Seminar on Reinsurance

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Westin Philadelphia
Philadelphia, PA
Workers Compensation Large Losses

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NCCI
LARGE CLAIMS DECONSTRUCTED
A large claim is defined as exceeding $1M in incurred loss.
Development types for Large Claims

- **FAST** ELC
  - Exceed $1M within 2 years of injury

- **SLOW** ELC
  - Exceed $1M 2 years or more after injury
Frequency of Large Claims per 10K Lost-Time Claims

Pre-Great Recession

Recession

Recovery

Accident Year

2002 2008 2012 2021

Frequency of Large Claims per 10K Lost-Time Claims

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Deconstructing Frequency of **FAST**\(_{ELC}\) per 10K Lost-Time Claims

Burns, Spinal Cord Injuries, and Traumatic Brain Injuries (B, SCI, TBI) and Other

![Graph showing the frequency of FAST\(_{ELC}\) per 10K Lost-Time Claims over time.](image-url)
Deconstructing Frequency of $SLOW_E^{ELC}$ per 10K Lost-Time Claims
Degenerative Disc Disorders, Pain and Other

<table>
<thead>
<tr>
<th>Accident Year</th>
<th>Degenerative Disc Disorders</th>
<th>Pain and Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>2013</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>2014</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>2015</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>2016</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>2017</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>2018</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>2019</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>2020</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>2021</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Top Causes and Injuries for workers with large claims

**FAST**<sub>ELC</sub>  
Caused by **Fall or Slip from Elevation** and **Motor Vehicle Accidents**  
Resulting in **Fractures**  
Primarily injuring **Multiple Body Parts**

**SLOW**<sub>ELC</sub>  
Caused by **Strain or Injury by Lifting**  
Resulting in **Strains**  
Primarily injuring **Lower Back**
### Occupations of injured workers with large claims

<table>
<thead>
<tr>
<th>Occupation</th>
<th>FAST&lt;sub&gt;ELC&lt;/sub&gt;</th>
<th>SLOW&lt;sub&gt;ELC&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction-Related</td>
<td>25–31%</td>
<td>20–24%</td>
</tr>
<tr>
<td>Operation of Motor Vehicles</td>
<td>8-11%</td>
<td>8-10%</td>
</tr>
<tr>
<td>Installation of Machines and Equipment</td>
<td>4-5%</td>
<td>4-6%</td>
</tr>
</tbody>
</table>
Occupations of injured workers with large claims

- Instructional and Medical Professionals: 5-7%
- Clerical: 4-6%
Age at injury for a worker with $\text{FAST}_{\text{ELCs}}$ and $\text{SLOW}_{\text{ELCs}}$
Injury Types for injured workers with large claims

15% result in Fatalities

Nearly 33% result in Permanent Total Injuries

How are these differences reflected in severity?

Over 75% of Slow ELC are classified as Other, which includes Permanent Partial Injuries

Results are at 5 years after injury

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Deconstructing Large Claim Severity
Average Claim Cost ($ in Millions)

Similar amount of indemnity

FAST_{ELC} 3.0

MEDICAL

INDEMNITY

SLOW_{ELC} 1.6
Deconstructing Medical Service Costs

Year 1
- Physician: 44%
- Hospital: 27%
- Medical Supplies: 10%
- Drugs: 9%
- Other: 10%

Year 10
- Physician: 27%
- Hospital: 34%
- Medical Supplies: 10%
- Drugs: 9%
- Other: 10%
Deconstructing Medical Service Costs

FAST<sub>ELC</sub>
Burns, SCI, TBI

Year 1
- Hospital: 68%
- Physician: 100%
- Drugs: 0%
- Medical Supplies: 0%
- Other: 0%

Year 10
- Hospital: 56%
- Physician: 0%
- Drugs: 0%
- Medical Supplies: 0%
- Other: 0%
Deconstructing Medical Service Costs

Year 1

- Medical Supplies: 25%
- Drugs: 29%
- Hospital: 17%
- Physician: 100% - 68% = 32%
- Other: 100% - 68% = 32%

Year 10

- Medical Supplies: 25%
- Drugs: 29%
- Hospital: 100% - 25% - 29% = 46%
- Physician: 100% - 25% - 29% - 46% = 0%
Distribution of Other Medical Cost Category

- Home Health: 57%
- Skilled Nursing: 18%
- Transportation: 12%
- Miscellaneous: 3%

For Other Medical Cost Categories:
- All Other: 57%
- Burn, SCI, TBI: 77%
Deconstructing Medical Service Costs

Year 1
- Physician: 35%
- Hospital: 27%
- Drugs: 19%
- Medical Supplies: 10%
- Other: 0%

Year 10
- Physician: 35%
- Hospital: 27%
- Drugs: 19%
- Medical Supplies: 10%
- Other: 0%
Both Non-Opioid and Opioid Share of Prescription Drugs Have Been Steadily Decreasing
Price pressure on the costs for large claims

<table>
<thead>
<tr>
<th>Medical Service Category</th>
<th>Inflation Rate as of March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician care</td>
<td>1.0%</td>
</tr>
<tr>
<td>Hospital <em>inpatient</em> care</td>
<td>3.5%</td>
</tr>
<tr>
<td>Hospital <em>outpatient</em> care</td>
<td>1.7%</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>2.4%</td>
</tr>
<tr>
<td>Medical supplies</td>
<td>7.7%</td>
</tr>
<tr>
<td>Home health and hospice care</td>
<td>7.6%</td>
</tr>
<tr>
<td>Nursing home care</td>
<td>5.7%</td>
</tr>
<tr>
<td>Transportation services</td>
<td>14.6%</td>
</tr>
</tbody>
</table>
Summarizing Large Claims

1. Relative frequency trends indicate long-term declines
   - Burns, Spinal Cord Injuries, Traumatic Brain Injuries
   - Degenerative Disc Disorders and Pain

2. Identifying leading causes of injury
   - Fall or Slip from Elevation
   - Motor Vehicle Accidents
   - Strain or Injury by Lifting

3. Medical services exhibit varying inflation and utilization
   - Home Health Care
   - Prescription Drugs