker is unable to work due to injury, but anticipates that the worker's condition will improve with medical treatment. The compensation rate is set at two-thirds (66 percent) of the employee's gross earnings, subject to minimum and maximum amounts set by law. For injuries occurring in 2000 and 2001, the maximum rate was \$490 per week, but in 2002, state lawmakers enacted legislation increasing the maximum TD rate over three years. After that, both the 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. For claims involving 2009 injuries, the maximum weekly temporary disability rate is \$958 per week.

Prior to April 2004, California law capped temporary partial disability (TPD) payments for single injury claims at a maximum of 240 compensable weeks within five years from the date of injury. For more than 25 years, however, no such cap existed for temporary total disability (TTD) payments, which are by far the most common type of TD payment in the system. SB 899 amended California Labor Code Section 4656 to expand the cap to encompass temporary total disability payments and to revise the time limit to 104 weeks of paid temporary disability within 2 years of the first TD payment date. SB 899 allowed an exception for specified injuries that usually require extended medical treatment and recuperation including hepatitis, amputations, severe burns and others. These specific types of injuries are eligible for 240 weeks of TD payments within 5 years of the date of injury.

SB 899's 2-year cap on temporary disability payments went into effect for injuries on or after April 19, 2004. In order to analyze the association between the statutory TD reforms and changes in outcomes on TD payments and duration, the authors compiled data on TD payments and other key data on injured workers from CWCI's Industry Claim Information System. The analysis of early indicators included:

- 1) distribution of TD claim characteristics by year of injury
- 2) number of days from date of injury to employer notification
- 3) number of days from employer notification to carrier notification

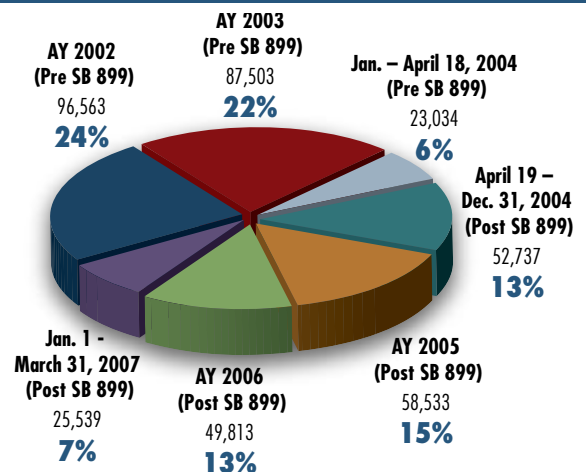
- 4) number of days from date of injury to carrier notification
- 5) amount of TD paid within 12 and 24 months of the first TD payment
- 6) number of paid TD days within 12 and 24 months of the first TD payment
- 7) percentage of TD claims involving diagnoses exempt from the 2-year cap
- 8) percentage of TD claims that are not exempt from the 2-year cap in which temporary disability benefits were paid beyond 24 months of the first TD payment

In 2007, Governor Schwarzenegger signed AB 338, once again modifying the TD cap for most injuries. The revised cap applies to all claims with dates of injury on or after January 1, 2008 and allows TD payments to a maximum of 104 compensable weeks within five years of the injury date. The effect of AB 338's extension of the time frame in which TD benefits can be paid is beyond the scope of this analysis. In a previous report, CWCI estimated that AB 338 will increase California workers' compensation TD costs by an estimated 6.5 percent¹.

CLAIM SAMPLE CHARACTERISTICS

The Institute analyzed data on 392,722 TD claims from accident years 2002 through the first quarter of AY 2007. Each claim in the study was assigned to one of two subsamples (pre-SB 899 or post-899) based on the month and year of the injury. Chart 1 shows the distribution of the pre- and post-SB 899 TD claims used in the analysis by accident year.

Chart 1: Distribution of TD Claims by Date of Injury Pre- Vs. Post-SB 899



¹ Comparison of SB 899 and AB 338 2-Year Temporary Disability Caps. CWCI Bulletin, November 9, 2007

RESULTS

To examine the changing nature of California workers’ compensation temporary disability claims under SB 899, the authors calculated the pre- and post-reform claim distributions by diagnostic category. Table 1 compares the pre- and post-SB 899 TD claim distributions across the top 20 diagnostic categories.

The results reveal significant differences in the mix of injuries

as indicated by the assigned diagnosis. Most notable were the post-reform reductions in “medical back” claims, which fell from 25.3 percent of TD claims prior to SB 899 to 20.9 percent after the reform; and the declining proportion of claims involving “other injuries, poisonings and toxic effects,” which dropped from 9.6 percent to 4.0 percent under SB 899. These proportional changes may have an effect on the amount of TD paid, as well as the days associated with injury notification, independent of temporary disability duration reform.

Table 1: Distribution of TD Claims Sample by Diagnostic Category

Diagnostic Categories	Number of Claims		Percent of Claims	
	Pre- SB 899	Post- SB 899	Pre- SB 899	Post- SB 899
Medical Back Problems w/o Spinal Cord Involvement	52,141	39,058	25.3%	20.9%
Sprain Of Shoulder, Arm, Knee, Lower Leg	23,189	22,362	11.3%	12.0%
Minor Wounds & Injuries to the Skin	14,953	17,992	7.3%	9.6%
Wound, Fracture of Shoulder, Arm, Knee, Lower Leg	12,648	14,998	6.1%	8.0%
Ruptured Tendon, Tendonitis, Myositis & Bursitis	11,716	9,192	5.7%	4.9%
Degenerative, Infective & Metabolic Joint Disorder	9,675	8,452	4.7%	4.5%
Trauma of Fingers & Toes	6,714	7,576	3.3%	4.1%
Other Injuries, Poisonings & Toxic Effects	19,822	7,417	9.6%	4.0%
Spine Disorders w/Spinal Cord or Root Involvement	8,021	4,823	3.9%	2.6%
Hernia	3,871	3,965	1.9%	2.1%
Carpal Tunnel Syndrome	4,476	2,647	2.2%	1.4%
Other Diagnoses of Musculoskeletal System	3,417	2,507	1.7%	1.3%
Cranial & Peripheral Nerve Disorders	5,288	2,323	2.6%	1.2%
External Eye Disorders	1,414	1,526	0.7%	0.8%
Cellulitis, Soft Tissue Infections	1,087	1,511	0.5%	0.8%
Head & Spinal Injury w/o Spinal Cord Involvement	1,752	1,450	0.9%	0.8%
Burn Injury, 2nd or 3rd Degree or >=20%	1,233	1,423	0.6%	0.8%
Trauma of Pelvis, Hip & Femur	1,003	1,222	0.5%	0.7%
Other Mental Disturbances	1,293	1,055	0.6%	0.6%
Fracture or Dislocation of Sternum or Rib(s)	442	600	0.2%	0.3%
Top 20 Sub-Total	184,155	152,099	89.4%	81.5%
Total	206,100	186,622	100.0%	100.0%

Days to Employer and Carrier Notification

To see if the time lags for reporting injuries have changed since SB 899 took effect, the authors calculated the mean (average) and median² number of days between three key reporting milestones: the date of injury to employer notification; the date of employer notification to the carrier notification; and the date of injury to the carrier notification. Table 2 compares the pre- and post-SB 899 notification time lags.

	Pre-SB 899	Post-SB 899	% Change
Date of Injury to Employer Notification			
Mean	10.2	6.8	-33.3%
Median	1	1	0%
Days from Employer Notification to Carrier Notification			
Mean	14.5	9.8	-32.4%
Median	4	4	0%
Date of Injury to Carrier Notification			
Mean	25.4	17.6	-30.7%
Median	7	6	-14.3%

The average time lag between the date of the injury and the employer notification decreased from 10.2 days prior to SB 899 to 6.8 days after SB 899 took effect – a 33.3 percent improvement. The number of days from employer to carrier notification also decreased, dropping 32.4 percent from a pre-reform average of 14.5 days to a post-SB 899 average of 9.8 days. The combined effect was that the average number of days from date of injury to carrier notification declined from 25.4 days prior to SB 899 to 17.6 days following the reform – 30.7 percent faster. On the other hand, the median values for all three of these report timing categories showed little if any change, indicating that the shortening of average reporting times resulted from a reduction in the magnitude of reporting outliers, rather than from a fundamental shift in the reporting processes.

2 A median is the midpoint in a series of numbers. For example, in the post-SB 899 sample, the median value of 6 days from the date of injury to carrier notification means that in half of these claims, the carrier was notified within 6 days of injury, while in the other half, carrier notification occurred at some point beyond that.

Average TD Payment and Paid TD Days within 12 and 24 months of First TD Payment

To control for the statutory increases in TD benefit levels that occurred between 2002 and 2007, the authors adjusted all TD payments in the study samples to 2007 levels. The factors used to adjust the 2002 - 2006 TD payments to 2007 levels were provided by the Workers' Compensation Insurance Rating Bureau and are displayed in Table 3.

Year of Injury	TD Adjustment Factor
2002	1.135
2003	1.054
2004	1.032
2005	1.016
2006	1.006
2007	1.000

Table 4 shows the adjusted mean and median payment amounts for the pre- and post-SB 899 samples.

	Pre-SB 899 TD (Adjusted)	Post-SB 899 TD (Adjusted)	Percent Difference
TD @ 12 Months			
Mean	\$6,536	\$6,366	-2.6%
Median	\$2,860	\$2,408	-15.8%
TD @ 24 Months			
Mean	\$8,378	\$7,863	-6.1%
Median	\$3,015	\$2,493	-17.3%

* Payments adjusted to AY 2007 TD rate levels

After controlling for the statutory benefit increases, the study found that the average amount paid in TD benefits within 12 months of the first payment for the post-SB 899 claims (\$6,366) was 2.6 percent less than the average for the pre-SB 899 TD claims (\$6,536). The adjusted median payment within one year of the first payment was 15.8 percent less than the pre-SB 899 average. At 24 months, TD payments for the post-SB 899 claims averaged \$7,863, or 6.1 percent less than the \$8,378 average for the pre-SB 899 TD claims, while the median amount paid was down 17.3 percent from the pre-SB 899 level.

A review of the average and median number of paid TD days also points to the TD reductions under SB 899. Table 5 shows that at the 12-month valuation, the post-SB 899 TD claims averaged 2.3 fewer days of paid TD (100.1) than the pre-SB 899 claims (102.4), while the median number of paid TD days fell 12.2 percent from 49 to 43. At the 24-month valuation, the post-SB 899 claims averaged 7.3 fewer days of paid TD, down 5.7 percent from the pre-SB 899 level, while the median number of paid TD days fell 26.8 percent from 56 to 41.

	Pre-SB 899	Post-SB 899	Percent Difference
TD @ 12 Months			
Mean	102.4	100.1	-2.3%
Median	49	43	-12.2%
TD @ 24 Months			
Mean	128.9	121.6	-5.7%
Median	56	41	-26.8%

The post-SB 899 reductions in average TD payments are significantly less than in the prior CWCI study,³ which showed 11.4 and 15.0 percent reductions at 12 and 24 months respectively. To gain a better understanding of how this change in pre- versus post-SB 899 outcomes might have occurred, the authors calculated a year-to-year breakdown of the average TD payments at 12 and 24 months (Table 6).

Pre-SB 899	TD @ 12 Months	TD @ 24 Months
2002	\$6,422	\$8,097
2003	\$6,416	\$7,806
2004	\$6,571	\$8,125
Post-SB 899	TD @ 12 Months	TD @ 24 Months
2004	\$6,220	\$7,592
2005	\$6,389	\$7,910
2006	\$6,485	

* Payments adjusted to AY 2007 TD rate levels

Breaking out the results by accident year reveals that after an initial decline in the first several months of the post-reform period that began in April 2004, average first-year TD payments began to move back up in 2005 and 2006. Similarly, at the 24-month valuation, average TD benefits fell more than 6.5 percent in the immediate aftermath of SB 899, but then rebounded in 2005, increasing by 4.2 percent from the level noted in the post-SB 899 period of 2004.

3 Analysis of California Workers' Compensation Reforms Part 2: Temporary Disability Benefits. CWCI January 2008

Rate of Exempt Diagnostic Categories

SB 899 includes an exception to the two-year TD payment cap for specified injuries⁴ that can require extended medical treatment including:

- Amputation
- Burns
- Eye Burns
- Eye Injury
- Hepatitis
- HIV
- Lung Disease
- Pulmonary Fibrosis

Injured workers diagnosed with these injuries may receive up to 240 compensable weeks of TD payments within 5 years of the date of injury. Table 7 shows the distribution of TD claims with exempt diagnosis for the pre- and post-SB 899 claim samples.

Exempt Categories	Percent of Exempt Claims	
	Pre-SB 899	Post-SB 899
Amputation	1.7%	1.5%
Burns	1.4%	1.2%
Eye Burns	0.2%	0.1%
Eye Injury	0.7%	0.5
Hepatitis	0.1%	0.1%
HIV	0.0%	0.0%
Lung Disease	1.0%	1.0%
Pulmonary Fibrosis	0.1%	0.0%
Exempt Sub-Total	5.1%	4.5%
Non-Exempt	94.9%	95.5%
Total	100%	100%

Although the percentage of TD claims that are exempt from the 2-year cap edged down marginally after SB 899 took effect, these claims accounted for only about 5 percent of the TD cases in the California workers' compensation system both before and after the reforms.

TD Payments Beyond the 2-Year Cap

The legislative intent of the 2-year cap on temporary disability payments was to facilitate prompt return to work and to reduce indemnity costs. Table 8 displays the percentage of non-exempt temporary disability claims in which TD benefits were paid more than 2 years after the initial payment for a sample of pre-reform claims (April 19 – June 30, 2002 injury dates) and post-reform claims (April 19 – June 30, 2004). The time frame for the post-reform claim sample was within the first available quarter in which claims would have been subject to the cap, and was chosen to allow a sufficient period for payments beyond 2 years to be reliably measured with available data⁵.

Dates of Injury	Non-Exempt Claims with TD Payments	Claims with TD Paid Beyond 2 Years	Percent of Total
April 19 – June 30, 2002 (Pre-SB 899)	19,163	1,745	9.1%
April 19 – June 30, 2004 (Post-SB 899)	15,271	481	3.1%

Just over 9 percent of pre-SB 899 non-exempt TD claims had payments that extended for more than 104 weeks following the initial TD benefit payment, but that proportion dwindled to 3.1 percent of the post-SB 899 claims. Non-exempt claims with more than two years of TD payments could reflect lost-time payments made for medical exams and/or initial uncertainty over the trigger date for the cap. Nevertheless, this result suggests that the 2-year limit was correctly applied in 97 percent of the initial TD claims that were subject to the cap.

SUMMARY

The current analysis shows SB 899 continues to be associated with lower TD payments, fewer paid TD days, faster injury reporting, and fewer exempt injury claims. However, after controlling for statutory benefit increases, the study found that following an initial decline in TD payments within the first several months after SB 899 was adopted, average TD payments at both the 12- and 24-month valuation points began to increase in 2005. As a result, the post-SB 899 reductions in average TD payments are now significantly less than those noted in earlier analyses, and benefit levels are approaching pre-reform levels.

4 The list of ICD-9 diagnosis codes was used in the prior study, Analysis of California Workers' Compensation Reforms Part 2: Temporary Disability Benefits (CWCI January 2008). Appendix A provides the table of ICD-9 codes used to categorize the exempt categories.

5 The data used in this measurement was valued at December 31, 2007.

Appendix A: Exempt Injury Categories and Associated ICD9 Codes

Exempt Category	Associated ICD-9s	ICD-9 description
Acute and chronic hepatitis B	070.30	Hepatitis, viral, type B (acute)
	070.20	Hepatitis, viral, type B (acute), with hepatic coma
	V02.61	Hepatitis, viral, type B (acute), with carrier status
	070.32	Hepatitis, viral, type B, chronic
	070.41	Hepatitis, viral, type B, chronic with hepatic coma
Acute and chronic hepatitis C	070.51	Hepatitis, viral, type C (acute)
	070.41	Hepatitis, viral, type C (acute), with hepatic coma
	V02.62	Hepatitis, viral, type C (acute), with carrier status
	070.54	Hepatitis, viral, type C, chronic
	070.44	Hepatitis, viral, type C, chronic with hepatic coma
Amputations	997.6-997.69	Amputation, stump (surgical or posttraumatic), abnormal, painful or with late complication
	885-885.1	Amputation, traumatic, of thumb
	886-886.1	Amputation, traumatic, of other finger
	887-887.7	Amputation, traumatic, of arm and hand
	895-895.1	Amputation, traumatic, of toe
	896-896.3	Amputation, traumatic, of foot
	897-897.7	Amputation, traumatic, of legs
	878-878.9	Amputation, traumatic, of external genitals
	874.9	Amputation, traumatic, of head
	Severe burns	940-940.9
941-941.5*		Burn of face, head or neck
942-942.5*		Burn of trunk
943-943.5*		Burn of upper limb, exc. wrist and hand
944-944.5*		Burn of wrist and/or hand
945-945.5*		Burn of lower limb
946-946.5*		Burn of multiple specified sites
948.2-948.9**		Burn, by extent of body surface
949.2-949.5**		Burn, unspecified site
Human immunodeficiency virus (HIV)	042	HIV disease
	V08	HIV infection, without overt disease
	079.53	HIV, type 2 disease
High-velocity eye injuries	870.3-870.4	Penetrating wound of orbit of eye
	871-871.9	Open wound of eyeball, with laceration or penetration
	921.3, 921.9	Contusion of eyeball
Chemical burns to the eyes	940-940.9	Chemical burn of eye or eye area
Pulmonary fibrosis	515	Post-inflammatory pulmonary fibrosis

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 is based on AY 2002-2007 claims data, and this is the third report in the series. The complete series will cover the following topics:

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

Part IV of the series is scheduled to be released in March 2009. It will include updated data through September 2008 and present new findings on issues surrounding medical utilization.

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.



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