2016 Benchmark Study of Healthcare Professional Liability Claims
Zurich is pleased to present our 11th annual Benchmark Study of Healthcare Professional Liability Claims. Zurich’s healthcare claims database includes nearly $24 billion in losses representing nearly 8.4 million exposure units.

The data contained in this publication provides insights on healthcare claims from hospital and outpatient care providers from all 50 states.

Some of the key findings of the study include:

- Claim frequency remains virtually flat and has varied little over the period represented in this study.
- Average claim severity continues to illustrate an average annual trend of 4.6 percent from 2005 to 2013.
- Average severity for children’s hospitals remains significantly higher than for other facility types. Severity for teaching hospitals remains high, as reported in prior publications, and is approximately 50 percent higher than for acute care hospitals.
- The ratio of expenses to indemnity remains consistent.

In an increasingly data driven decision-making environment, Zurich strives to continually support our healthcare customers with our claims insights as they navigate through the many challenges and opportunities they face today.

Zurich remains dedicated to the healthcare industry and continues to seek opportunities to improve its product and service offerings to our customers. We appreciate any of your feedback on this publication as we strive to provide more valuable data and insights in the future. We look forward to the discussion on this year’s study.

Thank you for your support of Zurich Healthcare.

Facts about the data
Zurich’s database contains 354,000 claims of which 123,000 are already closed with expense payment, indemnity payment or both. Additionally, there are 18,000 open claims that are expected to close with payment, bringing the estimated total number of ‘ultimate claims’ to 141,000.

Of the 141,000 ultimate claims, there are almost 33,000 with total incurred of at least $100,000. We expect an additional 1,000 claims to breach this threshold, bringing the number of claims with at least $100,000 in total incurred to roughly 34,000.

There are $23.5 billion in losses from across the country, Washington, D.C. included. Factoring in development on open claims yields an additional $2.2 billion for a total of $25.7 billion in estimated ultimate losses. To limit much of the subjective component of claim evaluations, the 2013 year was used as the cutoff point.

Uncertainty
Although the database is very large, the results reported in this study have an inherent uncertainty because assumptions had to be made with respect to loss development and trends. These assumptions consider the long-tailed nature of many of the claims in the database and are unavoidable. However, they also open up the possibility that results could be quite different depending on the interpretation of the data by each individual reviewer.

Differences in results versus prior studies
Results reported in this study differ somewhat from previous years’ because of the volatile nature of claims and claim maturity. Additionally, these results are based on data collected from healthcare facilities seeking quotes for professional liability insurance from Zurich over the past year. Although a large portion of the submissions we receive from one year to the next are from the same facilities, this is not always the case.

Predictions
Estimates of future costs are limited by the ability to predict the course of future events such as jury decisions, judicial decisions, legislative changes, public attitudes and social and economic conditions that may impact losses. In addition, state or regional results vary in credibility because of the amount of available data. Therefore, we provide no assurance as to actual future events.
**What data goes into these dashboards?**

Losses are developed to ultimate, are brought to the same level via trend and then capped at $1 million each. All ‘ultimate claims’ with dates of report from 2005 to 2013 are included. With the exception of these dashboards and the loss cost map at the back of the publication, none of the remaining graphs or analyses incorporate trend. The dashboards for acute care hospitals that indicate results near the national average are partially driven by the data mix; acute care hospitals make up a large portion of the data set.

**Visualizing claim metrics – How often, how expensive?**

The severity of claims from teaching and children’s hospitals remains much higher than the national average claim severity, even after capping claims at $1 million each. This is not necessarily surprising given the relative nature of exposures in these types of facilities. However, their relative claim frequency remains distinctly lower than acute care facilities. This may indicate stronger risk prevention programs in these types of hospitals, which could drive frequency down. Other factors, such as geographic location or patient mix, may also be impacting frequency.

**What is our data mix?**

The data available for our 2016 Benchmark Study is robust. This study is based on nearly 8.4 million occupied bed equivalents from thousands of locations across the country; it contains almost $24 billion in ground up undeveloped losses that we are able to parse out at an individual claim level. The underlying account mix that makes up our data set is also quite diverse.

**Why are some points darker?**

The darker the point the more account observations we have for that particular mix of frequency and severity. For reference, the graphic to the right depicts around 90 percent of the accounts used for the study.

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**What does one exposure year look like?**

- Beds: 302,000
- Visits and procedures: 537 million
- Professionals: 164,000

**How much data is included in the study?**

- Losses: 23.5 billion
- Losses including development: 25.7 billion
- Occupied bed equivalents (OBEs): 8.4 million
- Total claims: 354,000
- Claims expected to close with defense or indemnity payment or both: 141,000
Data fluctuations and a consistent message

Differences in historical figures are expected from one publication to the next. These differences may primarily be a result of:

- Movement in claim values, although mitigated by using a mature year as the cutoff (i.e., 2013 vs. 2016)
- Changes in the mix of submission data underlying each study

Despite any fluctuations in absolute figures, however, we have a high degree of confidence in the patterns displayed and overall messages on the healthcare professional liability landscape inferred via these publications. The Indexed National Average Severity graph compares the national average severity from this year’s publication to that of last year’s publication indexed to each of their respective 2005 values. By indexing the results we can clearly see the extraordinary consistency in severity patterns between studies.
Claim frequency

Overall frequency continues to be quite stable and our data suggests this will continue through the next report year with a projected frequency between 1.5 and 2 claims per 100 occupied bed equivalents. In last year’s publication we made a frequency projection for 2013. As seen in the graph below, the actual frequency came in slightly above expectations, within just 4 percent. This minimal difference could be reflective of the change in the account mix of this year’s submission database compared to last year, a difference in claim activity versus what was expected or a combination of the two. Claim frequency in Texas remains significantly below the national average; as noted in prior publications, the lasting impact of reform in Texas cannot be understated.

What is an ‘ultimate’ claim?

Throughout this publication you will see references to ultimate claims. An ultimate claim is one that is expected to close with defense payment, indemnity payment or both.

Why use an occupied bed equivalent?

Using a standardized measure of exposure allows healthcare organizations to compare themselves against their peers. In order to use a standardized unit, several factors must be blended together.

Zurich’s proprietary relativity standardization allows us the ability to combine dozens of different exposure types into an occupied bed equivalent. These exposures can range from bed type such as acute care or long-term care to emergency room visits, laboratory services, physicians and professionals of varying specialties.
Closed-no-pay (CNP) claims and small non-zero closed claims

Since 2005 there has been an uptick in the percentage of claims that close with no payment. Several factors could be at play, but hospitals may be reporting more Potentially Compensable Events (PCEs) than previously. From 2007 onward the ratio has remained steady, so perhaps equilibrium has been reached. In addition to looking at CNP claims, we have also found it useful to consider claims that have closed with a very small payment. Interestingly, the percentage of these small non-zero claims (below $1,000) has actually shrunk over time, as the thinning width of the top section of the plotted area attests. At first glance this ‘decrease’ may seem like a good thing. However, the inflationary impact on claim severity over time is a possible driving force, effectively pushing claims out of the ‘very small’ category and into the next level.

Lastly, the slight drop in the CNP ratio for 2013 relative to the prior years is probably due to claim maturity rather than to a start of a new pattern or a better-than-historical year. Impacts on the ‘latest’ year CNP ratio have been noted in our prior Benchmark Studies as well.

Other professional lines

For the last six out of seven years, about 60 percent of claims have closed with no payment. Interestingly, a closed-no-pay ratio of this general magnitude is consistent with observations seen in other professional lines.

Is the decrease for the ‘latest’ year the start of a new pattern?

The slight decrease in the 2013 closed-no-pay ratio may be due to claim age rather than the start of a new pattern to closed ratios. As this year matures, uncertainty should decrease. Some of the claims open with reserves and no pay may end up closing with no pay, potentially resulting in a higher ratio.
Loss development

All open claims are developed to their projected ultimate settlement value using loss development factors. The impact of development is mitigated by using losses from 2013 and prior since 94.5 percent of claims are already closed.

Average claim severity

Average severity has increased steadily over the past several years but is down slightly in 2013. With respect to trends, the implied long-term average annual trend was just over 4 percent for the period from 2008 to 2013.

Illinois, New York and Pennsylvania versus the national average

Consistent with the findings in prior publications, these three states have an overall claim severity higher than the national average – in many cases significantly higher. Interestingly, Pennsylvania, which experienced a more significant increase from 2005 to 2007 than the national average, has been relatively stable through 2012.
On the horizon: increasing exposure from unnecessary cardiac procedures

Robert Bartolone, National Director, Healthcare Claims and
Susan Salpeter, Vice President, Risk Engineering Healthcare

Over the past few years, Zurich has seen a number of malpractice claims alleging inappropriate cardiac stenting. There has been a concurrent rise in the number of settlements paid to the federal government under the False Claims Act (FCA) for unnecessary care. Recent data from 2013 indicates that in the past 10 years, 7 million Americans had cardiac stents placed at a cost of $110 billion. A study published in the Journal of the American Medical Association in July 2011 classified the appropriateness of percutaneous coronary intervention (PCI). It found that 98.6 percent of PCI for acute indications were appropriate. For non-acute indications, however, 50.4 percent were classified as appropriate, 38 percent as uncertain, and 11.6 percent as inappropriate.

Healthcare providers face a three-pronged attack in managing unnecessary surgery claims: first, the government may seek fines and penalties under the FCA for Medicare fraud; patients may sue for medical malpractice; and insurers may claim that some losses or damages sought are outside the scope of coverage.

In 2015, the Department of Justice obtained $1.9 billion in healthcare fraud settlements. While the hospitals assessed fines under the FCA have been few, the amounts of some fines have been staggering:

- Hospital in Maryland: settled FCA allegations of unnecessary cardiac stenting of 273 patients for $22 million.
- Hospital in London, Ky.: paid $16.5 million to settle FCA allegations of unnecessary cardiac stenting that occurred over a three year period.
- Hospital in Ashland, Ky.: paid $41 million to settle an FCA suit. The government alleged that from 2006 to 2011, the hospital billed numerous Medicare and Medicaid patients for unnecessary coronary stents and diagnostic catheterizations.

Civil suits for medical malpractice have resulted in sizable settlements as well. All patients involved in the Maryland event had their claims resolved for $37 million, resulting in an average payment of $134,000 to each claimant. Recently, a jury awarded a patient involved in the London, Ky. event $21 million in damages.

The total cost of the loss may not end with government fines and civil suits for medical malpractice. Some insurers have relied on the intentional act exclusion to contest coverage where the conduct of the physician was dishonest, fraudulent or intentional, including the willful or reckless violation of any statute. If a physician is found criminally liable, a strong argument might be made that the individual was acting intentionally or recklessly, potentially making the loss uncovered.

Unnecessary stenting claims, which affect hundreds of patients, can result in significantly large losses for hospitals for a variety of reasons, including:

- The potential assessment of governmental fines under the FCA
- The rising value of civil suits related to perpetrating fraud on a patient
- The potential loss of coverage because of intentional or reckless conduct

All hospitals may be vulnerable to allegations of performing, and billing for, unnecessary procedures. This is true even if the physicians performing them are not employees or contractors. Under Medicare Conditions of Participation (CoPs), the governing body
must ensure that the medical staff is accountable to it for the quality of care provided. If the board does not monitor, and take steps to address, unnecessary surgeries, the hospital may be subject to fines and other regulatory actions by governmental agencies.2

It can be difficult for hospitals to identify and address these issues in part because oversight over physician performance is carried out by multiple bodies. In many hospitals, the peer review process reviews the quality of care, while the audit function has oversight of appropriate billing and coding issues and can identify overutilization of services. Building a linkage between the audit function and the peer review function could help assure good communication of potential problems. However, this must be done carefully in order to avoid losing protection of the peer review process and/or attorney–client privilege.

A robust peer review process is an important component of addressing this issue. Unfortunately, peer review is not always effective. There may be bias or a reluctance to criticize other physicians. The hospital may be unwilling to discipline a physician. Even more concerning, senior management or the governing body may be reluctant to take action against a physician who brings in significant revenue.

Another complicating factor is that it can be difficult to determine whether a procedure is unnecessary. As noted above, many cases fall into a gray area of “uncertain” appropriateness. The American College of Cardiology Foundation (ACCF) has emphasized that patients in the uncertain category may be reasonable candidates for the procedure, and that the physicians working directly with these patients should determine whether the procedure is appropriate.3 The ACCF developed several sets of Appropriate Use Criteria (AUC) that provides a hierarchy of indications and practice guidelines that hospitals can use to evaluate appropriateness.

Peer review departments routinely look at individual cases if there are questions about the quality of care. In addition, there is some oversight through the Ongoing Professional Practice Evaluation (OPPE) process under Joint Commission requirements, and there are additional steps to help identify patterns of unnecessary surgeries.

The department can sample a proportion of all cases (preferably blinded) to see if there is a pattern of clearly unnecessary or a high proportion of “uncertain” cases for any one provider. If identified, the cases can be sent to an outside body for review to determine appropriateness, using AUC guidelines. Once the review is complete, results should be provided to the department. The medical staff should have a clear set of criteria for the review and reporting of results to the medical staff executive committee and/or the governing body that will give direction on what steps to take.

The hospital should also periodically conduct a review of its peer review process.

Compliance
The hospital should also consider using its compliance function to identify these problems. Centers for Medicare & Medicaid Services (CMS) applies predictive algorithms to identify potential billing patterns of high-volume producers of high-risk invasive procedures. The hospital can develop similar algorithms.

Another way to identify potential issues is to encourage members of the medical nursing or other provider staff to report concerns through the compliance hotline.

Education
It’s important to ensure that peer review and quality management committee members, the credentialing committee, and governing board members receive education about the problem of unnecessary care and their exposure to regulatory actions if they do not identify and address this problem. This education should also address medical staff physician misconduct and substandard care.

References
Average claim severity – Profit status

Aggressive claim management, differences in case-mix index and patient populations could be contributing factors driving the lower average severity of for-profit hospitals. While the severity trend for both groups has been relatively comparable since 2005, the difference in average severity between the two has increased particularly in the last five years.
Facility classifications
Zurich uses dozens of categories and subcategories to uniquely classify facility types. We show four classifications, some rolled up to a higher level for the purposes of this publication. Having classifications at such a granular level creates the opportunity to perform deep dive analyses and could prove important for future benchmarking.

Average claim severity – Facility type
Children’s and teaching hospitals continue to have claim severities that are substantially higher than the national average severity. Absolute numbers have moved over time, perhaps partially driven by the mix of accounts in our database as well as changing claim values, but the overall message remains the same.

As emphasized in prior publications, providing lifetime care is a possible driving force behind the high severities in children’s hospitals. Teaching hospitals may be experiencing this as well, due to their exposure to high-risk obstetrics cases, which can result in lifetime care for injured neonates. These higher severities may be leveraged by the general interest rate environment (lower interest rates, higher present values of lifetime care, all else being equal).

Average claim severity by facility type

Data composition % of OBEs

- Acute Care Hospitals: 72%
- Teaching Hospitals: 6%
- Children’s Hospitals: 6%
- Outpatient: 14%
- All Other (severity not shown): 2%

Zurich 2016 Benchmark Study of Healthcare Professional Liability Claims
**Average claim severity – Community type**

We continue to see that claim severity from facilities in urban areas is higher than those in rural and suburban locales. The spread between the two groups in terms of actual dollars has moved over time, but on a relative scale they are mostly stable, especially in the later years, as the dotted line attests.

**How do we classify geographic areas?**

Areas with populations of 200,000 or higher are considered urban. Those with fewer than 10,000 are considered rural and everything in between is considered suburban.
Expense component of claims with indemnity – National average versus acute care

The difference between the national average percentage of severity due to expenses and the same ratio from just acute care hospitals is stable. Interestingly, these values have not materially converged or diverged over the years evaluated in this publication, despite increased numbers of early-offer claims management programs.

Percentage of ultimate losses due to expenses for claims with an indemnity component
Medium and large claims – Moving at a similar pace

There has been no major change in the general pattern or trajectory of medium and large claims since our prior review. The raw number of medium and large claims relative to the total number of ultimate claims has both increased over time and at roughly the same pace.

Medium and large claims

On average, 4 claims exceed $1M per every 100 ultimate claims.

On average, 4 claims exceed $5M per every 1,000 ultimate claims.
Medium claims and facility type

Claim severities from teaching hospitals are higher than those from acute care hospitals as seen earlier. Looking at raw counts of claims greater than $1 million as a proportion of total ultimate claim counts can help shed light on severity drivers. Based on the graph below, the high severity of claims from teaching hospitals is driven by a large quantity of large claims per year rather than skewed by just a few very large claims. And, as compared to acute care hospitals, the pace of $1 million claims has increased faster over time for teaching hospitals. Although not shown below, teaching hospitals represent only 14 percent of the ultimate claim counts in our database — yet represent 24 percent of claims greater than $1 million. For acute care, the relationship is just the opposite, at 72 percent and 66 percent, respectively.

Percentage of ultimate claims greater than $1M
Teaching hospitals vs acute care hospitals
**Loss cost**

Year over year changes in loss cost appear to be severity driven given the relatively benign movement in frequency. The implied annual trend in loss costs on an unlimited basis is approximately 3.8 percent from 2008 to 2013.

**Implied average annual trends**

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<td>Claims limited to $1M each</td>
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<td>Unlimited claim values</td>
<td>4.4%</td>
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Zurich continues to aggregate a significant amount of our healthcare claims data from across the country. We hope this information, combined with an organization’s individual loss history and qualitative information about risk management and patient safety programs, will serve as another tool to help advance your organization’s mission to improving patient outcomes and reducing total cost of risk. We look forward to providing additional insights to healthcare organizations as the industry continues to evolve in the future.
Claim frequency by state

Average claims frequency per 100 OBEs:

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<th>Below 0.96</th>
<th>1.14 to 1.29</th>
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Loss costs by state

Average loss cost per OBE:

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