Hospital Employee Safety and Workers’ Compensation
Benchmark Study 2011

BEECHER CARLSON
Key Observations:

- Incurred medical costs account for more than 54% of all claim costs for hospital facilities, an increase from 52% in the 2010 Study.

- Less than 2% of all Lost Time claims account for nearly one fourth of the total costs incurred.

- While developed loss years 2004 and 2006 were slightly higher than the prior years, 2010 is potentially higher than 2009 and closer to the 2007 rate per $100 of Payroll.

- Approximately 85% of all claims generated by healthcare facilities have Incurred costs less than $5,000.

- There is less than a 10% difference in claims cost between employees employed ten years or less versus those employed ten years or more.

- The average workers’ compensation costs per claim for employees over 55 years of age are over two times that of employees 18 to 24 years old.

- Claims reported between the eighth and thirtieth day after an accident cost 42% more on average than those reported in the first seven days.
The Vision:

A group of hospital organizations met in 2008 to discuss employee safety, workers’ compensation and a desire to generate benchmark data specific to their industry’s risks. Through the support and assistance of Beecher Carlson, the first edition Hospital Employee Safety and Workers’ Compensation 2009 Benchmark Study was completed and distributed to the participants in July 2009. The participation and findings were so significant that this same group recruited additional peer organizations to conduct further studies and analysis in 2010 and 2011.

The opportunity to share data and improve employee safety and workers’ compensation outcomes is significant. We applaud the participants in their efforts and encourage other members of the hospital industry to consider participating in future studies.

“If you have an apple and I have an apple and we exchange these apples then you and I will still have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas.”

George Bernard Shaw
The Opportunity

These benchmark studies provide the opportunity to reduce losses and the costs associated with workplace safety. As regulatory requirements are put into place affecting hospitals and healthcare providers, it is essential for the industry to evaluate the impact of those initiatives in comparison to the associated costs.

Due to Beecher Carlson’s commitment to the healthcare industry and following through on the request by a number of organizations to undertake this analysis in 2009 and 2010, we have continued our investment of time and resources for this 2011 Benchmark Study.

We welcome your feedback and inquiries. On the back cover of this document is contact information to discuss the 2011 Benchmark Study and to inquire about participation in 2012.

Participation

This report is based on findings and insights obtained from a review of loss information submitted by participating hospital organizations during the fall of 2011. These participants include for-profit and not-for-profit institutions, teaching facilities, stand-alone hospitals and large regional or national networks and chains. The loss information is from 44 states and mainly from acute care hospitals. Some additional business units included are long term care units and facilities, psychiatric facilities, physician offices and home health. However, all participants’ core operations are hospitals based in the United States.
“Coming together is a beginning, staying together is progress, and working together is success.”

Henry Ford
A benchmark is a standard or measure by which others can be compared or judged. The participants’ goal is to develop an understanding of their organization and how it compares to other hospital organizations. An infinite amount of variables can impact the accuracy of any benchmark (jurisdiction, reserving philosophy, claims settlement philosophy, employee mix, etc.). This study is a means of evaluation for organizations and do not replace an actuarial analysis or offer specific expectations where an organization’s losses should be valued.
For the development of this third edition of the *Hospital Employee Safety and Workers’ Compensation 2011 Benchmark Study*, Beecher Carlson gathered loss and exposure information from the last ten years from organizations representing:

- More than $219 billion dollars in hospital payroll
- Nearly $8.8 billion Manhours
- Approximately 41,000 Indemnity or Lost Time claims
- More than $1.87 billion in incurred workers’ compensation costs

Due to the varying methods for handling incident or “report only” type claims, two file groups were analyzed for the 2011 Benchmark Study:

- **Non-Zero claims**: Claims either open or closed with at least $1 of paid or reserved Indemnity, Medical or Expense costs.
- **Lost Time claims**: Claims either open or closed with greater than $0 paid or reserved Indemnity costs.

Participants provided loss runs generally valued in the second or third quarter of 2011, along with the Payroll and Manhour exposures associated with those loss years.

More than 330,000 claims were presented in total. However, organizations use a variety of software or claim systems that code or record loss details differently. Therefore, a data “scrub” was needed and all submitted loss information was consolidated into a master database in a uniform format. Certain data discrepancies were identified requiring various fields or descriptions to be removed from the database.
With more than 330,000 claim files and a variety of details and data points available for each loss, it is important to start with the basics. Some organizations include claims with $0 paid or reserved for Indemnity, Medical or Expense costs. These are generally incident or record only type losses. However, other organizations exclude those from their loss run. To ensure a consistent and measureable comparison between all claims, any file with less than $1 paid or reserved for any category was determined to be a “Zero Claim” and removed from the analysis.

Non-Zero Claims
There were a total of 255,000 Non-Zero claims evaluated totaling nearly $1.6 billion in incurred workers’ compensation losses. The average value of each claim is $6,226.

Investigating the traditional “80/20” rule, it was determined that 84.5% of all Non-Zero claims were valued less than $5,000 each. Only 3.4% of Non-Zero claims had incurred values greater than $50,000.

Percentage of Claims By Incurred Layers – Non-Zero
Lost Time Claims
The Non-Zero claims were further reduced considering only those that had greater than $0 in Indemnity paid or reserved. These were assumed to have been paid if the reserve was present even though some may be disputed and ultimately not have Indemnity paid. Claims in this category were determined to be Lost Time claims.

Nearly 41,000 Lost Time claims are included, representing more than $1.4 billion in Incurred losses. The average value of each of these claims is $34,588.

Eighty-three percent of these claims had total incurred figures of $50,000 or less. Less than 2% had paid or reserved amounts greater than $250,000 each.

Percentage of Claims by Incurred Layers – Lost Time
With nearly an inverse proportion to the percentage of claims, the costs represented by the various incurred layers of claims illustrates the appropriate focus of time and resources on the larger losses. While 83% of all Lost Time claims have values of $50,000 or less, they account for less than 30% of the total costs.

The smallest claims, valued less than $5,000 each, are just over 1/3 of all Lost Time claims. However, they represent only 2% of the costs.

In comparison, nearly 71% of the Lost Time claim costs are attributed to less than 18% of the claims, or those valued at $50,000 or higher.

**Percentage of Total Costs by Incurred Layers – Lost Time**
Less than one-half of one percent (0.4%) of the Lost Time claims have total incurred costs greater than $500,000. This represents nearly 10% of the total costs for the Lost Time claims.

Due to this disparity, and to minimize the distortion of our results by a few catastrophic cases, the later studies utilize loss data capped at $500,000 per claim.

Cost Distribution
Three cost elements are evaluated in the claims: Indemnity, Medical and Expenses. Indemnity includes disability pay as well as settlement contributions for partial and total disability. Medical includes the cost of care from first aid through rehabilitation and pharmaceuticals. Expense is associated with investigative costs, legal costs and other administrative costs associated with the management and resolution of the file.

In reviewing the Non-Zero claims, a fairly consistent pattern was evident in the distribution of costs between all claims. Medical related costs account for 53% of the total cost. The remaining costs include 10% for Expense and 37% for Indemnity.

Cost Distribution 2001 to 2010 – Non-Zero Claims
Keep Them Working

Frequency and severity are key elements to consider in measuring the results associated with an employee safety and workers’ compensation program. A third factor to consider is the frequency of severe cases. A small percentage of claims account for a large portion of the costs, therefore it is important to minimize cases in which an employee is off for extended periods of time. The best performers in our analysis have a lower percentage of Lost Time claims in comparison to all other Non-Zero claims. Over the last 10 years, just over 19% of the claims are Lost Time.

Percentage for Lost Time and All Other Non-Zero Claims

This figure is up from our prior year’s analysis which had the Lost Time claims at 17%.
While less than one out of five Non-Zero claims result in Lost Time, nearly 90% of all costs are attributed to these losses. This year’s analysis is no exception. The percentage is 88%, the same as our prior year’s results.

Claim Costs for Lost Time and All Other Non-Zero Claims

"Individually, we are one drop. Together, we are an ocean."
Ryunosuke Satoro
Developed Losses
To facilitate a side-by-side comparison of the Paid and Incurred values provided and to allow a 2001 claim that has developed and matured to be evaluated fairly against a 2010 claim with significant development potential and variability, we have utilized Loss Development Factors published by The National Council on Compensation Insurance, Inc. (NCCI) for the studies that follow. Paid and Incurred losses for each year were developed to their estimated ultimate value based on these factors.

Developed Loss Rate
Although there are some years when there are slight upward increases from the prior years, there is an overall downward trend over the last ten years. This positive trend has a slight upturn in 2010 with an increase from 2009.

There is significant development in 2004 to 2009 years when comparing this year’s Developed Loss Rates to our prior studies, again, with the highest increases in the Paid loss figures. Due to the recent nature of the data, there could be significant volatility in the results.
This increase could reflect faster settlement patterns. However, the Incurred figures also reflect similar increases, but appear to be somewhat behind the Paid figures. This may reflect a delayed reserving response across the group of participants or a slight disparity in the NCCI factors. Regardless of the cause, this potential trend should be closely monitored.

Developed loss rates in 2004 were around $.90 in last year’s analysis and are now developing out to over $1.13. This continued development of older loss years can greatly impact projected results, collateral requirements and future insurance premiums.

Developed Loss Rate per $100 of Payroll – Non-Zero Claims

While still down from a rate of $1.14 in 2004, the Developed Paid rate for 2010 is up closer to the 2007 rate. This represents a 17% increase from 2009.
The Findings

Costs per Manhours
Manhours are used as an exposure basis to remove the disparity between salary and pay levels from one position or location and another. Whether tracked as Full Time Employees (FTEs) or Equivalents, Hours Worked or Manhours, participants provided an exposure basis for their loss years.

To ensure a similarity between the exposures provided by each organization, the Manhours provided was divided into the Payroll provided to determine a rate per Manhour. The various rates were compared between all participating organizations, and where discrepancies were found, follow up investigation was conducted to adjust the exposure appropriately.

While some of the participating organizations have changed from our prior analysis and the methods the participants have used for tracking this exposure may vary, this contrasting result to the prior year’s study is notable. The 2010 Study illustrated a significant reduction in the costs per 100,000 Manhours from 2001 to 2009. The trend in this year’s analysis is slightly up for the period 2001 to 2010.

Costs per 100,000 Manhours – Non-Zero Claims

While the overall trend is slightly up and the costs per Manhour are influenced by medical inflation and other factors, the Developed Paid costs are up 24% from 2009 to their highest level over the ten years.
**Frequency**

As organizations strive to reduce costs, they should seek to reduce the overall number of claims as well as the number of claims in which time is lost from work. While average severity is a good indication of an organization’s efforts, it can provide distorted results. If an organization only had one loss in a year and it cost $100, their average severity looks worse than an organization with ten losses worth $50 each. However, their overall cost of risk is much lower due to lower frequency.

Since 2004, there is a clear reduction in Lost Time claims both when measured against 100,000 Manhours and $1 million in Payroll. However, 2010 appears to be flat compared to 2009 for Payroll and up in 2010 when compared to Manhours.

This figure could be similar to the data evident in 2004 when compared to 2003. However, this is an element of the overall loss picture that should continually be considered when attempting to reduce an organization’s overall cost of risk.

**Frequency – Lost Time Claims**

While down 20% since 2004, the 2010 Lost Time Frequency is up 7.3% from 2009 when measured against Manhours.

While 2010 is flat in comparison to 2009, it is down over 41% since 2004 when measured against Payroll.
Severity
In addition to frequency, there also needs to be an emphasis placed on severity. In the frequency charts, 2004 figures are among the highest in the data reviewed. However, the severity is at the lowest average cost per Lost Time claim between 2001 and 2010 in comparison to the other years.

Of greater importance is the measure of 2009 and 2010, with average costs nearing the 2004 high combined with slight increases in frequency. When combined, these factors point to potential higher overall costs.

A number of factors can influence average costs including increased pay, medical inflation and an aging workforce. Some have also expressed concern with the impact of the Medicare set-aside and other liens.

Average Developed Cost per Lost Time Claim
“In the long history of humankind those who learned to collaborate and improvise most effectively have prevailed.”
Charles Darwin
**Claims Handling**

It is important to factor in additional elements as the data is analyzed to identify trends and elements that influence costs and results. Claims handling practices, in particular closing ratios, can influence the ultimate loss pick as well as the Total Cost of Risk.

In the 2010 Study, nearly 60% of the Lost Time claims for 2009 were already closed. This is nearly up to 66% for 2010.

**Percentage of Claims Closed by Calendar Year – Lost Time**

![Percentage of Claims Closed by Calendar Year – Lost Time](chart)

**Claims Administration**

While jurisdictional influences and employee demographics can have significant impacts on the outcomes of claims and the costs associated, there is clear evidence in the loss data to support the importance of timely loss reporting. In evaluating the loss data included in the study, a number of organizations measured Lag Time as the period of time between the Date of Loss (DOL) and the Date Reported to the Supervisor/Employer. Others measured from the DOL to the Date Reported to the Carrier/Third Party Administrator (TPA). To ensure the consistency in the analysis, we measured the Lag Time from the DOL to the Date Reported to the Carrier/TPA.
More than 93% of all Non-Zero claims were reported in the first 30 days. Only 2% of losses were reported outside the first 180 days.

While the greater percentage of claims are reported in the first week, 15% of the claims included in the database were reported between the eighth and ninetieth days after the DOL. This is not an excess period of time, but the average costs per claim show significant increases outside the first week after the DOL.

There is a 69% increase in the average Incurred costs for those claims reported between the eighth and thirtieth days in comparison to those reported in the first seven days. Given this increase for the files reported after the first week, total costs for nearly 18% of all claims are significantly increased due to the reporting lag. This gap is potentially even greater when considering the most severe claims are reported the earliest due to worse injuries or circumstances.

**Percentage of Claims Reported by Specified Number of Days – Non-Zero**

![Graph](graph.png)
**Employee Age**

A number of discussions have occurred around the aging workforce and the concerns associated with the increased costs in medical care and treatment for older employees. While the loss results support the concern with costs associated with older employees, there does not appear to be evidence from the claims information that illustrates a significant change in the average employee age for those employees with Lost Time claims.

Losses were allocated according to specific age groups to assist with clarity in the findings. Employees between the ages of 36 and 55 made up 55% of the claims. Employees under the age of 25 and over the age of 65 account for 10% of all Non-Zero claims.

**Percentage of Claims by Age Group – Non-Zero and Lost Time**
The costs associated with an average claim for an employee in the age group 26 to 35 years old is 43% of the average cost associated with an employee 56 to 65 years old. In reviewing losses for employees 36 to 45 years old in comparison to those 46 to 55 years old, there is a nearly 21% increase in average total Incurred costs.
Employee Tenure
Beyond the age of the employee, our analysis shifted to the evaluation of whether new employees or those with lower tenure generated higher claim costs than longer term employees. In addition, with the discussions around the aging workforce, we wondered if employees with longer periods of employment had higher loss costs.

In considering the Non-Zero claims only, it appeared the longer the tenure, the higher the costs. Part of that could be contributed to higher salaries, in addition to employee age.

Average Costs per Claim per Employee Tenure – Non-Zero
Surprisingly, while there was a slight contrast between the percentage of the claim paid and the percentage of the claim outstanding for the newer tenured employees versus those that had been with their employer five to twenty years at the time of loss, there was little variability between the total loss costs incurred. The lowest average total incurred was for the employees with one to two years of tenure at $34,530. The highest average was for the employees with over 20 years of tenure at $37,853. With that, the range difference was less than 10% over the six categories considered.

Average Costs per Claim by Employee Tenure – Lost Time

[Graph showing average costs per claim by employee tenure group with values for each tenure group.]

- 0-1: $31,843
- 1-2: $30,386
- 2-5: $30,037
- 5-10: $29,531
- 10-20: $30,410
- >20: $31,335
- All Groups: $30,526
Jurisdiction

Due to the variety of laws and regulations associated with workers' compensation and the individual impact on each state and the employers, the database was analyzed with an emphasis on the state in which the loss occurred. In order to increase the credibility of the data considered for each specific state, only those states with at least 1,000 Non-Zero claims or 150 Lost Time claims were considered.

In comparing the average cost per Non-Zero claim for those 33 states with at least 1,000 claims in the database from 2001 to 2010, California, Alaska, Wisconsin and New York had the highest average cost per claim. California’s average cost per Non-Zero claim exceeded the total group’s average by 78% with an average of $12,902 per claim versus $7,271.

Average Total Incurred per Claim by State 2001 to 2010 – Non-Zero Claims
When considering only Lost Time claims, 35 states had at least 150 claims in the database. Georgia, South Carolina and Virginia top the list with the highest average cost per claim. Georgia’s average cost of $60,443 exceeds the group’s average of $34,389 by nearly 76%.

Average Total Incurred per Claim by State 2001 to 2010 – Lost Time Claims

<table>
<thead>
<tr>
<th>State</th>
<th>Average Total Incurred per Claim 2001 to 2010 – Lost Time Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>$52,354</td>
</tr>
<tr>
<td>SC</td>
<td>$42,312</td>
</tr>
<tr>
<td>VA</td>
<td>$42,606</td>
</tr>
<tr>
<td>TN</td>
<td>$41,479</td>
</tr>
<tr>
<td>NM</td>
<td>$35,302</td>
</tr>
<tr>
<td>NH</td>
<td>$37,870</td>
</tr>
<tr>
<td>LA</td>
<td>$39,282</td>
</tr>
<tr>
<td>OK</td>
<td>$35,341</td>
</tr>
<tr>
<td>NV</td>
<td>$36,732</td>
</tr>
<tr>
<td>FL</td>
<td>$36,647</td>
</tr>
<tr>
<td>CA</td>
<td>$31,191</td>
</tr>
<tr>
<td>IL</td>
<td>$30,492</td>
</tr>
<tr>
<td>KS</td>
<td>$32,594</td>
</tr>
<tr>
<td>CO</td>
<td>$33,141</td>
</tr>
<tr>
<td>MO</td>
<td>$32,573</td>
</tr>
<tr>
<td>AK</td>
<td>$31,203</td>
</tr>
<tr>
<td>All</td>
<td>$28,929</td>
</tr>
</tbody>
</table>

Average Paid
Average Reserve
Hospital Employee Safety and Workers’ Compensation Benchmark Study 2011

If you are interested in receiving electronic copies of the Hospital Employee Safety and Workers’ Compensation 2011 Benchmark Study or if you are interested in learning about or expressing interest in participating in a 2012 Benchmark Study and evaluating how your organization compares, please contact us today.

BEECHER CARLSON

800.657.0243        beechercarlson.com