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# Workers Compensation Temporary Total Disability Indemnity Benefit Duration— 2011 Update

## **KEY FINDINGS**

This brief updates our previous paper<sup>1</sup> published in 2011 with an additional 12 months of data. While this study confirms prior findings that average duration of payments for Temporary Total Disability (TTD) indemnity benefits<sup>2</sup> has been increasing since the onset of the recession in late 2007, there is evidence that the trend might be moderating in 2010.

Countrywide,<sup>3</sup> our estimate of ultimate mean duration of TTD indemnity benefits has risen from about 123 days for injuries that occurred in 2006 to a forecasted high of 143 days for injuries that occurred in 2009, moderating slightly to 141 days in 2010. The national unemployment rate deteriorated nationally from 4.6% in December 2007 to 9.3% in December 2009, and rising further to 9.6% in December 2010.<sup>4</sup>

## **STUDY DESIGN**

Data for this study is claims with injury dates from 1998 through the first six months of 2010 for which TTD indemnity benefits have been paid.<sup>5</sup>

The duration of TTD benefits is determined by adding the number of distinct compensated days reported on indemnity payment transactions. The data was edited for reasonableness, removing less than 1% of the claims, as discussed in the methodology section in Appendix I.

Lump sum settlements were included where the compensated days were listed as part of the payment. If a settlement transaction only included a single covered day, then only that one day was included as part of the claim duration.

<sup>&</sup>lt;sup>1</sup> "Workers Compensation Temporary Total Disability Indemnity Benefit Duration 2011 Update," NCCI Research on **ncci.com**, February 2011.

<sup>&</sup>lt;sup>2</sup> Temporary Total Disability indemnity benefits are paid to injured workers to replace wages—and other specified costs such as vocational rehabilitation—while the claimant is recovering from a work-related injury or illness and is not able to work. Duration is the number of compensated days of lost wages.

<sup>&</sup>lt;sup>3</sup> States included in countrywide statistics are AK, AL, AR, AZ, CO, CT, DC, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MD, ME, MO, MS, MT, NC, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, TX, UT, VA, and VT.

<sup>&</sup>lt;sup>4</sup> Bureau of Labor Statistics.

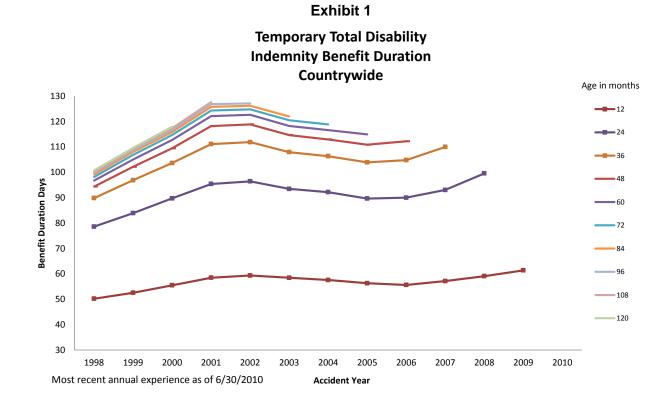
<sup>&</sup>lt;sup>5</sup> The data, licensed to NCCI, is a transactional level claims sample provided by carriers.

#### **RECENT TRENDS IN COUNTRYWIDE TTD INDEMNITY DURATION**

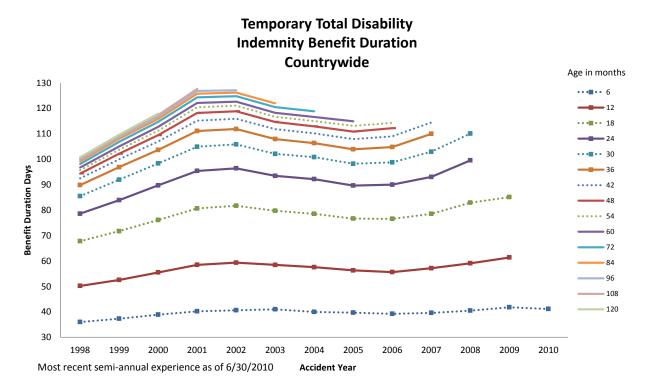
The duration of TTD indemnity benefits by accident year is shown in the next three exhibits. Exhibit 1 shows that duration increased from Accident Year (AY) 1998 to AY 2002 and declined slightly from AY 2002 to AY 2006. Duration increased from AY 2006 through AY 2009.

In this exhibit, each line represents the average duration of claims for the accident years at the specified maturity. For example, the line denoting 36 months displays the average durations of TTD benefits for each accident year through 36 months from the start of the accident year. So for AY 2007, this is the average duration of payments through December 31, 2009, while for AY 2000, this is the average duration through December 31, 2002.

Exhibit 1 shows average TTD benefits durations beginning with Accident Year 1998. The lines represent apples-to-apples comparisons of claims at the same age across accident years. The right-hand point of each line represents the average duration evaluated as of June 30, 2010. As accident years mature, the increase in average duration from one evaluation to the next declines as fewer claims continue to have TTD benefits being paid. But there is minor development even after 72 months. In most cases, these are lost-time benefits for injured workers who continue to be on Temporary Total Disability for many years. The increase in duration in recent years accelerated as of the latest evaluation, particularly at 24 and 36 months of development.



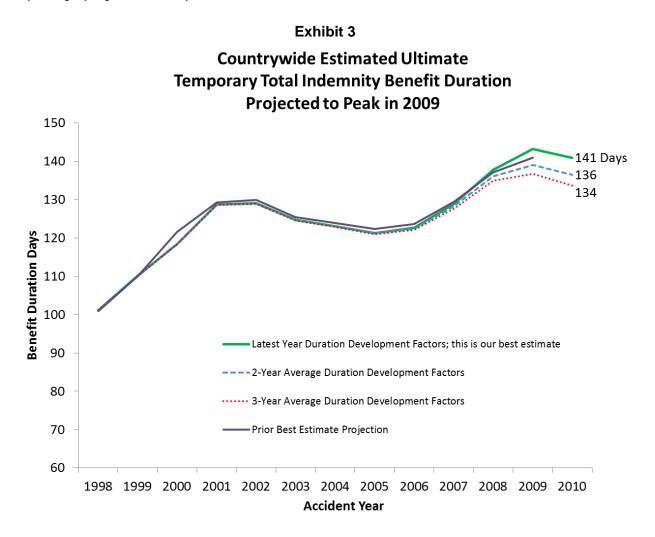
In Exhibit 2, we enhance Exhibit 1 with additional experience to better see how duration develops over time. TTD benefit duration increased from AY 1998 to AY 2002, and then declined over the next few accident years. The Great Recession affected claim durations evaluated at 12 through 42 months as the durations for AYs 2007 and subsequent increased relative to the prior accident years. The first look at AY 2010, as of June 2010, is a downtick from the June 2009 duration. This could be a harbinger of a moderation in the trend, after the steeply increasing claim durations in the late 2000s.



#### Exhibit 2

3

Estimates of ultimate duration are shown in Exhibit 3. Projected ultimate duration increased sharply between Accident Years 2006 and 2009. Actuarial projections often use recent history as a starting point for forecasting the future. In this case, we need to forecast the number of days of temporary disability that claimants will have subsequent to our evaluation date (6/30/2010). Common choices of a historical base would be a three-year average, two-year average, or the latest year. We have selected the latest year as the best estimate because it is most responsive to the changing forces driving the development. Notice that last year's best estimate selection of 141 days for AY 2009 is holding up well, with the updated estimate just slightly higher at 143 days.



## HEALING PERIOD AND PURE TTD INDEMNITY DURATIONS

Temporary Total Disability benefits are paid on two distinct types of claims:

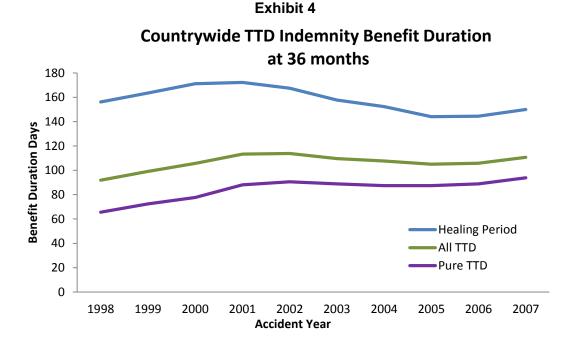
- TTD claim or pure TTD claim—TTD claim for which there has been no paid compensation for permanent impairment.
- Permanent Partial Disability (PPD) claim or healing period of PPD claim—These TTD benefits, also known as healing period benefits, are included in this study. Permanent benefits, paid subsequent to MMI, are not included in this study.

The increase in duration through the late 1990s can be seen in Exhibit 4, at 36 months, for all TTD claims, pure TTD claims, and the healing period of PPD claims. At 36 months, slightly less than two-thirds of these claims are consistently pure TTD.

The leveling off and minor decline of duration for all claims between AY 2001 and AY 2006 are decomposed into:

- A consistent duration of about 88 days for pure TTD claims through AY 2006
- A decline in duration of the healing period for several years from a high of 172 days in AY 2001 to 144 days in AY 2005 and AY 2006

The latest accident year, 2007, shows a break in the recent pattern of decline of the healing period duration with an increase of 4 days, to 150 days. Pure TTD claim duration also rose, breaking a flat pattern, by 6 days from the baseline of 88 days to 94 days. Consequently, the overall duration moved upward from 106 days in AY 2006 to 111 days in AY 2007.



## APPENDIX I—METHODOLOGY

NCCI reviewed 1.3 million TTD and PPD claims for this study. Accident Years 1998 through 2010 were reviewed as of the end of each six months through June 30, 2010. The addition of valuations at six months provided an opportunity to review duration on claims with payouts during the recession that began in December 2007.

TTD indemnity benefit duration is measured by counting the dates of covered loss on payment records.

- A small portion of claims included overlapping dates. Each date was only counted once.
- In cases where the dates associated with a large payment covered numerous days, those days were included as part of duration. This could be a disputed claim settlement, for example, where the claimant is compensated after the dispute is settled.
- When a large payment had only a single covered day, it appeared that the claim included a negotiated lump-sum settlement. We did not expand the single day to cover any imputed lost time because there are numerous circumstances for these settlements, which might have or have not covered lost work time. To the extent that some of these settlements covered time away from the job, the durations we calculated could be understated.

Each claim meets a reasonableness criterion that the sum of the payments at a transactional level are close to the payments posted at the claim level. In addition, each claim's dates were validated to pick up inaccuracies and typographical errors that could distort results, such as a closure year of 2099 rather than 1999.

Examples of validation logic are that claims included in the study:

- Have injury date on or before the report date
- Do not have a claim closed date before injury or report date
- Do not have a claim closed date after June 30, 2010, the final evaluation date in the database

Claims with total payments of less than \$50 were excluded on the basis that such a small payment accounted for less than one day's wages.

### APPENDIX II—DATA

Table 1 contains the data graphed as Exhibit 2. As you move across the table, note the increase in TTD benefits indemnity duration between the late 1990s and AY 2001 and 2002, then the shortening days of duration through AY 2006. Duration increases again as the Great Recession begins in 2007.

#### Table 1

	The Duration by Accident fear and Months of Development												
Months	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
6	36	37	39	40	41	41	40	40	39	40	40	42	41
12	50	53	55	58	59	58	58	56	56	57	59	61	
18	68	72	76	81	82	80	79	77	77	79	83	85	
24	79	84	90	95	96	93	92	90	90	93	100		
30	86	92	98	105	106	102	101	98	99	103	110		
36	90	97	104	111	112	108	106	104	105	110			
42	92	100	107	115	116	112	110	108	109	114			
48	94	102	109	118	119	115	113	111	112				
54	96	104	111	120	121	117	115	113	114				
60	97	105	113	122	123	118	117	115					
72	98	107	115	124	125	120	119						
84	99	108	116	126	126	122							
96	100	109	117	127	127								
108	100	109	117	128									
120	101	110	118										
Estimated													
Ultimate	101	110	118	129	129	125	123	121	123	129	138	143	141

TTD Duration by Accident Year and Months of Development

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