Oregon Tort Reform

Impact on Medical Liability and Access to Healthcare

Susan J. Forray, FCAS, MAAA Principal and Consulting Actuary

May 6, 2019



Overview of Presentation

- Scope and Overall Results
- Empirical Evidence
- Access to Healthcare
- Other Considerations
- Appendix Claim Severity Model



Topic 1: Scope and Overall Results

Scope of Analysis

- Effect on Prospective Medical Liability Indemnity and Claim Expense Payments
 - Average Indemnity and Expense per Claim
 - Number of claims
- Provide Empirical Evidence Based on Oregon and Other States
- Summarize Evidence on Access to Healthcare



Overall Results

- 26% Increase in Average Loss per Bodily Injury Claim
- 15% Increase in Bodily Injury Costs Due to Additional Claims
- \$27 million in Additional Indemnity and Claim Defense Costs



Data Underlying Statistical Model of Oregon Medical Liability Claims

- Based on Oregon Closed Claim Data
- Data Provided by Three Largest Providers of Medical Liability Coverage in Oregon
- Approximately 24,000 claims over 15+ years
- 25+ fields maintained in database
- Resulting model yielded a process with 1,000,000 simulated occurrences of medical misadventure



Topic 2: Empirical Evidence

Oregon Average Medical Liability Indemnity Payment – Impact of BI Cap Overturn in 1999



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File.

Increase in observed 2017 and 2018 severities is due to an increase in the number of large claims exceeding \$2M, consistent with national trends.

C Milliman

Oregon Claim Frequency Relative to Countrywide



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File and the American Medical Association.

C Milliman

Claim Frequency of the Seven States Implementing Tort Reform 2003 – 2005 Relative to All Others



Source: Milliman analysis of data from the National Practitioner Data Bank Public Use Data File and the American Medical Ass Tort reform states are Florida, Mississippi, Nevada, Oklahoma, South Carolina, and Texas.

Data normalized to 2001.

Chart ends in 2013 since cap on damages was overturned in Florida in 2014.

C Milliman

Why Do Caps Affect Claim Frequency?

Less Meritorious Claim Example					
Claim	Alleged Non-Economic Damages	Cap on Damages	Probability of Plaintiff Verdict	Expected Gross Indemnity*	Expected Net Financial Value**
A	\$1,000,000	\$1,000,000	20%	\$200,000	\$80,000
А	1,000,000	500,000	20%	100,000	0

• Claim A represents a less meritorious claim not reported under lower cap on damages.

* Calculated as the product of the capped damages and the probability of a plaintiff verdict.

**Calculated as the expected gross indemnity less fixed litigation costs of \$80,000 and variable litigation costs of 20% of the capped damages.



Topic 3: Access to Healthcare

Caps Improve Physician Supply

"Reforms are associated with an increased probability of new physicians locating in the state that passed the reform."

Source: Chatterji, Pinka, Siyang Li, and Gerald R. Marschke. 2018. Medical Malpractice Reforms and the Location Decisions of New Physicians. National Bureau of Economic Research, working paper No. 24401. Cambridge, MA.



Caps Improve Access to High-Risk Specialists

"[...] Evidence clearly indicates an increase in physicians in high risk specialties after the adoption of noneconomic damage caps [...]."

Source: Helland, Eric and Seth A. Seabury. 2014. "Tort Reform and Physician Labor Supply: A Review of the Evidence," RAND Institute for Civil Justice.



Caps Improve Access to Surgical Providers

"Malpractice insurance premiums are a significant deterrent for surgeons.... In addition, caps on malpractice damage awards attract surgeons to areas."

Source: Chou, C. F. and A. T. Lo Sasso. 2009. "Practice Location Choice by New Physicians: The Importance of Malpractice Premiums, Damage Caps, and Health Professional Shortage Area Designation," Health Services Research, Vol. 44: 1271–1289. doi: 10.1111/j.1475-6773.2009.00976.x.



Caps Improve Access to Obstetricians

"The supply of obstetrician-gynecologists decreased by 8 percent in the three years following premium increases in 1999."

Source: Mello, Michelle M., David M. Studdert, Jennifer Schumi, Troyen A. Brennan and William M. Sage. 2007. "Changes In Physician Supply And Scope Of Practice During A Malpractice Crisis: Evidence From Pennsylvania," Health Affairs. Vol. 26, no.3:w425-w435 (published online April 24, 2007; 10.1377/hlthaff.26.3.w425).



Caps Improve Access to Specialists in Rural Areas

"Caps appear to increase the supply of frontier rural, specialist physicians by 10-12 percent."

Source: Matsa, David A. 2007. "Does Malpractice Liability Keep the Doctor Away? Evidence from Tort Reform Damage Caps," Journal of Legal Studies. Vol 36(2):S143-S182.



Topic 4: Other Considerations

Other Considerations

- **Oral Discussion** This document is not complete without the accompanying oral discussion and explanation of the underlying projections, results and variability.
- Limited Distribution This document should not be distributed, disclosed, or otherwise furnished, in whole or in part, without the express written consent of Milliman.
- Reliance on Data In performing this analysis, we relied upon data provided by others, as documented throughout this presentation. We performed a limited review of the data used directly in our analysis for reasonableness and consistency. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a detailed review was beyond the scope of our assignment.



Appendix: Claim Severity Model

Overview of Claim Cost Model Oregon Medical Liability Claims

- Based on Oregon Closed Claim Data
- Data Provided by Three Largest Providers of Medical Liability Coverage in Oregon
- 24,000+ claims over 15+ years
- 25+ fields maintained in database
- Resulting model yielded a process with 1,000,000 simulated occurrences of medical misadventure



Overview of Claim Cost Model Steps of Simulation Process





Overview of Claim Cost Model Occurrence of Medical Misadventure





Overview of Claim Cost Model Claims with Indemnity Payment





Overview of Claim Cost Model Claims Closed with Expense Only





Reasonability Tests of Claim Cost Model

- Tests against the Oregon Closed Claim Data
 - Test 1: Portion of claims by type
 - Test 2: Modeled severity versus calculated severity
 - Test 3: Average indemnity severity limited to \$1,000,000*
 - Test 4: Average expense per claim closed with indemnity
 - Test 5: Average expense per claim closed with expense only
 - Tests 2 through 5 performed separately for Bodily Injury and Wrongful Death claims
- Objective was to Balance the Results from All the Tests Simultaneously

* Chosen based on typical minimum policy limit of \$1,000,000 per claim.





Thank you

Susan J. Forray, FCAS, MAAA susan.forray@milliman.com