2016 Long Term Care

General Liability and Professional Liability Actuarial Analysis

November 2016
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Introduction

Purpose

Aon Global Risk Consulting's (Aon) Actuarial and Analytics practice conducted an actuarial analysis of general liability and professional liability (GL/PL) claim costs for the long term care profession in the United States.

Scope

The specific objectives of this study are to:

- Identify the overall trends in the cost of GL/PL claims for long term care
- Identify state specific trends in the cost of GL/PL claims for long term care
- Identify trends in frequency and severity overall and on a state by state basis
- Present closed claim statistics related to claim lag and expense versus indemnity

An overview of the findings can be found in the Executive Summary section of this report.

Please contact us if you have any questions regarding this report.

Respectfully submitted,

Christian Coleianne, FCAS, MAAA
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Executive Summary

Key Findings

Based on the actuarial analysis of GL/PL claims data from long term care providers on a national level:

- Long term care loss rates are increasing by 6.0% annually.
- The overall forecasted 2017 occurrence year long term care GL/PL loss rate limited to $1 million per occurrence is $2,350 per bed.
- Long term care frequency is increasing by 4.0% annually.
- The forecasted 2017 occurrence year long term care GL/PL frequency is 1.08 claims per 100 occupied beds.
- Long term care claim severity is increasing by 2.0% annually on an overall basis.
- The forecasted 2017 occurrence year long term care GL/PL severity is $218,000 per claim limited to $1 million per occurrence.

Liability and the Long Term Care Profession

The cost of liability continues to increase for the Long Term Care profession. At the national level, the overall loss rate is expected to grow by six percent annually, with claim frequency driving the increase at an expected four percent growth rate. We have increased our estimate of frequency trend to reflect a deteriorating claims environment.

The most significant development related to liability for Long Term Care providers in 2016 is the Centers for Medicare and Medicaid Services (CMS) ban on the use of pre-dispute binding arbitration agreements. Last year, members of Congress and a number of states’ attorneys general sent letters asking CMS for this ban. On September 28, 2016, CMS issued a final rule for participants in Medicare and Medicaid. Included in the rule was a prohibition on the use of pre-dispute binding arbitration agreements, effective November 28, 2016.

The American Healthcare Association (AHCA), in association with several providers, has filed for declaratory and injunctive relief to prevent this part of the rule from taking effect. AHCA contends that the CMS rule bypasses the legislative process and is in conflict with the Federal Arbitration Act (FAA). Historically, AHCA has promoted best practices for arbitration, recommending voluntary agreements that are set apart from the admission document and that include rescission language. Providers are facing another challenge to managing liability costs if arbitration is no longer available.

Advisory Estimates

The following table presents a summary of our findings for long term care GL/PL:

### LTC Estimates and Annual Trends for Losses Limited to $1 Million per Occurrence

<table>
<thead>
<tr>
<th></th>
<th>Projected 2017 estimate</th>
<th>Annual trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall claim frequency*</td>
<td>1.08</td>
<td>4.00%</td>
</tr>
<tr>
<td>Indemnity claim frequency*</td>
<td>0.80</td>
<td>4.00%</td>
</tr>
<tr>
<td>Severity</td>
<td>$218,000</td>
<td>2.00%</td>
</tr>
<tr>
<td>Loss rate**</td>
<td>$2,350</td>
<td>6.00%</td>
</tr>
</tbody>
</table>

*number of claims per 100 occupied beds

**liability cost per occupied bed

- Overall claim frequency is the number of claims per 100 occupied beds. Indemnity claim frequency is the number of claims that resolve with a payment to the claimant per 100 occupied beds.
- Claim severity is the average size of claims, with claims limited to $1 million per occurrence.
- The loss rate is the annual amount per occupied bed required to defend, settle or litigate claims in a given year.
- The projected 2017 loss rate is $2,350 and is projected to grow by six percent annually.

State Findings

The following chart shows projected 2017 loss rate levels for the states that we have profiled in this study. The 2017 projected loss rates are determined by applying trend to our 2016 estimates by state. The states were profiled based on the volume of data received, the stability of the results compared to prior years, and the number of providers represented in the data.

### Comparison of Projected 2017 Loss Rates Limited to $1 Million per Occurrence

<table>
<thead>
<tr>
<th>Country Code</th>
<th>Loss Rate</th>
<th>% of Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA</td>
<td>$2,350</td>
<td>6.0%</td>
</tr>
<tr>
<td>FL</td>
<td>$2,000</td>
<td>3.4%</td>
</tr>
<tr>
<td>GA</td>
<td>$2,080</td>
<td>4.2%</td>
</tr>
<tr>
<td>IL</td>
<td>$1,910</td>
<td>4.1%</td>
</tr>
<tr>
<td>IN</td>
<td>$1,070</td>
<td>2.6%</td>
</tr>
<tr>
<td>KY</td>
<td>$1,090</td>
<td>4.7%</td>
</tr>
<tr>
<td>MA</td>
<td>$1,630</td>
<td>2.3%</td>
</tr>
<tr>
<td>MD</td>
<td>$1,590</td>
<td>4.7%</td>
</tr>
<tr>
<td>MI</td>
<td>$1,530</td>
<td>4.1%</td>
</tr>
<tr>
<td>MN</td>
<td>$1,500</td>
<td>4.1%</td>
</tr>
<tr>
<td>NJ</td>
<td>$1,050</td>
<td>4.4%</td>
</tr>
<tr>
<td>NC</td>
<td>$1,000</td>
<td>4.4%</td>
</tr>
<tr>
<td>OH</td>
<td>$2,270</td>
<td>9.4%</td>
</tr>
<tr>
<td>PA</td>
<td>$1,100</td>
<td>6.3%</td>
</tr>
<tr>
<td>TN</td>
<td>$1,250</td>
<td>2.2%</td>
</tr>
<tr>
<td>TX</td>
<td>$1,000</td>
<td>5.2%</td>
</tr>
<tr>
<td>WV</td>
<td>$1,530</td>
<td>4.1%</td>
</tr>
<tr>
<td>All Other</td>
<td>$7,360</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

*Loss Rates are relative to 2017 occupied beds. The % of Database is measured by occupied beds.*
Indemnity and Expense Statistics

Closed claims are presented to show the relationship between indemnity and expense. The claims were limited to those that are seven or less years from the occurrence date. This represents 99% of the claims in each closing year.

The following chart shows the distribution of claims closed with expense only versus claims closed with indemnity.

The percent of claims closed with indemnity is 72% over the experience period, but only 66% of claims closed with indemnity in 2015.

Indemnity and Expense Only Claim Counts

The following chart shows the average paid indemnity and expense for claims closed with an indemnity payment. Indemnity costs are about 75% of total costs on claims closed with indemnity. The average indemnity has grown since 2008, while the average expense is relatively flat.

Claims Closed with Indemnity: Average Size - Unlimited
The following chart shows the average paid expense for claims closed without an indemnity payment. The average expense on claims closed without indemnity averages $19,000.

Claims Closed without Indemnity: Average Expense - Unlimited

![Chart showing average expense for claims closed without indemnity over years 2008 to 2015. The average expense ranges from $0 to $35,000.]
Claim Lag Statistics

Occurrence to Closing Lag
The occurrence to closing lag is number of months between the occurrence date of an event and the time it is closed. Our analysis shows 19% of incidents are closed within 12 months of the occurrence, and 42% are closed within 24 months. Four years after an occurrence, 81% of claims are closed.

Closing Lag: Cumulative Percent of Claims Closed

![Closing Lag Chart]

Reporting Lag
The reporting lag is time between the occurrence date of an event and the time it is reported to the provider. 71% of incidents are reported within 12 months of the occurrence, and 92% are reported within 24 months.

Reporting Lag: Cumulative Percent of Claims Reported

![Reporting Lag Chart]
Report to Closing Lag
The report to closing lag is the number of months between the report date of the incident and the final settlement. 34% of claims close within 12 months of being reported and 63% of claims close within the first 24 months after being reported.

Report to Closing Lag: Cumulative Percent of Claims Closed

![Bar chart showing cumulative percent of claims closed over different time periods from report to close.]

- 34.4% of claims closed within 0-12 months
- 63.3% of claims closed within 12-24 months
- 81.9% of claims closed within 24-36 months
- 91.5% of claims closed within 36-48 months
- 96.8% of claims closed within 48-60 months
- 98.6% of claims closed within 60-72 months

Number of Months from Report to Close
Claim Size Distribution

The following table shows the distribution of claim sizes and incurred dollars in our database.

### Distribution of Claim Counts and Claim Dollars

<table>
<thead>
<tr>
<th>Total Claim Size</th>
<th>Claim Count</th>
<th>Distribution of Claim Count</th>
<th>Distribution of Incurred Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>$50,000 or less</td>
<td>8,818</td>
<td>47.7%</td>
<td>19.8%</td>
</tr>
<tr>
<td>$50,001 - $250,000</td>
<td>5,865</td>
<td>31.7%</td>
<td>43.5%</td>
</tr>
<tr>
<td>$250,001 - $500,000</td>
<td>2,599</td>
<td>14.1%</td>
<td>18.7%</td>
</tr>
<tr>
<td>$500,001 - $1,000,000</td>
<td>931</td>
<td>5.0%</td>
<td>9.6%</td>
</tr>
<tr>
<td>$1,000,001 - $2,500,000</td>
<td>232</td>
<td>1.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>$2,500,001 - $5,000,000</td>
<td>34</td>
<td>0.2%</td>
<td>1.3%</td>
</tr>
<tr>
<td>$5,000,001 and Greater</td>
<td>6</td>
<td>0.0%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18,485</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

In our analyses, except where noted, we limit the size of each claim to $1 million. This limitation reduces the influence and skew of individual large claims on our calculations.
Countrywide Estimates

The participants in this study represent approximately 223,600 occupied beds in the country. This is approximately 17% of the beds in the country.

Loss Rate
The following chart shows the loss rate per occupied bed.
Loss rates are increasing since 2010.
The current annual loss rate trend is projected at 6.0%.

Claim Frequency
The following graph shows the frequency per 100 occupied beds. The stacked bar chart provides frequency estimates for claims with indemnity (indemnity claims) and claims without indemnity (expense only claims).
Claim frequency has increased from 0.67 per 100 occupied beds to 1.04 per 100 occupied beds.
Severity
The following graph shows the average size per claim, also called claim severity.

Claim severity has grown over the experience period from $164,000 in 2006 to a projected $214,000 in 2016.

Liability Costs and Medicaid Reimbursement Trends
Medicaid is a significant source of revenue for long term care providers.

The following graph shows the per diem loss rate per bed as a percentage of the Overall Medicaid per diem reimbursement rate. The Overall Medicaid reimbursement rate shown here is a state rate weighted by the exposure distribution underlying the per diem loss rate.

Concurrent with the recent loss rate growth, liability costs as a percent of the Medicaid Reimbursement rate has increased in recent years.
California

The participants in this study represent approximately 15,900 occupied beds in the state. This is approximately 16% of the state total beds.

Loss Rate
Loss rates have increased to a level above $2,300 since 2012.

![Loss Rate per Occupied Bed Limited to $1M Occurrence](chart1)

Frequency
Claims frequency is fairly flat since 2010, with a spike in 2012.

![Claim Frequency per 100 Occupied Beds](chart2)
Severity
In 2013, claim severity has exceeded $300,000 per claim and appears to be holding at that level.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percentage of the Medicaid Reimbursement Rate is 4.21%.
Florida

The participants in this study represent approximately 6,400 occupied beds in the state. This is approximately nine percent of the state total beds.

Loss Rate

Florida loss rates are increasing since 2007, with a projected 2016 loss rate at $6,960 per occupied bed.

The sharp increase in 2009 is attributable to rising claims frequency.

Florida’s loss rate is the second highest among the profiled states and is noteworthy because of the elevated frequency of claims.

Frequency

Florida’s frequency is the highest of the profiled states at 2.79 claims per 100 occupied beds.

Frequency has been elevated since 2009.
Severity
Florida’s claim severity has been over $190,000 since 2009.

Liability Costs and Medicaid Reimbursement Trends
The liability costs as a percent of the Medicaid Reimbursement Rate is 7.98%, and is the second highest among the profiled states.

Severity per Claim Limited to $1M per Occurrence

Loss Rate as a Percentage of Medicaid Reimbursement Limited to $1M Per Occurrence
Georgia

The participants in this study represent approximately 9,400 occupied beds in the state. This is approximately 28% of the state total beds.

Loss Rate

Georgia’s loss rate has been increasing over time.

The sharp increase in 2010 may be related to the removal of the $350,000 cap on non-economic damages.

Frequency

Claim frequency in Georgia spiked in 2010 coincident with the Georgia Supreme Court’s ruling striking down the $350,000 cap on non-economic damages.

![Loss Rate per Occupied Bed Limited to $1M Occurrence](chart)

![Claim Frequency per 100 Occupied Beds](chart)
Severity

Claim severity in Georgia also increased in 2010, around the time of the Georgia Supreme Court ruling, which struck down the $350,000 cap on non-economic damages.

Liability Costs and Medicaid Reimbursement Trends

Georgia’s loss rates relative to the Medicaid Per Diem Reimbursement rate is substantially higher than levels pre-2010.
Illinois

The participants in this study represent approximately 9,300 occupied beds in the state. This is approximately 14% of the state total beds.

Loss Rate
The loss rate in Illinois has been increasing moderately since 2008.

Frequency
Claim frequency in Illinois is the third highest among the states profiled in this report.

The claims frequency is higher than historical levels since 2011.

The overall indemnification rate for Illinois is 83%.
Severity
Severity has been under $150,000 since 2011.

Liability Costs and Medicaid Reimbursement Trends
Illinois' loss rate relative to the Medicaid Per Diem Reimbursement rate is above five percent.
Illinois – Cook County

The participants in this study represent approximately 5,900 occupied beds in Cook County, Illinois. This is approximately nine percent of the Illinois state total beds.

Loss Rate
The loss rate in Cook County, Illinois has been increasing since 2009 and is nearly 30% higher than the Illinois state loss rate.

Frequency
Claim frequency in Cook County, Illinois is has been increasing over the experience period. The claim frequency is currently 26% higher than the Illinois state frequency.

Interestingly 85% of claims in Cook County result in indemnification to the plaintiffs.

Loss Rate per Occupied Bed Limited to $1M Occurrence

Claim Frequency per 100 Occupied Beds
Severity
Severity is around $144,000 per claim and has been stable since 2011.

Liability Costs and Medicaid Reimbursement Trends
When compared to the Medicaid Per Diem Reimbursement rate, Cook County’s loss rate per bed is over seven percent. This is comparable to the West Virginia and Florida, the states with the second and third highest loss rates among the profiled states.
Illinois – Excluding Cook County

The participants in this study represent approximately 3,400 occupied beds in counties other than Cook County. This is approximately five percent of the Illinois state total beds.

Loss Rate

The loss rate in counties other than Cook County, Illinois is generally under $2,000 per occupied bed.

2011 was influenced by several claims over $600,000.

Frequency

Claim frequency in counties other than Cook County show an increase in 2011, but has been stable near 1.40 claims per occupied bed in recent history.
Severity

Severity is currently around $128,000 per claim.

2011 was influenced by several claims over $600,000.

Liability Costs and Medicaid Reimbursement Trends

For counties other than Cook County, the loss rate relative to the Medicaid Per Diem Reimbursement rate is generally below four percent.

This is a bit higher than the countrywide average of three percent.
Indiana

The participants in this study represent approximately 12,400 occupied beds in the state. This is approximately 32% of the state total beds.

Loss Rate

Indiana’s loss rates increased sharply in 2012 due to increasing severity.

Frequency

Since 2012, claim frequency has been near the current level of 0.78 claims per 100 occupied beds.

Loss Rate per Occupied Bed Limited to $1M Occurrence

Claim Frequency per 100 Occupied Beds
Severity
Claim severity is increasing since 2012.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percent of the Medicaid Reimbursement Rate has increased from a low of 0.56% in 2009 to 1.63% in 2015.
Kentucky

The participants in this study represent approximately 6,100 occupied beds in the state. This is approximately 26% of the state total beds.

Loss Rate
Kentucky has the highest loss rate of the profiled states in this study.

The loss rate has increased from $1,500 in 2007 to a projected $7,070 in 2016.

Frequency
Claim frequency in Kentucky is the second highest among the profiled states.

Frequency has increased from a low of 0.72 claims per occupied bed in 2007 to a projected high of 2.32 claims per occupied bed in 2016.
Severity
Claim severity in Kentucky is the highest of the states profiled in this study and has been above $250,000 per claim since 2008.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percentage of the per diem Medicaid Reimbursement rate is 10.63% in 2015.
This is the highest level among the profiled states.
Maryland

The participants in this study represent approximately 7,500 occupied beds in the state. This is approximately 30% of the state total beds.

Loss Rate
The loss rates in Maryland have increased since 2013.

Frequency
Claim frequency in Maryland is stable around 0.75 claims per 100 occupied beds.
Severity

Claim severity in Maryland increased sharply in 2013.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid Reimbursement Rate is 1.55%.

Severity per Claim Limited to $1M per Occurrence

Loss Rate as a Percentage of Medicaid Reimbursement Limited to $1M Per Occurrence

Occurrence Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Loss Rate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.88%</td>
</tr>
<tr>
<td>2015</td>
<td>1.34%</td>
</tr>
<tr>
<td>2014</td>
<td>1.25%</td>
</tr>
<tr>
<td>2013</td>
<td>1.46%</td>
</tr>
<tr>
<td>2012</td>
<td>1.34%</td>
</tr>
<tr>
<td>2011</td>
<td>1.32%</td>
</tr>
<tr>
<td>2010</td>
<td>0.87%</td>
</tr>
</tbody>
</table>

Occurrence Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Avg. Medicaid per Diem Reimbursement</th>
<th>Per Diem Loss Rate per Bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$186.41</td>
<td>$3.50</td>
</tr>
<tr>
<td>2015</td>
<td>$194.10</td>
<td>$2.40</td>
</tr>
<tr>
<td>2014</td>
<td>$213.27</td>
<td>$2.66</td>
</tr>
<tr>
<td>2013</td>
<td>$212.29</td>
<td>$3.09</td>
</tr>
<tr>
<td>2012</td>
<td>$222.47</td>
<td>$2.96</td>
</tr>
<tr>
<td>2011</td>
<td>$202.00</td>
<td>$3.07</td>
</tr>
<tr>
<td>2010</td>
<td>$186.00</td>
<td>$4.27</td>
</tr>
<tr>
<td>2009</td>
<td>$188.00</td>
<td>$3.70</td>
</tr>
<tr>
<td>2008</td>
<td>$180.00</td>
<td>$3.70</td>
</tr>
<tr>
<td>2007</td>
<td>$171.00</td>
<td>$3.09</td>
</tr>
<tr>
<td>2006</td>
<td>$165.00</td>
<td>$2.96</td>
</tr>
</tbody>
</table>
The participants in this study represent approximately 12,900 occupied beds in the state. This is approximately 32% of the state total beds.

**Loss Rate**

The loss rate in Massachusetts has been near $450 per occupied bed since 2009, with a surge to $530 in 2011 driven by claim severity.

Massachusetts has a $500,000 per occurrence limit on non-economic damages and limitations on plaintiff’s attorneys’ fees. These may contribute to the stable environment, low claims incidence and low severity.

**Frequency**

Claim frequency in Massachusetts has been stable over the experience and is currently at 0.34 per 100 occupied beds, the lowest frequency among the profiled states.
Severity
Claim severity in Massachusetts has been under $155,000 for the entire experience period.

The projected severity in 2016 is $135,000.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percent of the Medicaid Reimbursement Rate has been declining over the experience period and, at 0.60%, is the lowest of the profiled states.
Michigan

The participants in this study represent approximately 4,300 occupied beds in the state. This is approximately 11% of the state total beds.

Loss Rate
The loss rate in Michigan surged in 2011, but has since subsided to a projected $840 per occupied bed in 2016.

Frequency
Frequency has leveled at 0.90 claims per 100 occupied beds.
Severity

Severity peaked at $147,000 in 2009 and has since decreased to under $100,000.

Michigan has the second lowest severity among the profiled states.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid reimbursement rate is at 0.91%.
Minnesota

The participants in this study represent approximately 4,600 occupied beds in the state. This is approximately 18% of the state total beds.

Loss Rate

The loss rate in Minnesota has been growing during the experience period, from $260 per occupied bed in 2006 to $450 per occupied bed in 2016.

Minnesota has the lowest loss rate among the profiled states.

Frequency

Claim frequency has been level since 2011 and is currently 0.35 claims per 100 occupied beds.
Severity
Severity has increased from a low of $72,000 per occurrence in 2010 to a projected $128,000 per occurrence in 2016.

This is the third lowest severity among the profiled states.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percent of the Medicaid reimbursement rate is 0.64%.

Severity per Claim Limited to $1M per Occurrence

![Severity Per Claim Limited to $1M per Occurrence](chart1)

Loss Rate as a Percentage of Medicaid Reimbursement Limited to $1M Per Occurrence

![Loss Rate as a Percentage of Medicaid Reimbursement Limited to $1M Per Occurrence](chart2)
New Jersey

The participants in this study represent approximately 8,500 occupied beds in the state. This is approximately 19% of the state total beds.

Loss Rate
The loss rate per occupied bed in New Jersey has been generally between $2,110 and $2,640 since 2010.

Loss Rate per Occupied Bed Limited to $1M Occurrence

Frequency
The frequency per 100 occupied beds has been fairly level between 1.13 and 1.25 since 2009.

Claim Frequency per 100 Occupied Beds

Expense Claims
Indemnity Claims
Severity

Claim severity increased sharply in 2009 and has grown steadily since then, reaching $214,000 per claim in 2016.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid reimbursement rate is at 3.29%.
North Carolina

The participants in this study represent approximately 12,600 occupied beds in the state. This is approximately 34% of the state total beds.

Loss Rate

The loss rate in North Carolina has been volatile over the experience period.

The projected loss rate per occupied bed is expected to reach $990 in 2016.

A $500,000 non-economic damages cap became effective October 1, 2011.

Frequency

The frequency increase in 2010 may be related to claimants presenting before the implementation of tort reform effective October 1, 2011. Claim frequency has not subsided since the legislation became effective.
Severity

Claim severity has increased since 2011 and is now $201,000.

The claim severity spike in 2007 reflects several claims that exceed $1 million.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid reimbursement rate is at 1.36%.
Ohio

The participants in this study represent approximately 11,300 occupied beds in the state. This is approximately 15% of the state total beds.

Loss Rate

Loss rates in Ohio have grown from a low point of $420 per occupied bed in 2007. The growth is related to increases in claim severity.

Frequency

Claim frequency in Ohio has been between 0.50 and 0.65 claims per 100 occupied beds since 2009.
Severity
Claim severity has grown strongly over the experience period and is projected to be $164,000 in 2016.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percent of the Medicaid reimbursement rate is around 1.39%.
Pennsylvania

The participants in this study represent approximately 20,100 occupied beds in the state. This is approximately 26% of the state total beds.

Loss Rate
The 2016 projected loss rate in Pennsylvania is $2,090 per occupied bed.

Frequency
The frequency of losses has increased from a low of 0.53 in 2006 to a projected 1.26 in 2016.
Severity
Since 2009, claim severity has been near $165,000 with the exception of 2011 and 2012.

Liability Costs and Medicaid Reimbursement Trends
The liability cost as a percent of Medicaid per diem rate has grown over the experience period and is currently at 2.49%

Severity per Claim Limited to $1M per Occurrence

Loss Rate as a Percentage of Medicaid Reimbursement Limited to $1M Per Occurrence

Aon Global Risk Consulting
Tennessee

The participants in this study represent approximately 8,400 occupied beds in the state. This is approximately 30% of the state total beds.

Loss Rate

The loss rate in Tennessee has grown from a low in 2009 of $1,170 per occupied bed to a projected $3,580 per occupied bed in 2016.

The growth is primarily due to growth in frequency.

Tennessee enacted limits on non-economic damages effective October 1, 2011. The enacted cap on noneconomic damages was $750,000 for most allegations. This cap is higher than the caps implemented in other states.

Frequency

Claim frequency has increased since 2008.

The continued growth in claim frequency after the implementation of tort limits in 2011 is surprising.
Severity
Claim severity has increased since 2009 and is the fourth highest severity of the profiled states.

Liability Costs and Medicaid Reimbursement Trends
The loss rate as a percent of the Medicaid per diem reimbursement has increased from a low of 2.22% in 2009 to 5.32% in 2015.
Texas

The participants in this study represent approximately 12,900 occupied beds in the state. This is approximately 14% of the state total beds.

Loss Rate
The loss rate in Texas has been growing since 2010.
The increases are related to severity growth.

Frequency
The claim frequency in Texas is generally around 0.55 per 100 occupied beds since 2010.
Texas has the fourth lowest frequency rate among the profiled states.
Severity

Claim severity in Texas has grown to just under $90,000.

Despite this growth, Texas has the lowest severity of the profiled states.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid per diem reimbursement rate has grown from a low of 0.47% in 2010 to 0.87% in 2015. Texas has the third lowest rate among the profiled states.
West Virginia

The participants in this study represent approximately 5,100 occupied beds in the state. This is approximately 55\% of the state total beds.

Loss Rate

The loss rate in West Virginia has grown from a low in 2007 of $2,480 to a projected $6,940 in 2016.

West Virginia has the third highest loss rate among the profiled states.

Frequency

Frequency has increased from 1.03 claims per 100 occupied beds in 2007 to a projected 2.19 claims per 100 occupied beds in 2016. West Virginia has the fourth highest frequency among the profiled states.

The bulge in claims for occurrence years 2010 and subsequent may be related to the large jury award in 2011.

The state legislature explicitly applied statutory caps to long term care providers in 2013 and this may have reduced claims frequency from its peak in 2012.
Severity

Severity in West Virginia has been between $299,000 and $351,000 since 2008.

This is more than 150% of the countrywide average severity over the same time period.

Liability Costs and Medicaid Reimbursement Trends

The loss rate as a percent of the Medicaid reimbursement rate has increased from a low of 3.89% in 2007 to 7.95% in 2015.
All Other States

The participants in this study represent approximately 52,600 occupied beds in the remaining states. This is approximately 11% of the remaining state total beds.

**Loss Rate**

The All Other States loss rate is increasing since 2009.

**Frequency**

The All Other States frequency has increased from a low of 0.56 claims per 100 occupied beds in 2006 to a projected 0.72 claims per 100 occupied beds in 2016.
Severity

All Other States claim severity is growing since 2009 and is projected to reach $216,000 per claim in 2016.

Liability Costs and Medicaid Reimbursement Trends

The All Other States liability cost as a percent of the Medicaid Reimbursement rate has increased from 1.36% in 2009 to 2.09% in 2015.
Database and Collection Methodology

In an effort to present a comprehensive analysis from the perspective of all long term care systems, Aon disseminated a request for data to for-profit and not-for-profit providers including independent providers, regional multi-facility providers and national multi-facility providers.

The results presented in this study are based on the ensuing database of long term care GL/PL losses and allocated loss adjustment expenses (ALAE) as reported to us by 31 long term care participants. Participants included large national providers, regional providers, single state operators and insurance companies. Data from the participants was aggregated, resulting in 18,300 non-zero claims and $2.9 billion in incurred losses. The facilities represented in the national study operate approximately 224,000 long term care beds, consisting primarily of skilled nursing facility beds but also including a number of independent living, assisted living, home health care and rehabilitation beds. They represent approximately 17% of the beds in the United States, and include six of the ten largest providers in the country.

The results found in this study are based on calculations of participant provided data. Providers that did not participate may have different results, either higher or lower. This may be due to any number of reasons, including levels of effectiveness in quality of care initiatives and the attractiveness of the provider for tort actions. Based on standard actuarial techniques, the number of claims, number of participants and bed representation ensure significant credibility of the results at the national level. The proportion of statewide bed representation assures significant credibility of the results at the state level. To increase credibility, a higher response rate among providers would be required.

All long term care results published in this report are based on losses (indemnity plus allocated adjustment expense) limited to $1 million per occurrence unless otherwise noted. The $1 million per occurrence limitation was selected to limit the impact of large claims on the results.

Statutory limitations were based on National Conference of State Legislatures research updated August 2011, accessed October 18, 2016 from http://www.ncsl.org/issues-research/banking/medical-liability-medical-malpractice-laws.aspx. Referenced statutory limitations were confirmed by retrieving the individual state codes online.

The loss rates are presented relative to the Medicaid per diem reimbursement rate. The Medicaid per diem reimbursement rate is based on data from “A Report on Shortfalls in Medicaid Funding for Nursing Home Care” produced by Eljay LLC and Hansen Hunter & Company, PC for the American Health Care Association and dated April 2016. The Overall Medicaid per diem reimbursement rate is based on the state exposure distribution inherent in this study.
The statistics presented in this report are based on an actuarial analysis of the aggregated long term care GL/PL claim database and related exposure data. The analysis applies standard actuarial methods to the claim data to develop ultimate losses and claim counts by occurrence year. These projections are used to calculate the following statistics presented in this report:

- **Loss Rate** – ultimate loss projection per occupied bed equivalent
- **Overall Frequency** – annual number of non-zero claims per 100 occupied bed equivalents
- **Indemnity Frequency** – annual number of claims with indemnity payments per 100 occupied bed equivalents
- **Severity** – average ultimate size of each claim, where each claim is limited to $1 million per occurrence

Actuarial Analysis
Conditions and Limitations

Inherent Uncertainty
Actuarial calculations produce estimates of inherently uncertain future contingent events. We believe that the estimates provided represent reasonable provisions based on the appropriate application of actuarial techniques to the available data. However, there is no guarantee that actual future payments will not differ from estimates included herein.

Extraordinary Future Emergence
Our projections make no provision for the extraordinary future emergence of losses or types of losses not sufficiently represented in the historical data or which are not yet quantifiable.

Data Reliance
In conducting this analysis, we relied upon the provided data without audit or independent verification; however, we reviewed it for reasonableness and consistency. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis.

Use and Distribution
Use of this report is limited for the specific purpose described in the Introduction. Other uses are prohibited without an executed release with Aon.

We request that Aon be notified of further distribution of this report. This report should only be distributed in its entirety, including all supporting exhibits.
Definitions

The following definitions are provided to help the users of this report to fully understand the analyses presented and the resulting conclusions.

**ALAE**
ALAE is an abbreviation for allocated loss adjustment expense. ALAE refers to costs, in addition to indemnity payments and reserves, which are incurred in handling claims. Typically, these costs are comprised of legal fees paid by the insured entity in investigating and defending claims. In the context of this study ALAE represents defense costs. The majority of claim data used in this study contained a separate field to identify ALAE costs separately from indemnity costs. Whether separately identified or not, allocated loss adjustment expenses are included in the reported loss information, loss reserving methodologies and loss projections contained in this report. All references to losses throughout the report and exhibits include ALAE except where noted otherwise.

**Claim**
A claim is a demand by an individual or other entity to recover for a loss. It may involve a formal lawsuit but not necessarily, especially in the case of a general liability claim.

**Exposure**
Actuaries select an exposure base such that the incidence of claims will tend to vary directly with the exposure of the entity at risk. The actuary must consider both the historical loss level and the corresponding exposures in evaluating historical claim liabilities and expected future costs. It is important to choose an exposure measure that is relevant to the unique situation of each risk group.

In this study the exposure base is occupied beds. Occupied beds are calculated by multiplying the number of licensed beds by the average annual occupancy rate. There is a strong correlation between the number of occupied beds and the total amount of losses incurred by a long term care facility. Not all beds are equal in terms of their risk exposure, however. An assisted living bed generates fewer dollars of GL/PL claim activity than a skilled care bed. All beds in this study have been adjusted to the equivalent of a skilled nursing care bed.

By dividing losses by exposures, comparative estimates of the long term care industry GL/PL loss rates are developed.

**Frequency**
Frequency is the ratio of the number of claims divided by exposures. In this report, frequency is measured on an annual basis as the number of claims projected for the given time period divided by the number of occupied beds during that same period. In the summary exhibits, frequency is the annual number of claims per 100 occupied beds.

**General Liability (GL)**
General liability exposure relates to those sums an entity becomes legally obligated to pay as damages because of a bodily injury (typically including personal and advertising injury) or property damage.

**Indemnity**
Indemnity refers to the component of claim costs actually paid or reserved to be paid to the plaintiff. Indemnity costs include both the amount provided for the plaintiff, either as a jury award or a settlement, and the amount retained by the plaintiff’s attorney. However, in most claim files, including those used to do this study, the split between plaintiff award and plaintiff attorney is not provided. Indemnity may also include punitive damages, although this is not consistently treated among companies.

**Indemnification Rate**
This is the ratio of claims that result in indemnity to all claims (claims with indemnity and claims with expense only). This reflects the likelihood that a claimant will receive indemnification.
Definitions

Limit of Liability
A limit of liability is a maximum amount of coverage provided by an insurance transaction. Above the limit of liability, the insured is responsible for all losses. Limits of liability may be expressed on a per occurrence basis or an aggregate basis, similar to deductibles. The losses included in this study are limited to $1,000,000 per occurrence.

Loss Rate
Loss rate is the cost per exposure of settling and defending claims. Loss rate is calculated as the ratio of total dollars of losses (indemnity and ALAE) to total exposures for a given period of time. In this report exposures are selected to be occupied beds and the time period is one year. Consequently, a loss rate represents the annual amount per occupied bed expected to be paid to defend, settle and/or litigate GL/PL claims arising from incidents occurring during the respective year.

Loss Trend
Loss trend is the change in claim frequency and/or severity from one time period to the next. Factors that affect the frequency and severity of claims are constantly changing over time. Examples of causes include inflation, societal attitudes toward legal action, and changes in laws. Actuaries use trend factors to adjust historical loss experience to comparable levels.

Occurrence Year
An occurrence year is the year in which an incident giving rise to a claim occurred. All of the loss rate, frequency and severity analyses use grouped data by occurrence year, unless specifically noted otherwise. Accident year is interchangeable with occurrence year.

Professional Liability (PL)
Professional liability exposure relates to those sums an entity becomes legally obligated to pay as damages and associated claims and defense expenses because of a negligent act, error or omission in the rendering or failure to render professional services.

Severity
Severity refers to the total dollar amount of a claim including indemnity and ALAE. In this report, the average severity for a given year is measured by dividing the total dollars of losses for all claims incurred in the year by the total number of claims.
About Aon’s Actuarial & Analytics Practice

Aon’s Actuarial & Analytics Practice is the third largest North American property and casualty consulting firm, providing actuarial services to clients for more than 20 years. Our international capabilities are matched by our strong local presence that positions us to deliver timely results and meaningful communication to every level of your organization. Our practice is comprised of highly skilled and experienced professionals in the risk quantification and analysis field. We have more than 100 consultants and 50+ Fellows and Associates of the Casualty Actuarial Society. As part of Aon Global Risk Consulting, we are dedicated to expanding our solutions to help our clients effectively and proactively manage their risk in the current dynamic and challenging global economic market.
About Aon

Aon plc (NYSE:AON) is a leading global provider of risk management, insurance brokerage and reinsurance brokerage, and human resources solutions and outsourcing services. Through its more than 72,000 colleagues worldwide, Aon unites to empower results for clients in over 120 countries via innovative risk and people solutions. For further information on our capabilities and to learn how we empower results for clients, please visit: http://aon.mediaroom.com.

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