Aon/ASHRM
Hospital and Physician Professional Liability

Benchmark Analysis, September 2016
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Introduction

In the interest of continuing to recognize trends in health care professional liability, Aon’s actuarial and analytics specialists have produced the 17th annual edition of the Aon/ASHRM Hospital and Physician Professional Liability Benchmark Analysis.

This benchmark study is produced under a co-marketing agreement between Aon and The American Society for Healthcare Risk Management (ASHRM). Participation in this edition of the benchmark study was open to all ASHRM members.

The study is designed as a hands-on tool to provide health care risk managers with a better understanding of their cost of risk compared to an industry benchmark. Through measurement, analysis, and comparison of the claim and exposure data, risk managers develop proactive strategies to reduce risk-related costs and ultimately improve outcomes.

The database of hospital professional liability (HPL) and physician professional liability (PPL) claims underlying the industry benchmarks contains 98,094 non-zero claims, representing over $16.5 billion of incurred losses. In addition, the database also includes 11,200 non-zero general liability (GL) claims, representing over $283 million of incurred losses. The database contains historical claim information for ten accident years (2006 to 2015).

The study provides actuarial analysis and research related to professional liability costs from varying perspectives including:

- Countrywide HPL, PPL, and GL benchmark claim costs—expressed in frequency and severity components—based on the entire database of 107 systems
- Discussions of the relationship between quality of care and workplace safety to medical malpractice claims
- Survey results showing the insurance limits and retentions selected by health care systems and the ways in which self-insurance is used to manage employed physician risks.
- Frequency and severity of professional liability by Cause of Loss
- Benchmark statistics for hospital service lines and claim disposition types
- Benchmark statistics for twenty-five individual states having sufficient data volume and credibility
- Analysis of trends for very large professional liability claims that influence commercial insurance carriers

The study examines trends in frequency, severity and overall loss rates related to hospital and physician professional liability exposures. Unless noted otherwise, these statistics are defined as follows:

- **Frequency**—number of non-zero claims per occupied bed equivalent (OBE) or per Class 1 Physician Equivalent
- **Severity** (limited to $2 million per occurrence)—average loss per claim, where loss includes indemnity and expense
- **Loss Rate** (limited to $2 million per occurrence)—annual incurred loss dollars per OBE or per Class 1 Physician Equivalent
- **Occupied Bed Equivalent**—a standard measure of overall hospital professional liability risk including weighted contribution from 11 hospital volume metrics
- **Class 1 Physician Equivalent**—a standard measure of physician professional liability risk based on the risk represented by one full-time Internal Medicine (no surgery) physician over the course of one year.

The participation of ASHRM in the Benchmark Analysis is limited to providing promotion and distribution support. Aon is solely responsible for the design, conduct and interpretation of the Benchmark Analysis and holds the copyright thereto.
Executive Summary

Key Findings

Hospital and Employed Physician Trends
The frequency of hospital professional liability claims is showing a moderate decreasing trend over recent years. We project a decreasing trend of 1%, annually, in the number of HPL claims experienced by health care organizations. Claim severity, including defense costs, is growing at a 2% annual rate.

For the upcoming 2017 accident year, we project that hospitals will experience an annual loss rate of $2,620 per occupied bed equivalent and $5,450 per Class 1 employed physician for professional liability events. This projection applies at the countrywide level, assuming a $2 million per occurrence limit.

We project that HPL and PPL loss rates are increasing at a 1.0% annual rate.

Trends in Medical Liability for Non-Physician Health Care Providers
Non-physician providers, including health care professionals known as physician extenders, are taking a greater and more prominent role in the delivery of health care in the United States. The total number of these physician extenders has almost doubled over the last 16 years, outpacing the growth in the number of U.S. physicians.

As health care continues to evolve, efforts to utilize lower-cost providers will ultimately benefit health care consumers through greater accessibility and lower cost. However, as they continue to gain more independence and autonomy in the practice of medicine, we have seen and expect to see further shifts in medical liability from physicians to these providers.

Workers Compensation Claims are Linked to Professional Liability Claims
Aon produces two well-known benchmark studies, including the current Aon/ASHRM Hospital and Physician Professional Liability Benchmark Study and the biennial Aon Health Care Workers Compensation Barometer. These studies are based on databases of both professional liability claims and workers compensation claims. Using the connection of these databases, we found that health care organizations with a higher professional liability claim frequency also tended to have higher workers compensation claim frequency. This correlation suggests a link between worker safety and patient safety.

Higher Total Performance Scores Indicate Lower Professional Liability Claims
Using facility specific data, we found that Total Performance Scores (TPS), as measured by Centers for Medical & Medicaid Services (CMS), show a negative correlation to the frequency of professional liability claims. This is to say that health care systems with a better TPS also tend to have a lower number of professional liability claims. This finding reinforces the importance of TPS measures, which are an influential variable in the CMS VBP program calculations.

Survey Results Regarding the Role of Self Insurance
Our survey shows that approximately 59% of participating health care systems have PL insurance coverage attaching at $5 million or higher. The majority of respondents maintain total insurance limits of $20 million to $80 million. Additionally, our survey addresses challenges presented by the self-insurance of employed physicians and the vicarious exposures of third party providers.

Claim Frequency and Severity by Cause
Benchmark participants provided text information describing the allegations underlying their Medical Professional Liability claims. This data was used to identify and list the circumstances leading to the most severe and most commonly occurring claims. Birth related claims, with an average value of over $460,000, continue to be significantly more severe than claims related to other allegations.

General Liability Costs
In 2017, we project that health care organizations will incur General Liability (GL) claims at a rate of $122 per OBE.

State Trends
Frequency, severity, and loss rate benchmark statistics vary significantly by state. We have separately analyzed 25 states where we had sufficient state specific information to perform a credible analysis.

Beazley’s Analysis Shows Significant Claim Severity Increases in Tort Reform Venues
Claims closing in 2015 had the highest severity level of any year on record. Especially in “tort reform” venues such as California, claim severity is significantly increasing due to a higher frequency of claims in excess of $2 million.
Advisory Benchmarks for Hospital Professional Liability

The database underlying this analysis includes 107 health care systems in the United States. In 2015, the facilities in the study reported a total number of 170,954 hospital beds (physical beds, not OBEs). The American Hospital Associations “Fast Facts on U.S. Hospitals” report (2014 Survey) a total number of 902,202 staffed hospital beds in U.S. hospitals. Combined with the CDC’s estimated 65.2% countrywide occupancy percentage (2012), we estimate 588,236 occupied hospital beds in the U.S. Based on these statistics, our participant base represents 29% of the total U.S. hospital industry.

The following table shows the hospital professional liability frequency, severity and loss rate projections for claims occurring in 2017. The severity and loss rate statistics are shown subject to a $2 million per claim limitation.

2017 HPL Benchmarks and Annual Trends for Losses Limited to $2 Million Per Occurrence

<table>
<thead>
<tr>
<th>Advisory benchmark</th>
<th>Projected 2017 benchmark</th>
<th>Selected annual trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall frequency*</td>
<td>1.55%</td>
<td>-1.00%</td>
</tr>
<tr>
<td>Indemnity frequency*</td>
<td>0.70%</td>
<td>-1.00%</td>
</tr>
<tr>
<td>Severity</td>
<td>$169,000</td>
<td>2.00%</td>
</tr>
<tr>
<td>Loss rate*</td>
<td>$2,620</td>
<td>1.00%</td>
</tr>
</tbody>
</table>

*per occupied bed equivalent

The study tracks service-specific exposure and claim statistics for two key areas of hospital operations. The following table presents accident year 2017 loss rates for exposures related to Obstetrics Units and Emergency Departments.

2017 Service Line Benchmarks and Annual Trends for Losses Limited to $2 Million Per Occurrence

<table>
<thead>
<tr>
<th>Advisory benchmark</th>
<th>Exposure basis</th>
<th>Projected 2017 loss rate</th>
<th>Annual loss rate trend</th>
<th>Annual overall frequency trend</th>
<th>Annual severity trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrics</td>
<td>per birth</td>
<td>$178</td>
<td>3.0%</td>
<td>1.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Emergency department</td>
<td>per visit</td>
<td>$5.80</td>
<td>1.0%</td>
<td>-1.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
Advisory Benchmarks for Employed Physicians

Employed physicians represent a growing self-insurance risk for hospital systems. Employed physician claim and exposure data were collected and separately analyzed as a part of this benchmark study. The following table highlights the projected professional liability losses associated with employed physicians.

### 2017 PPL Benchmarks and Annual Trends for Losses Limited to $2 Million Per Occurrence

<table>
<thead>
<tr>
<th>Advisory benchmark</th>
<th>Projected 2017 benchmark</th>
<th>Selected annual trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall frequency*</td>
<td>3.01%</td>
<td>-1.00%</td>
</tr>
<tr>
<td>Indemnity frequency*</td>
<td>0.99%</td>
<td>-1.00%</td>
</tr>
<tr>
<td>Severity</td>
<td>$181,000</td>
<td>2.00%</td>
</tr>
<tr>
<td>Loss rate*</td>
<td>$5,450</td>
<td>1.00%</td>
</tr>
</tbody>
</table>

*per class 1 equivalent

Advisory Benchmarks for General Liability

General liability claim data was collected and separately analyzed as part of this benchmark study. The following table highlights the projected general liability losses for accident year 2017. As seen below, general liability losses represent a small portion (approximately 4%) of the combined HPL and GL loss rate.

### 2017 GL Benchmarks and Annual Trends for Losses Limited to $2 Million Per Occurrence

<table>
<thead>
<tr>
<th>Advisory benchmark</th>
<th>Projected 2017 benchmark</th>
<th>Selected annual trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall frequency*</td>
<td>0.32%</td>
<td>1.00%</td>
</tr>
<tr>
<td>Indemnity frequency*</td>
<td>0.29%</td>
<td>1.00%</td>
</tr>
<tr>
<td>Severity</td>
<td>$38,000</td>
<td>2.00%</td>
</tr>
<tr>
<td>Loss rate*</td>
<td>$122</td>
<td>3.00%</td>
</tr>
</tbody>
</table>

*per occupied bed equivalent
SWOT Analysis

SWOT analysis is a structured planning method used to describe the Strengths, Weaknesses, Opportunities, and Threats that characterize a business element. This framework can be useful for describing the internal and external factors that are favorable and unfavorable to the health care industry. The following chart overviews the hospital and physician professional liability landscape in the SWOT format. Many of the concepts listed below are addressed within this report.

<table>
<thead>
<tr>
<th>Favorable</th>
<th>Unfavorable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
</tr>
<tr>
<td>Internal Factors</td>
<td>Long-tailed nature of HPL/PPL claims leads to increased uncertainty</td>
</tr>
<tr>
<td></td>
<td>Difficulty in aligning senior management and risk management objectives</td>
</tr>
<tr>
<td></td>
<td>Complexity of program structures and data is growing quickly</td>
</tr>
<tr>
<td></td>
<td>Strong risk management culture and patient safety as top priority</td>
</tr>
<tr>
<td></td>
<td>Current stability in the frequency and severity of self insured claims</td>
</tr>
<tr>
<td></td>
<td>Well established infrastructure for self insurance—claims, financial, excess insurance partners</td>
</tr>
<tr>
<td></td>
<td>Integration of employed physicians into self-insurance programs</td>
</tr>
<tr>
<td></td>
<td>Increased use of technology to improve safety and efficiency</td>
</tr>
<tr>
<td></td>
<td>Benchmarking and business intelligence can pinpoint areas for investment or be used to measure return on investment</td>
</tr>
<tr>
<td></td>
<td>Historical precedent for dramatic cycles and trends in frequency and severity</td>
</tr>
<tr>
<td></td>
<td>Sensitive nature of local and state litigation environments</td>
</tr>
<tr>
<td></td>
<td>Increasing risk of Cyber Liability events</td>
</tr>
<tr>
<td></td>
<td>Increasing frequency of very large catastrophic claims and “batch” claims involving multiple patients</td>
</tr>
</tbody>
</table>

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2016 Aon/ASHRM Hospital and Physician Professional Liability Benchmark Analysis