

2009 Casualty Loss Reserve Seminar Session: Workers Compensation - How Long is the Tail?

Moderator:

- Larry Vitale, Senior Vice President, Aon Benfield

Panelists:

- Christopher Tait, Principal and Consulting Actuary, Milliman, Inc.
- Timothy Wisecarver, President, PA & DE Compensation Rating Bureaus
- Frank Schmid, Director and Senior Economist, NCCI Holdings, Inc

➤ Workers Compensation Loss Development “Tail”

- Problem Viewed by Component Parts – Very Different Characteristics
- Key Drivers in Loss Development Process

WC Loss by Injury Type including Frequency, Severity & Aggregate

Workers Compensation - Loss Frequency							
Number of Claims per 100,000 Workers							
	Fatal	Permanent Total	Permenant Partial	Temporary Total	Total Lost-Time	Medical Only	Total
Average Recent 7 PYs	3.8	7.9	413.8	771.5	1,196.9	4,123.8	5,320.7
% of Loss-Time	0.3%	0.7%	34.6%	64.5%	100.0%	77.5%	
Trend - Latest 5 Yrs	Negative	Positive	Negative	Negative	Negative		
Trend - Latest 10 Yrs	-2.5%	-1.0%	-3.2%	-5.0%	-4.5%		
Workers Compensation - Loss Severity							
Un-weighted Average of NCCI Rate Supported States	436,523	1,403,150	140,702	16,164	62,442	1,177	
Workers Compensation - Aggregate Loss							
Based on Aggregate Loss at Current Level Ultimate	1.8%	8.8%	62.8%	19.9%	93.2%	6.8%	100.0%

Source:

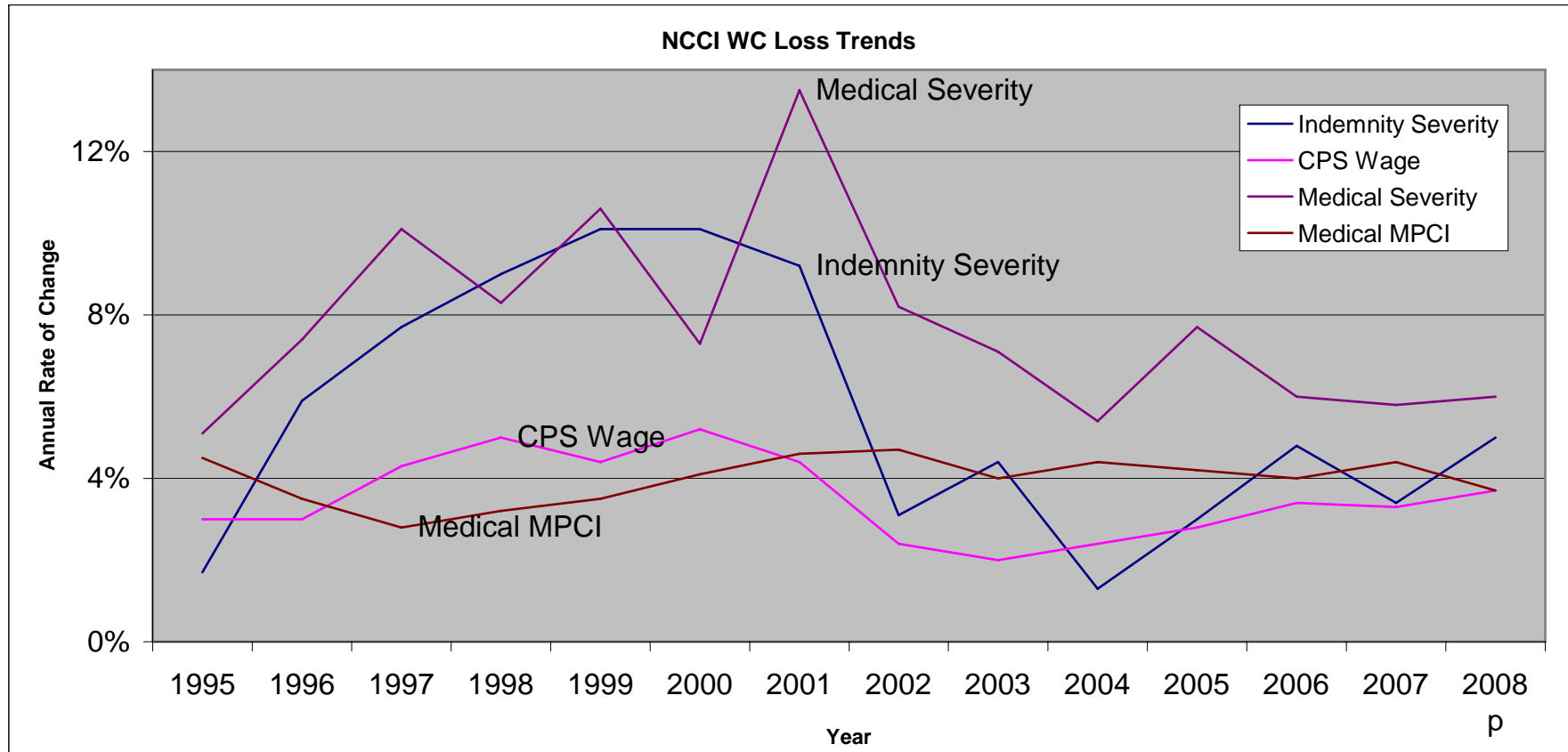
NCCI Annual Statistical Bulletins

NCCI State of the WC Line - Dennis Mealy Chief Actuary May 7,2009

NCCI Excess Loss Factors by State - values were derived by aggregating NCCI states values.



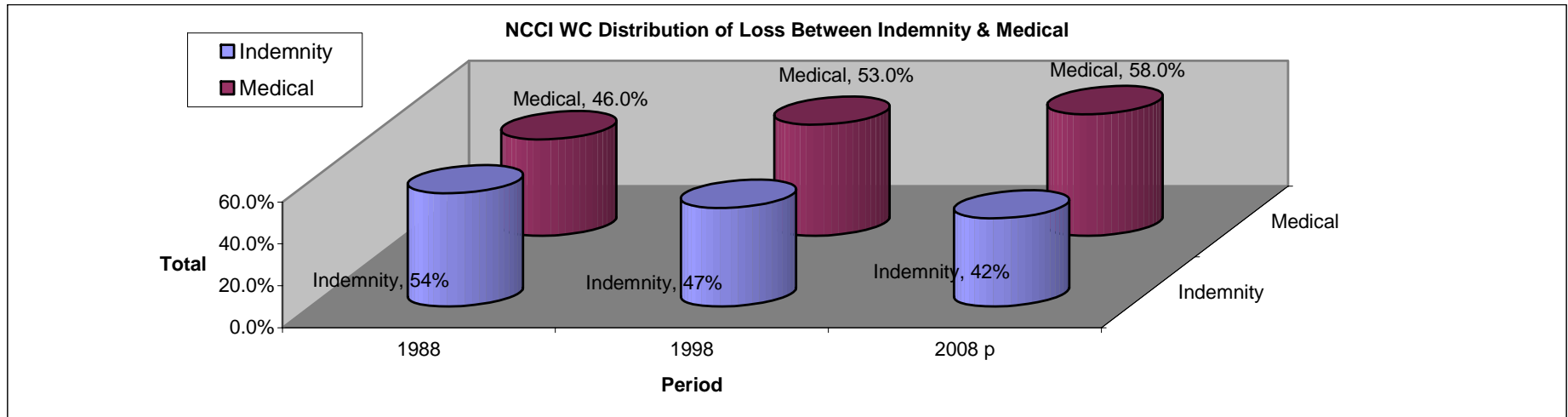
WC Loss Severity Trends



Period	Indemnity			Medical		
	Severity	CPS Wage	Delta	Severity	MPCI	Delta
14 Year Average (All)	5.6%	3.5%	2.1%	7.8%	4.0%	3.8%
9 Year Average	4.9%	3.3%	1.6%	7.4%	4.2%	3.2%
5 Year Average	3.5%	3.1%	0.4%	6.2%	4.1%	2.0%

Source: NCCI State of the WC Line - Dennis Mealy Chief Actuary May 7, 2009

Long Term Trends on WC "Tail": Medical Cost & Life Expectancy



Source: NCCI State of the WC Line - Dennis Mealy Chief Actuary May 7, 2009

Male Life Expectancies At Different Ages Based on Social Security Administration Mortality Tables

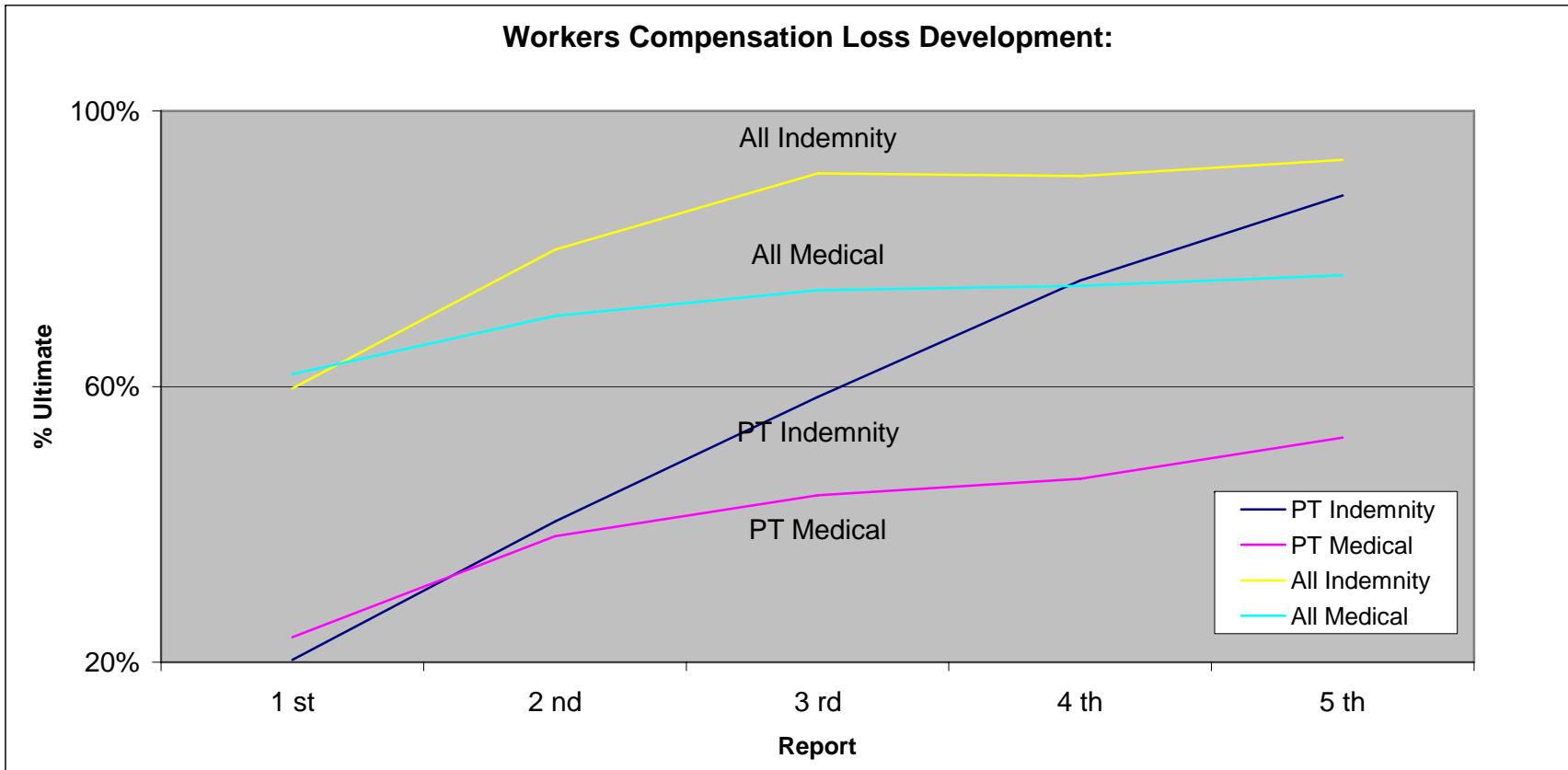
Current Age	1960	1980	2000	2020	2040	2060	2080
20	49.7	51.7	54.7	56.8	58.7	60.3	61.8
40	31.3	33.5	36.2	38.1	39.8	41.4	42.7
60	15.9	17.3	19.3	20.8	22.2	23.4	24.6
80	6.0	6.8	7.2	7.8	8.6	9.4	10.1

Percentage Increase in Male Life Expectancies Based on Social Security Administration Mortality Tables

1980 1960	2000 1980	2020 2000	2040 2020	2060 2040	2080 2060
4.0%	5.8%	3.8%	3.3%	2.7%	2.5%
7.0%	8.1%	5.2%	4.5%	4.0%	3.1%
8.8%	11.6%	7.8%	6.7%	5.4%	5.1%
13.3%	5.9%	8.3%	10.3%	9.3%	7.4%

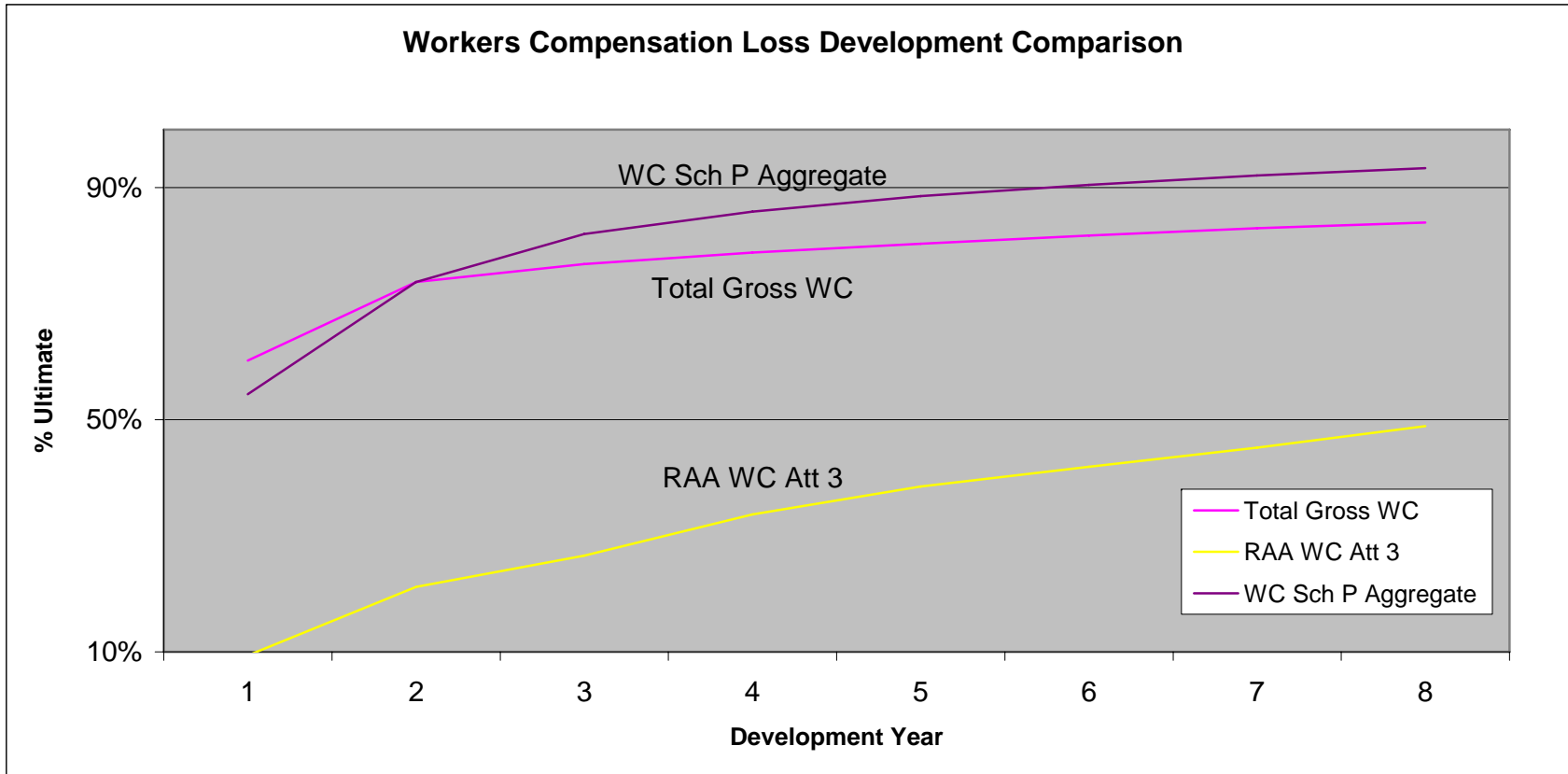
Source: Estimating The Workers' Compensation Tail, R.Sherman & Gordon Diss

WC Loss Development by Significant Component



Source: NCCI Excess Loss Factors by State - values were derived by aggregating NCCI states values.

WC Loss Development in Total



Sources:
Total Gross WC 2009 NCCI Annual Statistical Bulletin: Countrywide Incurred
RAA 2007 Loss Development Study: WC Attachment Point 3 - \$451k to \$1,850k
WC Schedule P Industry Aggregate a/o 5/2009 for AY 2008 & Prior