

**Department of Consumer
and
Business Services**

Workers' Compensation Division

and

Information Management Division

2005-2006

HB 2408 Permanent Partial Disability Study

Presented to:

MLAC

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Prepared by:

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HB 2408 study

Introduction

In 2003, the Legislature passed Senate Bill 757, modifying Permanent Partial Disability (PPD) rating criteria and benefit calculations. In 2005, the Legislature passed House Bill 2408, further modifying PPD rating criteria, and mandated that the Department of Consumer and Business Service collect data and report to the Seventy-fourth Legislative Assembly by January 30, 2007, on the impact to permanent partial disability awards in workers' compensation claims of each of these two law changes.

Study design

Based on system-wide PPD award data in the WCD Claims Information System, a statistically valid random sample was chosen to represent a year of PPD awards, or approximately 7,154 claims with awards. A sample size algorithm for this population size, estimating proportions with a 95% confidence level, yielded a minimum sample size of 365 claims. (Both means and proportions were estimated in the analysis, although means are primarily discussed in this report.) Anticipating that a small number of cases would be unavailable or otherwise unusable, a random sample of 400 PPD claims was selected from PPD awards made in the last nine months of calendar year 2005. The sample was drawn from this time period, rather than the entire year of awards, in order to assure that enhanced closure documentation, based on the administrative rules that became effective in January 2005, would be available for the claims examined.

A team of experienced reviewers from the WCD Appellate Review Unit reviewed each file under three sets of statutes and rules. The review was based on information in WCD claim files, supplemented by claim closure information requested by WCD for the sample set of cases and provided by insurers, self-insured employers, and third party administrators. Using the file data collected, WCD raters compared three sets of laws and associated administrative rules:

1. PPD benefits and rules for dates of injury immediately prior to 1/1/2005 (Old system)
2. PPD benefits and rules for dates of injury in 2005 (SB 757)
3. PPD benefits and rules for dates of injury in 2006 (HB 2408)

This method was chosen because claims with dates of injury under the more recent laws are not sufficiently mature to provide an accurate reflection of the law within the study's time frame. By looking at the same set of claims across three different law/rule regimes, we can factor out differences due to case characteristics, wage changes, insurer market share, etc., and focus on the differences due to law and administrative rule changes. (Not all of the administrative rule changes were due to the law changes; some changes were updates that were implemented concurrently. See Exhibit A for a list of rule changes affecting PPD rating.)

A total of 389 claims with PPD awards and complete information were reviewed and rated under each of the three sets of laws and rules. A total of 11 claims were excluded from review, primarily due to the original closure having been rescinded by later action. To factor out wage inflation in the years since the initial analysis of SB 757, wage levels in the computations were normalized to a common FY 2003 base, corresponding to the benefit wage in effect at the time the bill was heard in committee.

There is an important difference between this and prior estimates of the impact of SB 757 and HB 2408, which used the National Council on Compensation Insurance (NCCI) construct of including claims with CDAs as PPD claims for ratemaking purposes. It was not possible to include claims resolved by CDA in the study, because they have not gone through the claim closure process and lack the necessary closure documentation. (There are more than 3,000 CDAs each year; of these, more than 900 are for disabling claims and occur prior to any closure.) This also represents a difference from the approach we generally use to model the rate impact of PPD benefit changes. No attempt has been made in this study to quantify any changes to CDA amounts.

An examination of the full impact of the law, including behavioral changes by the parties involved and the effects on CDAs, to the extent that they can be observed, will require years of actual claims experience.

Results of the study: Overall awards

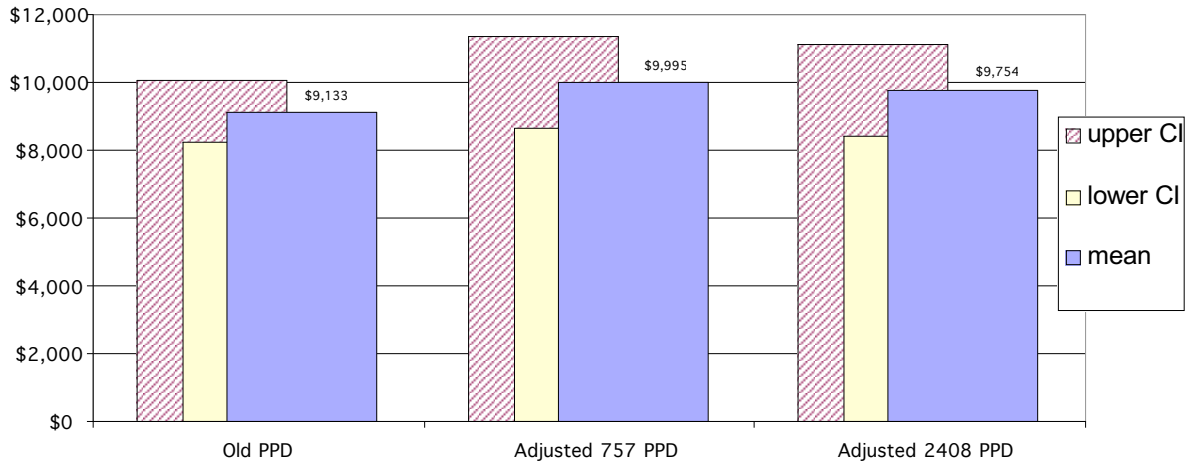
As can be seen in Table 1 below, the mean PPD awards for the sample under the three sets of statutes varied between \$9,132.71 and \$9,994.75. The table also shows that each group's mean is included within the confidence interval of each other group. Thus, we cannot rule out the possibility that differences in means are due to sampling variation, and the differences are not statistically significant given our chosen confidence level of 95%. Figure 1 also shows these values graphically.

Table 1.

Comparison of PPD awards from Old, SB 757, and HB 2408 rating & benefit structures					
Old		SB 757		HB 2408	
Mean	\$9,132.71	Mean	\$9,994.75	Mean	\$9,753.67
Confidence level(95.0%)	\$898.81	Confidence level(95.0%)	\$1,361.36	Confidence level(95.0%)	\$1,353.25
Upper CI	\$10,031.52	Upper CI	\$11,356.11	Upper CI	\$11,106.92
Lower CI	\$8,233.90	Lower CI	\$8,633.38	Lower CI	\$8,400.42

Note: CI=Confidence interval

Fig. 1. Sample means, upper and lower 95% confidence intervals for PPD



Another method for testing the significance of the difference between pairs of means is the Z-score. Using a hypothetical difference in means of zero, the Z-score tests whether the difference in means is large enough that the samples are unlikely to be from populations with the same mean. In the context of this study, the test evaluates whether the different disability rating schedules produce statistically significant differences in awards. Table 2 shows comparisons between the old system and SB 757 and between SB 757 and HB 2408. In both cases, the Z values (0.2469 and -1.0389) are within the range of critical values of -1.96 to 1.96. Therefore, we cannot rule out the possibility that the difference in means is zero.

Table 2.
Z-test comparisons

Analysis Tool pack z-Test: Two Sample for Means	HB 2408 vs SB 757		SB 757 vs. Old	
	757	2408	Old	757
Mean	9994.75	9753.67	9132.71	9994.75
Known Variance	186504528	184287468	81296765	186504528
Observations	389	389	389	389
Hypothesized Mean Difference	0		0	
z	0.2469		-1.0389	
P(Z<=z) one-tail	0.4025		0.1494	
z Critical one-tail	1.6449		1.6449	
P(Z<=z) two-tail	0.8050		0.2988	
z Critical two-tail	1.9600		1.9600	

Work disability award criteria

HB 2408 changed the statutory criteria for an award of work disability, effective January 1, 2006. The language for the work disability criteria for the two bills is shown as Exhibit B. IMD analysis in 2005, based on reported release-to-work and return-to-work statuses, predicted a

larger difference between SB 757 and HB 2408 in the work disability portion of awards than we observed in this study. The study data showed that 26 percent of SB 757 cases and 24 percent of HB 2408 cases received work disability awards. Additional data in the study, in the form of reviewers' comments, described the nuances of these statuses in more detail. In this study sample, only 8 of 64 injured workers who were released to regular work but did not return to regular work (about 2 percent of the 389 studied) received work disability under the SB 757 test; none of the 64 received work disability under the HB 2408 test. The others did not receive a work disability rating under either law primarily because of quitting, being fired or laid off, or other job changes. (See Exhibit C for more details.)

Current experience under SB 757

One of the expected effects of SB 757 was to re-allocate PPD award dollars to claims with greater economic loss. We would expect that claimants who return to regular work (generally shorter-duration claims) would receive lower awards under SB 757. We now have experience for short-duration claims rated under SB 757 that supports the assumed effect. Table 3 below shows that the average awards for 2005 claims that were closed within three quarters of the injury were more than 25 percent lower than comparable claims in 2004. This difference disappears for longer-duration claims. With more experience, we would expect longer-duration claims (less likely to return to regular work) to have higher average awards than in the past.

Table 3.
Average PPD paid by insurers on claims, by accident year

Quarters between injury and closure		Accident year					% change, 2004 to 2005
		2002	2003	2004	2005	2006	
Zero or one	PPD claims	507	490	559	489	60	
	Ave. PPD	\$5,287	\$4,830	\$4,936	\$3,197	\$3,409	-35.2%
Two	PPD claims	1,082	1,105	1,149	1,029		
	Ave. PPD	\$5,684	\$5,743	\$6,268	\$3,740		-40.3%
Three	PPD claims	1,157	1,105	1,169	712		
	Ave. PPD	\$7,279	\$7,216	\$7,620	\$5,643		-25.9%
Four	PPD claims	880	837	900	363		
	Ave. PPD	\$8,620	\$9,066	\$9,205	\$8,933		-3.0%
Five	PPD claims	643	627	657	121		
	Ave. PPD	\$9,398	\$10,824	\$10,810	\$11,388		5.3%

Notes: The data are the PPD awards made by insurers during the first closure for claims with PPD awards. Awards made or rescinded on appeal are not included. Claims are reported by the data of injury and the number of quarters between injury and closure. The grouping of claims by the time between injury and closure is done to group similar claims. PPD claims with injuries beginning in 2005 show the effects of SB 757. PPD claims with injuries beginning in 2006 show the effect of HB 2408.

Source: Information Management Division, Research and Analysis Section (June 2006).

Rule changes

As detailed in Exhibit A, a number of administrative rule changes were made concurrently with the implementation of SB 757 and HB 2408. Following established practice, the rulemaking process addresses all rule issues raised since the previous rules were adopted. Thus, some rule changes were not mandated by the statutory changes, even though the changes were made together. Two examples of rule changes not directly mandated by statute are Hearing Loss (presbycusis) and Chronic Conditions rules. The former was unrelated to statute changes, while the latter was chosen for several reasons: to implement the new law consistently across all body parts rated, to respond to case law developments, and to respond to prior testimony urging simplification of the old rule.

In the process of study data collection, ARU reviewers identified cases affected by these rule changes. Table 4 shows cases affected and mean PPD dollar amounts for each law/rule regime, both including and excluding the PPD amounts affected by these rule changes. Of the 389 cases studied, 11 (3%) involved hearing loss and 39 (10%) involved chronic conditions. Note that it is not possible to isolate the effects of statutory and non-statutory rule changes independently, as benefit amounts are the product of both the rated disability amounts and the benefit formula in effect. Nevertheless, removing the affected cases from total study awards does give some insight on the significance of the rule changes on the observed totals. As can be seen from the bottom rows of Table 4, mean awards drop for both SB 757 and HB 2408, relative to the old group, when cases affected by these two rule changes are removed. Thus, the observed difference in overall mean awards (although not statistically significant) is accounted for by the cases affected by these two rule changes.

Table 4.
Summary of cases affected by rating rule changes for
Chronic Conditions and Hearing Loss

Law/Rules		Old PPD	Adjusted 757 PPD	Adjusted 2408 PPD
Study totals	<i># claims</i>	389	389	389
	<i>Mean \$</i>	\$9,133	\$9,995	\$9,754
Chron Conditions	<i>claims</i>	39	39	39
	<i>Mean \$</i>	\$15,451	\$24,930	\$24,902
Hearing Loss	<i>claims</i>	11	11	11
	<i>Mean \$</i>	\$2,634	\$5,360	\$5,444
Totals (less Chron, Hearing Loss)	<i>claims</i>	339	339	339
	<i>Mean \$</i>	\$8,617	\$8,427	\$8,151

Conclusion

Although the sample study results do show increased average PPD awards under SB 757, and small decreases under HB 2408, the differences are not statistically significant. Also, the current actual claims data that WCD has received shows the expected effects of lower PPD awards for short-duration claims, indicating that the expected early effects of the law change are being observed. Among the claims rated in the study, all of the observed increase in mean awards (while not statistically significant) appears to be related to rule changes made concurrently with the implementation of the law.

Interoffice memo

Date: 9/19/2005
To: Jim VANNESS, Manager, ARU/RDRSS
Debra E HUGHES, Tech. Issues Analyst, ARU/RDRSS
From: Carol Helton, Tech. Issues Coordinator, ARU/RDRSS
Re: **PILOT PROJECT DATA COLLECTION CRITERIA**

As you requested, Jim, I reviewed the rulemaking action(s) for the current and most recent version(s) of the Division 30, 35, and 60 rules for those changes we made which would affect PPD awards but were not driven by SB 757. Listed below are the exceptions I was able to identify from those documents. There may be other items I failed to note or forgot in the course of my review. Please let me know and I'll be glad to add them. I hope this helps in planning for the pilot project.

2004-2005 (Admin. Order #04-062, 04-063, 04-064)

- Hearing loss/presbycusis
 - Extended prebycusis tables to age "85 and older"
 - Deduct presbycusis only when it exceeds 150 db minimum threshold
 - Capped maximum ratable hearing loss in each frequency at 100
- Chronic condition
 - Reduce to one type and method of valuing
 - Allow multiple values for chronic condition loss, not just one (no matter how many body parts/conditions are accepted)
- Adaptability scale and RFC scale
 - Compare the two and use higher of them for adaptability factor (pre-1/1/05 DOI)
- Cold intolerance standards

- Added neurological (cause) in addition to existing vascular (cause)
- Refined sensation impairment in a digit
 - Allow rating of a portion of a digit, even if sensation loss did not go all the way to the end of the digit
- Expansion of brain injury class descriptions (no change in values for each class)

2006

- Actual worsening
 - No longer considering whether the aggravation was an actual worsening at the time of reopening
 - Compute impairment loss(es) for current open period and compare with last arrangement of compensation
- Rounding percent of hearing and vision loss
 - Not going to hundredths
 - Round to whole percentage whether combining with other body part losses or not
- Rating skin disorders
 - Signs and symptoms need no be present at time of exam

CMC joint arthroplasty rating value

- There was no value for this previously

Statutory Criteria for Award of Work Disability PPD
under SB757 and HB 2408

<p>SB 757 work disability language (2005)</p>	<p><i>ORS 656.214(5) (relevant part)</i> <i>(b) If the worker has not been released to regular work by the attending physician or nurse practitioner authorized to provide compensable medical services under ORS 656.245 or has not returned to regular work at the job held at the time of injury, the award shall be for impairment and work disability.</i></p> <p><i>ORS656.726 (relevant part)</i> <i>(D) Notwithstanding any other provision of this section, impairment is the only factor to be considered in evaluation of the worker's disability under ORS 656.214 (5) if:</i> <i>(i) The worker returns to regular work at the job held at the time of injury;</i> <i>(ii) The attending physician releases the worker to regular work at the job held at the time of injury and the job is available but the worker fails or refuses to return to that job; or</i> <i>(iii) The attending physician releases the worker to regular work at the job held at the time of injury but the worker's employment is terminated for cause unrelated to the injury.</i></p>
<p>HB 2408 work disability language (2006)</p>	<p><i>ORS 656.214(5) (relevant part)</i> <i>(b) If the worker has been released to regular work by the attending physician or nurse practitioner authorized to provide compensable medical services under ORS 656.245 or has returned to regular work at the job held at the time of injury, the award shall be for impairment only.</i></p> <p><i>ORS656.726 (relevant part)</i> <i>(E) Notwithstanding any other provision of this section, only impairment benefits shall be awarded under ORS 656.214 if the worker has been released to regular work by the attending physician or nurse practitioner authorized to provide compensable medical services under ORS 656.245 or has returned to regular work at the job held at the time of injury.</i></p>

HB 2408 PPD Study
Release/Return to Work Data
6/20/2006

Number of injured workers that were not released to regular work and who did not return to regular work – **92**
All 92 of these claims received work disability under each of the tests.

Number of injured workers that were not released to regular work but did return to regular work – **3**
None of these claims received work disability under any of the tests.

- Only one of the three had an explanation and that was the worker did not go to the last medical appointment so he did not get a release.

Number of injured workers that were released to regular work but did not return to regular work – **64**
Only **8 of the 64** claims received work disability under the second test and none under the third test.
Reasons are known for **62** of the **64** claims.

- Voluntary reasons for not returning to regular work:
 - Quit - **22**
 - Job change or modification – **11**
 - Retired – **5**
 - Moved – **2**
 - School – **2**
- Involuntary reasons for not returning to regular work:
 - Fired/Laid Off – **14**
 - Unrelated Medical Condition – **5**
 - Unrelated Death – **1**