

## COMPSCOPE<sup>TM</sup> BENCHMARKS FOR ILLINOIS, 17TH EDITION

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State Report

Summary of Major Findings

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### **SUMMARY OF MAJOR FINDINGS FOR ILLINOIS**

Recent policy discussions in Illinois have focused on reducing workers' compensation costs and making the state more attractive to businesses. Among the areas of interest are causation of the injury, medical fee schedules, insurance premiums, and permanent partial disability benefits. The CompScope™ series of reports for Illinois provides ongoing annual monitoring of how indemnity benefits, medical payments, and benefit delivery expenses per claim change over time, as well as how the Illinois workers' compensation system compares with other study states on these key metrics. This edition analyzes claims with injury dates between 2010 and 2015 (evaluated as of March 31, 2016). In some cases, we used a longer time frame to supply a historical context for key metrics and to provide a broader context for evaluating effects of changes related to the 2011 reforms in Illinois and, where relevant, we include findings from other recent Workers Compensation Research Institute (WCRI) studies to provide a more comprehensive picture of the Illinois workers' compensation system.

#### **MAJOR FINDINGS FOR ILLINOIS**

The major findings are as follows:

- The average total cost per claim with more than seven days of lost time decreased 6.4 percent since 2010, due mainly to the reduction in medical fee schedule rates (effective in 2011). Compared with the other study states, total costs per claim in Illinois remained higher than typical for 2013/2016 claims.
- <u>Indemnity benefits per claim</u><sup>4</sup> were higher than those in the other study states, reflecting <u>system features</u> and processes related to lump-sum settlements and duration of temporary disability.
- Trends in <u>indemnity benefits per claim</u> reflect growth in <u>wages of injured workers</u>, especially in 2015, a
  decrease in the <u>percentage of claims with lump-sum settlements</u>, and small changes in the average <u>lump-sum payment per claim</u>.
- The average total <u>litigation expense per claim</u><sup>5</sup> was typical in Illinois. <u>Litigation expenses per claim</u> grew faster in Illinois than in all other study states.
- Medical payments per claim were in the higher group of study states for 2013/2016 claims. Prices paid for professional (nonfacility) services were one of the drivers.

<sup>2</sup> The terms *typical* and *median study state* are used interchangeably in this study.

<sup>&</sup>lt;sup>1</sup> Information on House Bill 1698 can be found here.

<sup>&</sup>lt;sup>3</sup> 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, with experience through March 31, 2016. Other injury year/evaluation combinations are denoted similarly.

<sup>&</sup>lt;sup>4</sup> Included in indemnity benefits are payments for temporary disability, permanent partial disability, and/or lump-sum settlements. Settlements may include some amount for future medical payments.

<sup>&</sup>lt;sup>5</sup> Litigation expenses reflect mainly defense attorney payments per claim (with payments greater than \$500) and medical-legal expenses such as payments for medical-legal evaluations and reports, independent medical examinations (IMEs), depositions, medical expert fees, and medical testimony. Not all medical-legal expenses are related to litigation.

## TOTAL COSTS PER CLAIM DECREASED 6 PERCENT SINCE 2010 (36 MONTHS), BUT STILL HIGHER THAN MOST OTHER STUDY STATES

The average total cost per claim with more than seven days of lost time in Illinois was 21 percent higher than the cost in the median study state for 2013 injuries evaluated as of the first quarter of 2016. Since 2010, total costs per claim were reduced by 6.4 percent. This decrease mainly reflects the impact of the 30 percent reduction in the fee schedule rates for all medical services, effective in 2011. Some of the decrease in total costs per claim from 2010 to 2013 (at 36 months of maturity) was offset by a 21 percent growth in benefit delivery expenses per claim (medical cost containment expenses and litigation expenses).

Between 2012 and 2015, based on claims with an average maturity of 12 months, total costs per claim in Illinois grew moderately, reflecting small to moderate increases in medical payments per claim, indemnity benefits per claim, and benefit delivery expenses per claim.

## INDEMNITY BENEFITS PER CLAIM WERE HIGHER THAN OTHER STUDY STATES, REFLECTING SYSTEM FEATURES AND PROCESSES

<u>Indemnity benefits per claim</u> with more than seven days of lost time in Illinois were higher than those in the median study state in 2013 (evaluated as of 2016).<sup>6</sup> This result reflected longer <u>duration of temporary disability</u> coupled with more <u>frequent and more costly permanent partial disability (PPD)/lump-sum settlements</u>.

In Illinois, temporary total disability (TTD) benefits are paid at a rate equal to 66% percent of the worker's preinjury wage, subject to a maximum set at 133% percent of the statewide average weekly wage (SAWW); in most study states the maximum benefit rate is set at 100 percent of the SAWW. The higher weekly benefit maximum in Illinois than in other study states likely contributed to higher-than-typical average weekly benefit rates. In addition, compared with the other study states, Illinois had among the largest gaps between the maximum weekly TTD benefit rate (\$1,362) and PPD benefit rate (\$755). This difference in benefit rates likely affects the duration of temporary disability benefits and proportion of claims with temporary disability and PPD benefits.

One important component of indemnity benefits is the duration of temporary disability benefits. In 2013 (evaluated as of 2016), Illinois had a longer <u>duration of temporary disability</u> benefits than most other study states. On average, injured workers stayed away from work for 19 weeks compared with 13 weeks in the median of states with PPD benefit systems. Longer-than-typical duration of temporary disability in Illinois might be related to the lack of limits on duration of benefits, except as indicated in the PPD schedule. In contrast, other study states have features that lead to lower average duration, such as statutory caps on temporary disability benefits and allowing termination or modification of TTD benefits without a formal hearing.

One <u>provision</u> of the 2011 reforms, the introduction of the American Medical Association (AMA) *Guides*<sup>8</sup> for the evaluation of impairment, may have a long-term impact on both the percentage of claims with

<sup>&</sup>lt;sup>6</sup> <u>Indemnity benefits</u> were the largest component of total costs in Illinois, accounting for 44 percent of all paid dollars for 2013/2016 claims and 49 percent of all paid dollars for 2011/2016 claims.

<sup>&</sup>lt;sup>7</sup> A general classification of indemnity benefit systems used in this report can be found here.

<sup>&</sup>lt;sup>8</sup> The reforms added a new section in the Act: Section 8.1b: AMA Guides.

PPD/lump-sum settlements and the average PPD/lump-sum payment per claim. Such an impact can be realized if the ratings for determination of the degree of impairment are applied consistently in the majority of cases. It is important to note that, under the new legislation, the degree of disability is determined by five factors: the level of impairment (AMA rating); the injured worker's occupation, age, and future earning capacity; and evidence of disability corroborated by medical records. The legislation specifies that the AMA *Guides* will be used to set the ratings, yet there is no provision for automatic admissibility of the ratings when determining the overall degree of disability. System stakeholders noted some observations: starting in 2014, more cases have been reaching maximum medical improvement when an evaluation of impairment rating is done; and when submitted, the AMA rating is generally considered by arbitrators. Furthermore, not all cases need an impairment rating; for instance, when the negotiated amount is relatively small, the parties may decide that the cost of obtaining the rating is not reasonable compared with the amount in dispute. Prior to the 2011 amendments and introduction of the AMA *Guides*, there was no part of the statute that provided any instructions to the Illinois Workers' Compensation Commission (IWCC) with respect to determining PPD benefits. As a result, PPD benefits were awarded based only on historical precedents, applying multiple factors.

In Illinois, a PPD benefit is often paid as a settlement (ending the insurer's liability for future payments) after the injured worker completes medical treatment and is at maximum medical improvement. That is why 38 percent of Illinois claims with more than seven days of lost time received settlements, higher than 24 percent in the median study state in 2013 (for claims with an average maturity of 36 months). The average lump-sum payment per claim with more than seven days of lost time in Illinois was in the middle of the states with PPD benefit systems for 2013/2016 claims. For 2011/2016 claims, the average lump-sum payment per claim was among the highest of the PPD study states. Note that in Illinois, claims with settlements developed slowly over time. For instance, 8 percent of the claims with injuries in 2011 in Illinois settled between 48 and 60 months after the injury. In most other study states, this proportion varied between 3 and 5 percent. This means that any sizeable impact from legislative or behavior changes related to PPD/lump-sum settlements in Illinois may be seen partially, until data for more mature claims become available.

## TRENDS IN INDEMNITY BENEFITS REFLECT: GROWTH IN WAGES, DECREASE IN PERCENTAGE OF CLAIMS WITH LUMP-SUM SETTLEMENTS, SMALL CHANGES IN LUMP-SUM PAYMENTS PER CLAIM

Aspects of the Illinois <u>post-recession economy</u> likely contributed to the trends in indemnity benefits per claim. According to external sources, <sup>10</sup> Illinois' recession was more severe than the nation's, and recovery in the state has been slower. The state has lagged behind the region and the country on income, output, and job growth. Illinois experienced considerable changes in employment structure by industry, especially for <u>manufacturing</u>. Jobs in manufacturing have not been recovered in Illinois since the peak of the recession. In contrast, almost all nearby states experienced employment gains in manufacturing. Consistent with changes in the Illinois economy, the <u>proportion of claims</u> with more than seven days of lost time decreased in high-risk services (package delivery, hotels, and hospital facilities), manufacturing, and low-risk services (schools,

<sup>&</sup>lt;sup>9</sup> In 2011, the <u>Illinois Workers' Compensation Commission</u> guidance to arbitrators provided that they do not need an impairment rating to approve settlement contracts, and they are not prevented from awarding PPD benefits at a hearing if there is no impairment rating on the record.

<sup>&</sup>lt;sup>10</sup> Moody's Analytics' State of Illinois Economic Forecast, January 2015.

commercial services and repair). Changes in the industry composition likely affected wage growth, and in 2015, the growth in the <u>average weekly wage of injured workers</u> in Illinois was faster (4.9 percent) than in the median study state (2.1 percent). Furthermore, the average <u>duration of temporary disability</u> decreased one week after 2010 for claims with an average maturity of 36 and 48 months; duration of temporary disability changed little for less mature claims.

Payments for permanent disability benefits and lump-sum settlements are another component that may affect trends in indemnity benefits. The <u>percentage of claims with settlements</u> in Illinois decreased between 4 and 5 points, depending on claim maturity, after 2009. Illinois was one of the two study states that experienced a decrease in the proportion of claims with <u>settlements</u>; most other states showed steady increases. System participants indicated that this result likely reflects the impact of the recession and especially slower recovery in Illinois, when higher unemployment rates might have created limited opportunities for injured workers to return to work with their preinjury employer or to find a job with a new employer.

The trend in the <u>average lump-sum payment per claim</u> changed little in Illinois after 2009 (claims at 12 to 36 months). For claims with an average maturity of 48 months, there was a 3 percent decrease in the average lump-sum payment per claim. In Illinois, the impairment rating is one of five factors considered in the determination of the overall disability of injured workers, and the application of AMA *Guides* may have had little impact.

#### TYPICAL LITIGATION EXPENSES PER CLAIM, ALTHOUGH GROWING FASTER THAN ALL STUDY STATES

Litigation expenses are another important metric to monitor related to the reforms. One component of litigation expenses is defense attorney payments. In Illinois, defense attorneys were involved in 42 percent of claims with more than seven days of lost time, which was higher than in other study states in 2013 (evaluated as of 2016). Higher defense attorney involvement likely reflects some features of the Illinois workers' compensation system. Defense attorneys are involved when the application (Application for Adjustment of Claim) to start a claim is filed with the Illinois Workers' Compensation Commission (IWCC). Also, Illinois had among the lowest defense attorney payments per claim with payments greater than \$500, compared with other study states in 2013 (evaluated as of 2016). System stakeholders indicated that the discovery in Illinois is typically done by claims adjusters, and this may have helped Illinois to have lower-than-typical defense attorney payments per claim.

Another component of litigation expenses is medical-legal expenses: medical reports, independent medical examinations (IMEs), and depositions. Compared with other study states, Illinois had among the highest medical-legal expenses per claim in 2013 (evaluated as of 2016). Medical-legal expenses per claim of \$2,898 in Illinois were 49 percent higher than in the median study state. Thirty-three percent of claims in Illinois had at least one medical-legal expense compared with 24 percent in the median study state. System participants suggested that this result might reflect the more frequent use of IMEs and the higher cost of IMEs in Illinois than in other study states. In the past, IMEs were widely used to determine whether treatment was

<sup>&</sup>lt;sup>11</sup> A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements.

 $<sup>^{12}</sup>$  There are two ways to file a workers' compensation claim in Illinois: by notifying the employer or by filing a claim with the IWCC.

<sup>&</sup>lt;sup>13</sup> Discovery is a pre-trial procedure requiring disclosure of requested information to the other party.

reasonable and necessary. As part of the 2011 reforms, Illinois introduced new utilization review standards allowing utilization review to be considered during claim arbitration. Utilization review conclusions are now based on nationally recognized peer review studies and evidence-based medicine. The new legislation also added that, if a provider fails to provide a report of clinical information needed to support the utilization review request, the cost of the medical treatment may not be compensable. During the study period, the cost of medical-legal expenses and defense attorney payments per claim grew substantially in Illinois at all claim maturities. The growth rates were the highest of all study states. System participants explained that during the recession period, IMEs were used more often to determine the end of the healing period and to determine release to work. Prior to 2011, IMEs were used in various ways in Illinois: as part of the utilization review process, to determine permanency, to determine the need for medical treatment, and to terminate TTD benefits.

## MEDICAL PAYMENTS PER CLAIM WERE IN HIGHER GROUP OF STUDY STATES; PRICES PAID FOR PROFESSIONAL SERVICES WERE ONE FACTOR

For 2013 injuries (evaluated as of 2016), the average medical payment per claim with more than seven days of lost time in Illinois was in the higher group of study states. As documented in CompScope<sup>TM</sup> Medical Benchmarks, 14</sup> higher-than-typical medical payments per claim in Illinois reflected higher prices paid for professional services (except for evaluation and management services) and higher utilization, largely driven by physical medicine. In contrast, the average hospital payment per claim (both for inpatient and outpatient care) in Illinois was in the middle group of study states (Radeva, 2016). In 2011, Illinois reduced fee schedule rates by 30 percent for all medical services. Before 2011, Illinois had the highest medical payments per claim of all study states.

Recent policy discussions in Illinois focused on further changes in reimbursements to providers. Various WCRI studies comparing fee schedule rates and prices paid for professional (nonfacility) services among a large group of states can inform the policy debate in Illinois. *Designing Workers' Compensation Medical Fee Schedules, 2016* benchmarked fee schedule rates for professional services in 43 states with workers' compensation medical fee schedules against Medicare rates in 2016 (Fomenko and Liu, 2016). The study used maximum allowable fees as reported in state fee schedules. The 2016 data indicate that overall fee schedule rates for professional services in Illinois were 74 percent higher than Medicare rates in the state. This percentage was higher than in other states with price regulations. The ratio of the Illinois workers' compensation fee schedule to the Illinois Medicare fee schedule was among the highest of the study states for major radiology (magnetic resonance imaging) and surgery (invasive surgical procedures, such as arthroscopic surgeries), and typical for physical medicine. Illinois' workers' compensation fee schedule rates for evaluation and management services (office visits) were similar to the Medicare rates in Illinois. Many study states set up their fee schedule rates for evaluation and management services between 20 and 40 percent over the Medicare rates. This decision may reflect state-specific concerns related to access to care or injured workers' outcomes.

Another WCRI study, Medical Price Index for Workers' Compensation, Eighth Edition, examines actual prices paid for professional services, which reflect network discounts and other price negotiations between

<sup>&</sup>lt;sup>14</sup> Radeva. 2016. CompScope™ Medical Benchmarks for Illinois, 17th Edition.

payors and medical providers. <u>Prices paid</u> in 2015 were higher in Illinois than in other study states, except for <u>evaluation and management</u> services. <sup>15</sup>

After the reduction in the fee schedule rates in 2011, <u>medical payments per claim</u> in Illinois grew on average 3.1 percent per year (claims with an average maturity of 12 months). One component of medical payments, <u>prices paid for professional services</u>, grew slightly from 2012 to 2015. The small changes in prices paid were consistent with the design of the Illinois medical fee schedule to update fee schedule rates with the annual changes in the Consumer Price Index for All Urban Consumers (CPI-U), which increased less than 2 percent per year since 2012.

<sup>&</sup>lt;sup>15</sup> Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC). "2015" reflects prices paid from January to June.

### Introduction and How to Use This Analysis

This is the 17th edition of an annual series of analyses that benchmarks the performance of state workers' compensation systems. This study focuses on income benefits, costs, use of benefits, duration of disability, litigiousness, benefit delivery expenses, timeliness of payments, and other metrics. The CompScope™ benchmarking series focuses on the performance of the benefit delivery system and does not address insurance markets, pricing, or regulations. A companion study to this annual series—the CompScope™ Medical Benchmarks—focuses on the costs, prices, and utilization of medical care received by injured workers. It examines these medical services in the aggregate, by type of provider, and by type of medical service. Related Workers Compensation Research Institute (WCRI) studies benchmark state fee schedules and worker outcomes.

The unit of analysis in the CompScope<sup>™</sup> benchmarking series is the individual workers' compensation claim, so most results are reported on a per claim basis. Therefore, changes in claim frequency do not affect the measures we report.

The annual benchmark studies provide dual perspectives:

- How have the Illinois system performance metrics changed over time (trends) using claims that arose between October 2009 and September 2015, usually with an average of 12, 24, and/or 36 months of experience?
- How does Illinois compare with other states—specifically with 17 other large states that were selected because they are geographically diverse; represent a range of system features; and represent the range of states that are higher, near the middle, and lower on costs per claim? Income benefit payments per claim in the median state in this group are similar to the median among all U.S. states (see "Data and Methods").

#### How to Use This Benchmarking Report

The format of this edition of the CompScope™ study is designed to make the findings easily accessible and still provide a rich and detailed set of benchmarks for those who want to drill down beneath the major findings.

- For those who want to get quickly to the bottom line, there is a short narrative <u>summary of major findings</u> and a <u>slide presentation</u> on major findings. The slides provide explanatory figures and charts, along with interactive links to the more detailed figures and tables that underlie the highlighted major findings.
- For those who want to drill down on a specific issue, the narrative summary and slide presentation both have links from each finding or slide to the underlying detailed tables and graphs.
- For those who are not familiar with the CompScope™ benchmarking studies, there is an "Information for First-Time Users" section to provide detail about the key benchmarks we analyze, detail about the data we use and adjustments we make to those data, and some presentational explanations.
- For those seeking a wide-ranging reference book to address questions of interest, there are many detailed tables and graphs that are available for browsing or that may be accessed through links in the "Quick Reference Guide to Figures and Tables."

• The data and methods are fully described in the <u>Technical Appendix</u>. This report contains a short summary of the *Technical Appendix* entitled "<u>Data and Methods</u>."

Note: Each page of this report contains a "Back to Previous View" button which allows the reader to click on a link to another section and then return to the original page, eliminating the need for bookmarking.

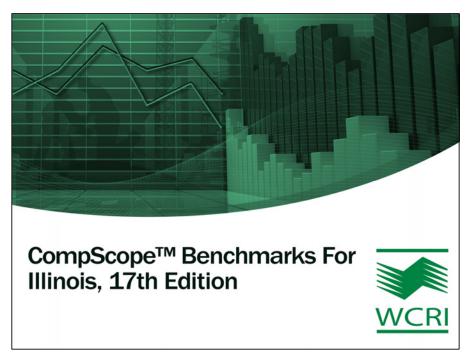
### INTRODUCTION TO MAJOR FINDINGS SLIDES

The following pages present a slide discussion of *CompScope<sup>TM</sup> Benchmarks for Illinois*, 17th Edition. The slides highlight the major findings discussed in the "Summary of Major Findings" section and provide explanatory figures and charts. Notation on the bottom of the slides specifies the injury year and/or maturity of the data shown, as applicable. The notes to the right of some slides provide additional technical or substantive information pertinent to that slide. For example, the notes might contain links to external summaries of legislation or workers' compensation agency reports, a reference to a related figure or table, or an explanation of a relevant workers' compensation system feature. References to source information and definitions of key terms or abbreviations are located below the slide to which they apply. To view the notes, references, and/or definitions, the document magnification on your computer may need to be set at 100 percent or lower. Please note that the slides are also interactive, linking to other areas of this report where useful. For example, bar charts generally link to the box plot figures that contain the numbers underlying the chart. Links in the slides are indicated by underlining.

When describing the performance of a state in this report, we generally use the following criteria and terms. Other words used to describe an increase include *growth* and *rise*. Other words to describe a decrease include *fall*, *drop*, and *decline*.

Multistate Values	Comparison with Median State			
Higher	More than 10 percent above median			
Lower	More than 10 percent below median			
Typical or close to	Within 10 percent above or below median			
Trends	Change in Cost Measures (annual average percentage)	Change in Frequency Measures (annual average percentage points)		
Very rapid increase	+9% and higher	+4 points and higher		
Rapid increase	+6% to 8.9%	+2 to 3.9 points		
Moderate increase	+3% to 5.9%	+1 to 1.9 points		
Flat, little change	+2.9% to -2.9%	+0.9 to -0.9 points		
Moderate decrease	-3% to -5.9%	-1 to -1.9 points		
Rapid decrease	-6% to -8.9%	-2 to -3.9 points		
Very rapid decrease	-9% and lower	-4 points and lower		

The thresholds in the multistate comparison above were chosen because a data point 10 percent above or below the median *usually, but not always*, indicates that the data point is notably different from the median. There are two exceptions. Sometimes the median state is part of a cluster of states with similar values that are all higher or lower than the remaining states. In that case, we describe a report state as being in the *higher*, *lower*, or *middle* group based on its cluster, not its relation to the median. In other cases, the range of states includes very different values, and even a state near the median differs from it by 10 percent or more. In that case, we would call that state *fairly typical* despite the criteria in the table. Review of the boxplots may help resolve any confusion.



The following pages are a slide discussion of CompScope™ Benchmarks for Illinois, 17th Edition. The slides highlight the major findings and provide explanatory figures and charts. Please note that the slides are also interactive, linking to other areas of this study where useful. Links are indicated by underlining.

### **Outline Of Report Content**

- Summary of major findings
- Slide presentation of major findings
- Summary of <u>data and methods</u>
- Information for first-time users of this report
- List of other WCRI studies of interest for Illinois
- Scope of CompScope™ multistate benchmarks
- Tables and figures: multistate comparisons & trends
- References
- Glossary
- Detailed data and methods: <u>Technical Appendix</u>

WCRI

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## **Major Findings For Illinois From** CompScope™, 17th Edition

- Total costs/claim decreased 6% since 2010 (36 months), but were still higher than most other study states
- Indemnity benefits per claim were higher than other study states, reflecting system features and practices
- Trends in <u>indemnity benefits</u> reflect: growth in <u>AWW</u>, decrease in <u>%</u> of claims with settlements, small changes in LS payments/claim
- Typical total <u>litigation expenses per claim</u>, although growing faster than all study states
- Medical payments per claim in higher group of study states, prices paid for professional services were one factor

Litigation expenses denote mainly defense attorney payments and medical-legal expenses allocated to individual claims

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Key: AWW: Average weekly wage (of injured workers). LS: Lump-sum settlements.

Naming convention (example 2013/16): The first year (2013) is the injury year, which we define as claims arising from October 1, 2012, through September 30, 2013; the second year (16) is the maturity of the claim (experience through March 31, 2016). This indicates 2013 claims at an average maturity of 36 months. We denote other injury year/evaluation combinations similarly.

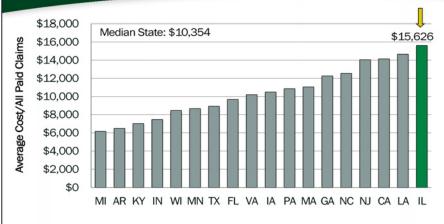
Note: The terms claim maturity and experience are used interchangeably.

The CompScope™ series of reports provides ongoing annual monitoring of how indemnity benefits, medical payments, and benefit delivery expenses per claim change over time, as well as how the Illinois workers' compensation system compares with other study states on these key metrics.

This CompScope™ report covers injury dates from 2010 to 2015 and payments through the end of March 2016. For some important key metrics used in this report, we use data for injuries before 2010 to provide a historical context for evaluating effects of changes related to the 2011 reforms in Illinois.

See a summary of the 2011 provisions in the section "Further Information on the 2011 Reforms in Illinois."

## IL Total Costs For All Paid Claims Were **Among The Highest Of Study States**



2013/16 All Paid Claims, Adjusted For Injury/Industry Mix And Wages

Definition: Total costs per claim: Combination of medical payments, indemnity benefits, and benefit delivery expenses (medical cost containment as well as litigation expenses, which include mainly payments for defense attorneys and medical-legal services).

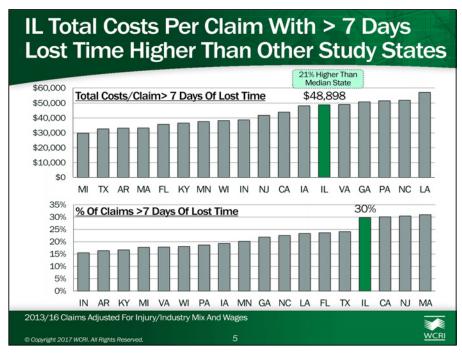
Note: Claims from nonfederal public employees (municipal, county, city, etc.) were included in the study. However, state employees were not included in the analyses because of comparability issues.

This slide provides the broadest view of the performance of the workers' compensation benefit delivery system. This measure of costs per claim uses all claims as its base—claims with indemnity benefits and claims that had only medical payments. Costs per all paid claims may be the best correlate of system cost.

We adjusted the data for interstate differences in injury and industry mix and for wages of injured workers to make the interstate comparisons more meaningful. Furthermore, using more mature claims provides a more appropriate basis for interstate comparisons, because the results are a better reflection of the ultimate costs per claim than the results for less mature claims.

The average total cost per claim for all paid claims in Illinois was among the highest of the study states for 2013 claims evaluated as of 2016. One factor that contributed to the higher costs for all paid claims was that relatively more workers in Illinois were off work for more

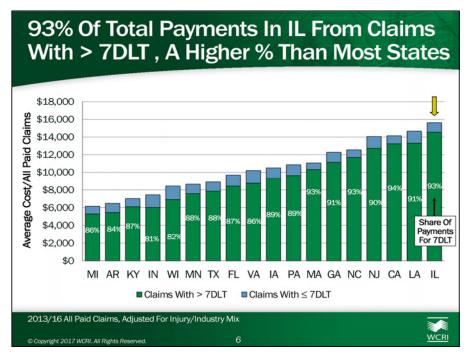
According to the National Council on Compensation Insurance, Inc., Illinois had among the lowest frequency of claims per 100,000 workers. The comparison is based on 45 states and the District of Columbia (Annual Statistical Bulletins 2014-2016, exhibit XII).



Note: The terms typical and median study state are used interchangeably in this study.

For claims with more than seven days of lost time, total costs per claim were higher in Illinois relative to other study states. As noted in previous editions of the report, costs per claim were among the highest of the study states for claims prior to the 2011 reforms (2008/11 claims). In 2011, Illinois reduced fee schedule rates for all medical services by 30 percent (effective for services on/after September 1, 2011).

We focus our analysis on claims with more than seven days of lost time because these claims account for the majority of total payments in each state. In Illinois, 30 percent of claims had more than seven days of lost time—among the highest of the study states. Claims with more than seven days of lost time in Illinois accounted for 93 percent of all paid dollars in 2013/16 (see next slide). The statutory waiting period for paying indemnity benefits varies by state, from a minimum of three days to a maximum of seven days. We put all states on the same basis by using a subset of claims with more than seven days of lost time to account for differences in the waiting period for benefits across states.



Key: 7DLT: Seven days of lost time.

Claims with more than seven days of lost time accounted for the majority of workers' compensation payments. The height of the bar represents total costs for all paid claims. The numbers refer to the proportion of total payments for claims with more than seven days of lost time.

At 93 percent, this proportion of total payments for 2013/16 claims with more than seven days of lost time was higher in Illinois than in most of the study states.

#### IL Higher Total Costs/Claim Driven Mainly By **Indemnity Benefits & Medical-Related Payments** \$40,000 \$40,000 Indemnity Benefits/Claim Medical Payments/Claim \$30,000 \$30,000 Average Payment/Claim \$20,000 \$20,000 \$10,000 \$10,000 \$10,000 \$10,000 Medical Cost Containment Litigation Expenses/Claim Expenses/Claim \$8,000 \$8,000 \$6,000 \$6,000 \$4,000 \$4,000

2013/16 Claims With > 7 Days Of Lost Time. Indemnity benefits are adjusted for injury/industry mix and wages; all other measures are adjusted for injury/industry mix.

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and/or lump-sum settlements. Indemnity benefits include lump-sum settlements, which may include some amount for future medical payments in many states. **Litigation expenses:** Payments for defense attorneys, medical-legal expenses, and ancillary legal expenses that are allocated to the individual claims. **Medical cost containment expenses:** Payments for bill review, case management, utilization review, and preferred provider networks allocated to individual claims. **Medical payments:** Payments for all medical services delivered to injured workers.

Definitions: Indemnity benefits: Payments for temporary disability, permanent partial disability payments,

\$2,000

For claims with more than seven days of lost time, total costs per claim were higher in Illinois than most of the other study states. The result was driven by indemnity benefits, medical payments per claim and medical cost containment expenses per claim. Another cost component, litigation expenses per claim, was similar in Illinois to the other study states. As discussed later, litigation expenses per claim grew faster in Illinois than in all study states.

Note that litigation and medical cost containment expenses are based on claims having these expenses allocated to individual claims.

This table shows the relative

with more than seven days of lost

Indemnity benefits were the largest component of total costs in Illinois, accounting for nearly 50 percent of total payments for 2011/16 claims. This explains why changes in indemnity benefits in Illinois have a relatively larger impact on the trend in the average total cost per claim.

contribution of each cost component to total costs for claims

# Indemnity Benefits Were Largest Component Of Total Costs In IL, Esp. At Longer Maturity

Key Cost Component Share Of Total Costs/Claim In IL	2013/16 (36 months)	2011/16 (60 months)
Indemnity Benefits	43.5%	48.7%
Medical Payments	41.6%	38.7%
Benefit Delivery Expenses	14.7%	12.3%
Medical Cost Containment Expenses	7.8%	5.8%
Litigation Expenses	6.9%	6.5%
Vocational Rehabilitation Provider Expenses	0.2%	0.3%
Total	100.0%	100.0%

Claims With > 7 Days Of Lost Time. Total costs and indemnity benefits are adjusted for injury/industry mix and wages; all other measures are adjusted for injury/industry mix.

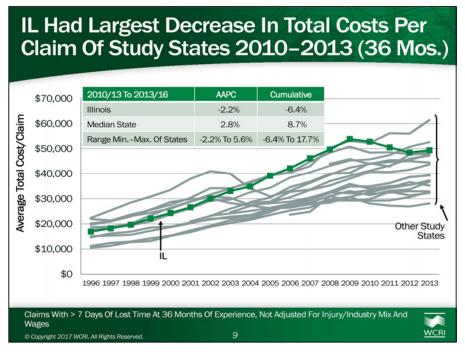
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Key: Esp.: Especially.

\$2,000

Definitions: Benefit delivery expenses: Payments for managing medical costs as well as litigation expenses, which include payments for defense attorneys and medical-legal services that are allocated to individual claims. Vocational rehabilitation provider expenses: Reflect only the payor portion of the costs of vocational rehabilitation services as reported in the insurance data and not the portion provided through state agencies, which could be significant in some states.

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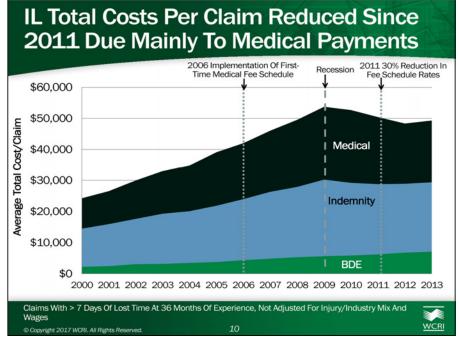
This longer-term view shows the trend in total costs per claim with more than seven days of lost time at an average 36 months of maturity.

The average total cost per claim decreased 6.4 percent in Illinois from 2010/13 to 2013/16, in contrast to other study states where costs per claim continued to grow. The decrease in costs per claim in Illinois mainly resulted from a decrease in medical payments. As part of the 2011 reforms, fee schedule rates for medical services (professional and hospital) were reduced by 30 percent.

Between 2012 and 2013 (36 months), total costs per claim increased 2.0 percent.

Key: AAPC: Annual average percentage change. Min.-Max.: Minimum-maximum. Mos.: Months.

*Note*: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.



Medical payments per claim were the largest factor in lowering Illinois total costs per claim. From 2009/12 to 2012/15 (claims with an average maturity of 36 months), total costs per claim decreased mainly due to a one-time reduction in the fee schedule rates for professional and hospital services. The average medical payment per claim decreased 15 percent (see next slide). Subsequent small changes in medical payments were consistent with the design of the Illinois medical fee schedule to update fee schedule rates with the annual changes in the Consumer Price Index for All Urban Consumers (CPI-U).

Key and definitions: Benefit delivery expenses (BDE): Expenses for managing medical costs and litigation-related expenses (defense attorney payments and medical-legal expenses) that are allocated to individual claims. Indemnity benefits: Payments for temporary disability, permanent partial disability, and/or lump-sum settlements (which may include some amount for future medical payments).

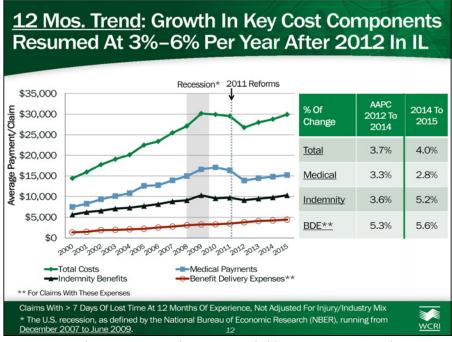
*Note*: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

#### 36 Mos. Trend: IL Total Costs/Claim Decrease Offset Partly By Growth In BDE Expenses/Claim 30% 30% BDE/Claim With BDE Total Costs/Claim 20% 20% 10% 10% Cumulative % Change 2010/13 To 2013/16 0% 0% -10% -10% -20% -20% 30% 30% Medical Payments/Claim Indemnity Benefits/Claim 20% 20% 10% 10% 0% 0% -10% -10% -20% -20% Claims With > 7 Days Of Lost Time At 36 Months Of Experience, Not Adjusted For Injury/Industry Mix And

Key: BDE: Benefit delivery expenses: Expenses for managing medical costs and litigation-related expenses that are allocated to individual claims. Mos.: Months.

The chart provides the cumulative percentage change from 2010 to 2013 (36 months) in total costs per claim and the main components for the 18 study states.

The overall decrease in costs per claim in Illinois was due to the decline in medical payments. In contrast, some of the decrease was offset by an increase in benefit delivery expenses per claim. The growth in benefit delivery expenses per claim was driven by medical cost containment expenses, defense attorney payments, and medicallegal expenses. The decrease in indemnity benefits per claim reflects some aspects of the recession and post-recession economy in Illinois, characterized by slower growth in employment and output.



We also examined the growth rates in Illinois based on less mature claims (12 months). Total costs per claim grew 4.0 percent in 2015, driven by medical payments, indemnity benefits, and benefit delivery expenses per claim. Key cost components also grew between 3.3 and 5.3 percent per year from 2012/13 to 2014/15.

Key: AAPC: Annual average percentage change. BDE: Benefit delivery expenses. Mos.: Months.

Definition: Indemnity benefits: Payments for temporary disability (total and partial), permanent partial disability benefits, and benefits paid in the form of a lump-sum settlement. All lump-sum payments (indemnity and medical) are reported as indemnity payments. This achieves consistency and comparability in this measure across all states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data.

Notes: The terms settlement and lump-sum payment are used interchangeably throughout this report to refer to lump-sum settlements. 2015 refers to 2015/16. Other injury year/evaluation combinations are denoted similarly.

## **Major Findings For Illinois From** CompScope™, 17th Edition

- Total costs/claim decreased 6% since 2010 (36 months), but were still higher than most other study states
- →Indemnity benefits per claim were higher than other study states, reflecting system features and practices
- Trends in indemnity benefits reflect: growth in AWW, decrease in % of claims with settlements, small changes in LS payments/claim
- Typical total litigation expenses per claim, although growing faster than all study states
- Medical payments per claim in higher group of study states, prices paid for professional services were one factor

Litigation expenses denote mainly defense attorney payments and medical-legal expenses allocated to individual claims

Illinois Indemnity Benefits Per Claim



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Key: AWW: Average weekly wage (of injured workers). LS: Lump-sum settlements.

#### **Higher Than Most Study States** \$30,000 Average Indemnity Benefit/Claim Median State: \$18,269 \$25,000 \$21.275 \$20,000 \$15,000 \$10,000 \$5,000 \$0

2013/16 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix And Wages Indemnity benefits include settlements, which may include some amount for future medical payments

Notes: All lump-sum settlement payments for compromise and release agreements are reported as indemnity benefits. This is done to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. Lump-sum settlements for future medical payments are not permitted in MA and TX (under most circumstances) and are not common in practice in MN and NJ. These differences can impact settlements and indemnity benefits per claim.

Included in indemnity benefits are mainly payments for temporary disability, permanent partial disability, and/or lump-sum settlements, which may include some amount for future medical payments.

Two major factors contributed to higher-than-typical indemnity benefits per claim in Illinois—more frequent and larger settlements and longer duration of temporary disability (see more on the next slide).

In general, the large variation in the average indemnity benefit per claim across the study states reflects a combination of factors, such as the average weekly wage of injured workers, the duration limits on benefits, the benefit rate, and the calculation of permanent partial disability/lump-sum benefits, including the ability to settle future medical benefits.

When analyzing interstate comparisons, we typically use claims with 36 months of maturity because they are a better reflection of the ultimate costs than claims with less experience.

TX AR MI FL NJ MN KY MA VA CA IL IA LA PA GA NC

# Factors Contributing To Higher-Than-Typical Indemnity Benefits Per Claim In IL

- Higher temporary disability benefits per claim:
  - Higher TTD weekly amounts; maximum TTD benefit based on 133 <sup>1</sup>/<sub>3</sub>% of SAWW
  - Longer duration of temporary disability
    - No limits on temporary disability benefits
    - Terminating temporary disability benefits may be more difficult than in some states
- Higher % of claims with lump-sum settlements, higher PPD/lump-sum payments per claim
  - PPD and/or lump-sum benefits are based on several factors in addition to physical impairment

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Key: AMA: American Medical Association. IWCC: Illinois Workers' Compensation Commission. MMI: Maximum medical improvement. PPD: Permanent partial disability. SAWW: Statewide average weekly wage. TTD: Temporary total disability.

**Determination of PPD benefits (continued from right):** For injuries occurring on or after September 1, 2011, Illinois introduced the AMA *Guides* for determination of the degree of impairment. Impairment rating is one of five factors in determining the degree of disability. Prior to 2011, PPD/lump-sum awards were calculated on a case-by-case basis, relying on the experience of adjusters, arbitrators, and prior court decisions. The determination of PPD benefits was not based on written/published standards; physician ratings were not considered. In addition, prior to the 2011 changes, PPD awards in Illinois were calculated considering many factors, such as the worker's age, occupation, nature of the accident/injury, and ability to return to work.

There are several factors contributing to higher-than-typical indemnity benefits per claim in Illinois:

(1) Higher average weekly benefit amounts, in part driven by a higher statutory maximum (133½ percent of SAWW). In addition, longer duration of temporary disability. Illinois does not have limits on duration of benefits, except as indicated in the PPD schedule. TTD benefits are paid until the injured worker has returned to work or has reached MMI. According to system stakeholders, terminating TTD benefits in Illinois is somewhat more difficult than in other states.

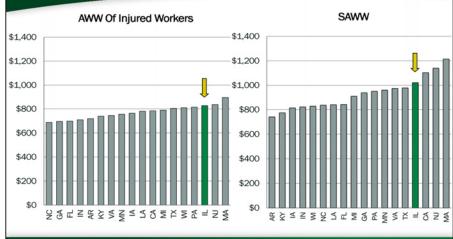
If an injured worker is released to a full-duty job, the employer can unilaterally terminate benefits without prior notice. However, if the injured worker contests the termination of benefits by filing a petition for review (Section 19b), a hearing is scheduled. The employer may also file a petition for a hearing as long as it keeps paying TTD benefits until the final decision is issued (within 180 days) or the injured worker has reached MMI, or return to work.

If an injured worker is released to work with restrictions and no light-duty job is offered, TTD benefits continue until return to work.

(2) Determination of PPD benefits. PPD benefits in Illinois are calculated by considering several factors in addition to physical impairment. See more notes on the left.

In Illinois, PPD benefits are often paid in a lump-sum settlement, with the ability to settle future medical benefits.

# Average Weekly Wage In IL Among The Highest Of The Study States



2015/16 Claims With > 7 Days Of Lost Time, AWW Of Injured Workers Is Adjusted For Injury/Industry Mix

*Key:* **AWW:** Average weekly wage (of injured workers). **SAWW:** Statewide average weekly wage. **TTD:** Temporary total disability.

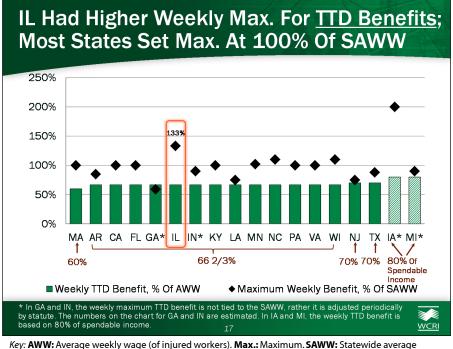
*Note*: The AWW is specific to the injured worker, while the SAWW is typically calculated by the state's Department of Labor and covers wages in all occupations and industries. SAWWs are as of July 1, 2015.

Most states tie indemnity benefits directly to wages, so the level of wages of injured workers and changes in the level of wages contribute directly to indemnity costs.

In Illinois, the average weekly wage of injured workers was higher relative to other study states. When adjusted for wages, the average weekly TTD benefit rate was also higher in Illinois than in other study states (see <a href="mailto:next slides">next slides</a>).

The <u>SAWW</u> in Illinois was higher, not only compared with the states included in this study but also compared with the U.S. average. According to the Quarterly Census of Employment and Wages published by the Bureau of Labor Statistics, the average weekly wage of Illinois workers in the private sector (all industries) was seventh highest in the nation in 2015.

According to system participants, determination of the AWW in Illinois can be problematic in some cases where an injured worker did not work a full 52 weeks prior to the injury (for instance, seasonal workers). Generally, AWW is based on the worker's pre-tax wages during the 52 weeks prior to the accident. The ambiguity in the method regarding the calculation of the AWW when an employee works less than 40 hours a week or less than 52 weeks may lead to higher weekly benefits, especially for construction workers (820 ILCS 305/10).



Key: AWW: Average weekly wage (of injured workers). Max.: Maximum. SAWW: Statewide average weekly wage. TTD: Temporary total disability.

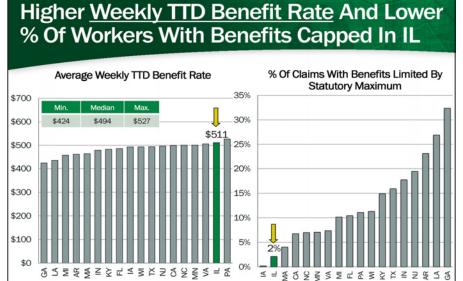
Notes: In GA and IN, the weekly maximum TTD benefit is adjusted periodically by statute rather than being tied to annual changes in the SAWW, as it is in the other study states. The SAWW shown for GA and IN is for comparison purposes and is the average weekly wage in private employment for all industries from the U.S. Bureau of Labor Statistics.

See <u>Table 5</u> for a comparison of the statutory maximum weekly TTD benefits and SAWWs in the study states in 2015.

The major features of the benefit structure in each state are the statutory benefit rate, minimum and maximum benefit levels, and the definition of AWW.

In Illinois, TTD benefits are paid at a rate equal to 66% percent of the worker's preinjury wage, subject to a maximum set at 133% percent of the SAWW; in most study states, the maximum benefit rate is set at 100 percent of the SAWW. Due in part to this, only 2.1 percent of claims in Illinois had TTD benefits constrained by the statutory weekly benefit maximum in 2015/16. In the typical state, this figure was 10.8 percent.

In two states, Iowa and Michigan, benefits are paid at 80 percent of spendable income. We use the terms spendable income and earnings interchangeably. The Michigan Workers' Compensation Act refers to this approach as after-tax weekly wages; the Iowa Workers' Compensation Act describes this approach as weekly earnings. This approach, when compared with the approach that compensates two-thirds of workers' pretax earnings, leads to slightly higher benefit rates among lower-wage workers and lower benefit rates among higher-wage workers. Nationally, six states (Alaska, Connecticut, Iowa, Maine, Michigan, and Rhode Island) use a spendable earnings approach for paying income benefits.



Key: AWW: Average weekly wage (of injured workers). Max.: Maximum. Min.: Minimum. SAWW: Statewide average weekly wage. TTD: Temporary total disability.

*Note*: The average weekly TTD benefit rate is a function of the statutory benefit rate and the average weekly wage of injured workers. Workers' compensation benefits are not subject to either state or federal income tax.

2015/16 Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix. The average weekly TTD

benefit rate is adjusted for wages

In Illinois, the average weekly TTD benefit was among the highest of the study states due mainly to the higher maximum set at 133½ percent of the SAWW; in most study states, the maximum benefit rate is set at 100 percent of the SAWW. As a result of this, only 2.1 percent of claims in Illinois had TTD benefits limited by the statutory weekly benefit maximum in 2015/16. In the typical state, this figure was 10.8 percent.

Illinois regulations regarding the amount of compensation are described in 820 ILCS 305/8.

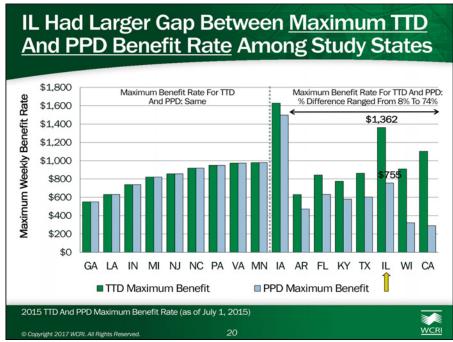
#### Illustration: Higher Weekly Benefit Max. In IL Likely A Factor In Higher Average Benefit Rate \$1,600 Illinois Maximum Weekly Average TTD Weekly Benefit Rate \$1,400 Benefit Rate Capped At 133 1/3 % Of SAWW If max at 100% of SAWW, \$1,200 28% of IL workers would have been affected \$1,000 \$800 Hypothetical State Maximum Weekly Benefit Rate Capped \$600 At 100% Of SAWW \$400 \$200 Statutory Minimum \$0 \$0 \$1,000 \$1,500 \$2,000 \$2,500 \$3,000 \$3,500 Hypothetical State IL Average Weekly Wage Of Injured Workers 2015/16 Claims With > 7 Days Of Lost Time, Not Adjusted For Injury/Industry Mix And Wages

Key: AWW: Average weekly wage. Max.: Maximum. SAWW: Statewide average weekly wage. TTD: Temporary total disability.

To illustrate the effect of the higher maximum in Illinois, we compared Illinois with a hypothetical state that has the same benefit structure for paying TTD benefits but the maximum was set at 100 percent of the SAWW.

In Illinois, an injured worker who receives \$2,000 per week in wages will receive \$1,335 (66% percent of wages) in TTD benefits. The maximum weekly TTD benefit in 2015 was \$1,362 (133½ percent of the SAWW). A similar worker in the hypothetical state with a maximum based on 100 percent of the SAWW would receive about \$1,000 per week in TTD payments. In Illinois, 28 percent of the injured workers received benefits between 100 and 133½ percent of the SAWW; this contributed to the higher-than-typical compensations relative to other study states.

TTD benefits are also subject to a minimum. The minimum benefit in Illinois is set at the lower of \$200 or 100 percent of the AWW of the injured worker in 2015. About 12 percent of the injured workers in Illinois were subject to the minimum for 2015/16 claims. This percentage was close to other study states with a similar limit for minimum benefits.



Key: AWW: Average weekly wage (of injured workers). PPD: Permanent partial disability. TTD: Temporary total disability.

Notes: Florida permanent impairment benefits are paid at 75 percent of the employee's average weekly TTD benefit, not to exceed the maximum weekly benefit under Florida law. As of July 1, 2015, the maximum TTD benefit was \$842, so we calculated the maximum PPD benefit as \$632, or 75 percent of \$842. Massachusetts is not included on this chart since the statutory maximum amount for scheduled benefits in the state is based on the statewide average weekly wage (SAWW) at the time of injury and, therefore, varies by claim.

This chart compares the level of the statutory weekly TTD benefit maximums and the weekly PPD benefit maximums as of 2015 across study states. The states are sorted according to the percentage difference between the TTD and PPD maximums.

In IL, the maximum weekly TTD benefit was set at \$1,362. By contrast, the weekly PPD benefit maximum was set at \$755about half of the TTD weekly maximum. The difference between the weekly TTD and PPD benefit maximums in IL was among the largest of the study states. The TTD rate in IL is set at 66% percent of the AWW, while the PPD rate is set at 60 percent of the AWW. Furthermore, the maximum number of weeks for which PPD benefits for unscheduled injuries are paid in IL is 500 weeks; for scheduled injuries, the maximum is 323 weeks. In half of the study states, there is no set maximum; in the rest of the study states, PPD benefits are paid for a maximum period between 300 and 1,000 weeks.

This large gap in the maximum rates between the two types of benefits may create incentives for injured workers in IL to postpone the transition from TTD benefits to PPD benefits and, therefore, may be a factor for the longer duration of temporary disability benefits in IL. The differences in the maximum benefit rates also affects the proportion of claims with TTD and PPD benefits, creating more incentives to settle. As discussed later, a larger proportion of benefits was settled

#### General Classification Of Indemnity Benefit Systems: Wage-Loss Vs. PPD States **Indemnity Benefit Systems** Wage-Loss Benefit PPD Benefit Systems Systems Attributes Of Both Wage-Loss And PPD 5 Study States: 2 Study States: 11 Study States: LA, MA, MI, PA, VA GA, NC AR, CA, FL, IA, IL, IN, KY, MN, NJ, TX, WI © Copyright 2017 WCRI. All Rights Re-

*Key:* **PPD:** Permanent partial disability. **TD:** Temporary disability includes temporary total disability (TTD) and temporary partial disability (TPD).

Note: See the "Glossary" for definitions of scheduled and unscheduled injuries.

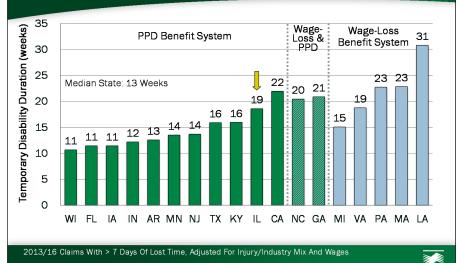
In the CompScope™ studies, we generally classify states into two groups—wage-loss benefit systems and PPD benefit systems—based on different approaches used to compensate income loss due to work-related injuries.

In a wage-loss benefit system, workers typically continue to receive TD benefits so long as they experience wage loss because of the work-related injury. PPD benefits are typically paid for scheduled injuries only. Unscheduled impairments typically are compensated only if injured workers actually experience a wage loss or a loss of wage-earning capacity.

In a PPD state, by contrast, TTD benefits usually end when the worker reaches maximum medical improvement (MMI) and the worker may be entitled to PPD benefits. Typically, PPD benefits in these states cover most or all impairments, including unscheduled impairments.

Two states, GA and NC, have aspects of both a wage-loss system and a PPD system. In GA, a worker continues to receive TD benefits as long as there is no return to work or there is a return to work with lower wages, up to the statutory limit of 400 weeks for TTD or 350 weeks for TPD. PPD benefits can be paid based on impairment only and cover loss or loss of use of body members. In NC, an injured worker who has not returned to work at the end of the healing period either continues to receive TTD benefits (as in a wage-loss benefit system) or elects to receive PPD benefits based on an impairment rating. A worker who has returned to work at full wages can receive PPD benefits (as in a PPD system).

## IL Injured <u>Workers Stayed Off Work</u> Longer Than Other Study States



Key: MMI: Maximum medical improvement. PPD: Permanent partial disability. TD: Temporary disability. TTD: Temporary total disability. WC: Workers' compensation.

Statutory Limit On TD Benefits	AR	CA	FL	GA	IN	MA	MN	NC	ИЛ	тх	VA	IA, IL, KY, LA, MI, PA, WI
Number Of Weeks	450	104	104	400	500	156	130	500	400	104	500	No Limit

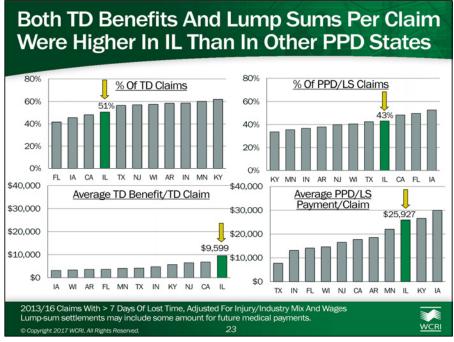
Duration of temporary disability shows the estimated length of time that temporary disability benefits were paid.

IL had a longer average duration of temporary disability for 2013/16 claims. At 60 months (2011/16), the average <u>duration</u> of temporary <u>disability</u> was 20 weeks in IL, which was higher than 14 weeks in the median study state (with PPD benefits).

In IL, TTD benefits are paid until the injured worker has returned to work or has reached MMI. IL does not have limits on duration of benefits, except as indicated in the PPD schedule (§8(e)). In contrast, some other study states have statutory limits on temporary disability benefits and allow termination or modification of TTD benefits without a formal hearing.

According to system stakeholders, terminating TTD benefits in IL is somewhat more difficult than in other states. For instance, if an injured worker is released to work with restrictions and no light-duty job is offered, TTD benefits continue until return to work. Furthermore, the IL Supreme Court in Interstate Scaffolding (2010) held that when an employee who is entitled to receive WC benefits as a result of a workrelated injury is later terminated for conduct unrelated to the injury, the employer's obligation to pay TTD workers' compensation benefits continues until the employee's medical condition has stabilized and he has reached MMI.

See more on reasons for <u>discontinuing TTD</u> benefits in 50 states.



Key: LS: Lump-sum settlement. PPD: Permanent partial disability. TD: Temporary disability.

Notes: States with a wage-loss benefit system (LA, MA, MI, PA, and VA) were excluded from this comparison. Under such a benefit system, workers typically continue to receive TD benefits so long as they experience wage loss because of the work-related injury. States with a wage-loss benefit structure are expected to have longer duration of temporary disability because most indemnity benefits are paid as temporary disability benefits. In addition, PPD benefits are typically paid for scheduled injuries only. GA and NC were also excluded because they have attributes of both a wage-loss system and a PPD system.

This slide shows the frequency and average payment per claim for two groups of claims—claims that received TD benefits (no weekly PPD or lump-sum settlements) and claims that received PPD or lump-sum payments. Note that claims with PPD or lump-sum settlements may have also received TD benefits.

Fifty-one percent of injured workers who lost more than seven days of work in Illinois received benefits for TD, and the average benefit per claim was the highest in Illinois compared with other states with PPD benefit systems. In addition, 43 percent of workers received PPD or lumpsum payments in 2013/16. When injured workers received PPD/lump-sum settlements in Illinois, the average PPD/lump-sum payment per claim was in the higher group of study states.

In Illinois, PPD benefits are awarded according to a schedule of payments codified in the Workers' Compensation Act. A PPD benefit is viewed as a settlement after the injured worker has completed medical treatment and is at maximum medical improvement. Permanence has been defined by the Illinois Supreme Court as a long period of time without substantial improvement.

#### Most PPD Benefits Were Paid As Lump-Sum Settlements In Illinois

2013/16 Claims In IL	PPD/Lump-Sum Claims	Lump-Sum Only Claims	
% Of Claims With PPD Or Lump-Sum Settlements	43%	38%	
Average PPD/Lump Sum Per Claim With PPD/Lump Sum	\$25,927	\$28,309	
% Of Total PPD/Lump-Sum Dollars	100%	91%	

Claims With > 7 Days Of Lost Time, Adjusted For Injury/Industry Mix And Wages Lump-sum settlements may include some amount for future medical payments.

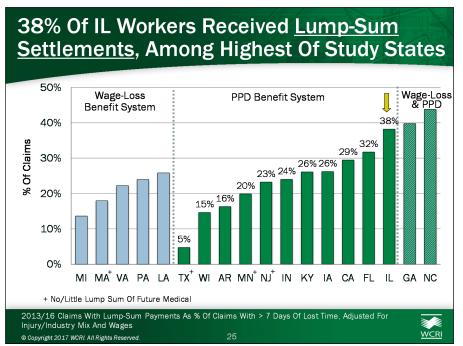
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Key: PPD: Permanent partial disability.

Note: Settlements related to fatalities were excluded.

In Illinois, the majority of PPD/lumpsum payments were paid as lumpsum settlements only (and no weekly PPD benefits). Based on 2013/16 claims, 91 percent of PPD or lumpsum payments were settlements only. In most of the other states with PPD benefit systems, settlements represented about 40 percent of the combined PPD/lump-sum payments.

Our data indicate that claims with PPD payments and no lump-sum settlements represented 5 percent of claims with more than seven days of lost time in 2013/16 in Illinois. The average amount was about \$6,000 per claim. In Illinois, PPD benefits are awarded according to a schedule of payments codified in the Workers' Compensation Act. However, historically the majority of PPD benefits are paid as settlements after the injured worker completes medical treatment and is at maximum medical improvement.

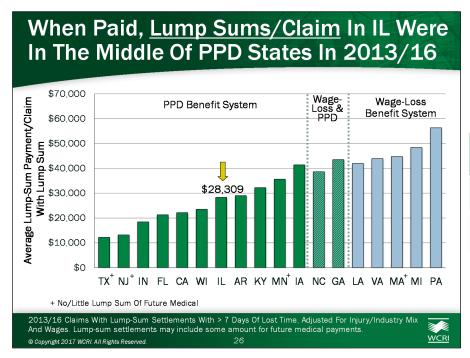


Overall in Illinois, 38 percent of injured workers received lump-sum settlements. This percentage was among the highest of the PPD study states in 2013/16. Data from 2011/16 (60 months' maturity) indicate that Illinois was the highest of all study states (48 percent).

System participants indicated that the higher proportion of lump-sum claims in Illinois is a function of the lack of limits on temporary disability benefits, as well as limited possibilities to terminate these benefits.

Key: PPD: Permanent partial disability.

*Note*: Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey.

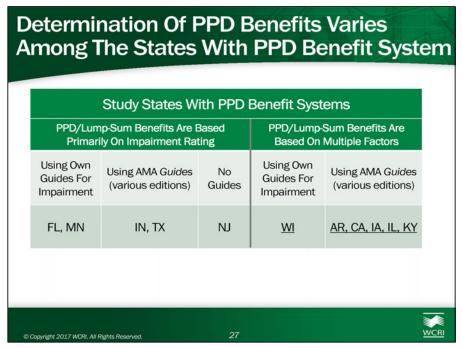


The average lump-sum settlement payment per claim in Illinois was in the middle of the states with PPD benefit systems for 2013/16 claims. The average <u>lump-sum payment per claim</u> for more mature 2011/16 claims was higher than typical.

<u>2011/16</u> (60 months)	Illinois	Range Min.–Max. PPD States
% Lump-Sum Claims	48% (highest)	4%-48%
Average Payment Per Claim	\$36,524 (higher)	\$13,018– \$49,732

Key: Min.-Max.: Minimum-maximum. PPD: Permanent partial disability.

Note: All lump-sum payments are reported as indemnity payments. This achieves consistency and comparability in this measure across all states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey. These differences can impact settlements.

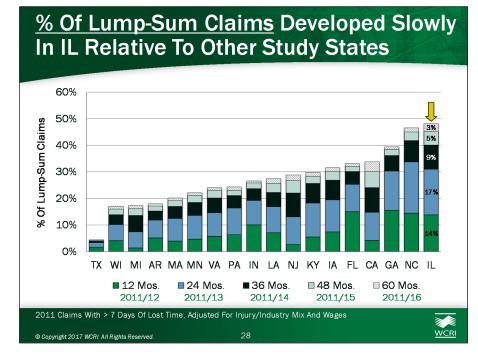


Key: AMA: American Medical Association. PPD: Permanent partial disability.

There is large variation in the average lump-sum payment per claim across the states with PPD benefits systems. One reason is that PPD benefits are calculated applying different factors. Several states, such as Florida, Indiana, Minnesota, New Jersey, and Texas, base their PPD benefits on medical impairment ratings only.

Arkansas, California, Illinois, Iowa, Kentucky, and Wisconsin apply an earning capacity approach for determining PPD benefits. In these states, a combination of factors is used to evaluate the overall degree of disability. Often benefits are adjusted depending on the ability of the injured worker to return to work at preinjury wages. See <u>Table 15</u>.

For information on how PPD benefits are determined in other PPD study states, see <u>Tables 9</u> and <u>10</u>.



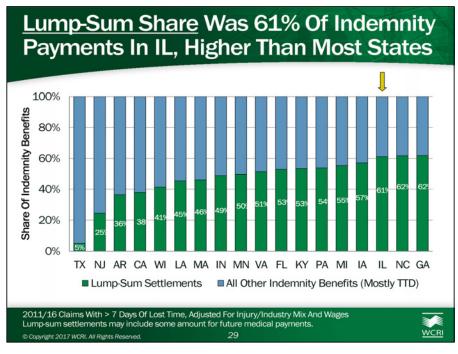
Key: IWCC: Illinois Workers' Compensation Commission. MMI: Maximum medical improvement. Mos.: Months. PPD: Permanent partial disability. TD: Temporary disability.

*Note*: Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey.

This slide shows the development of 2011 claims with lump-sum settlements. The overall height of the bar represents the proportion of claims with lump-sum settlements at 60 months (2011/16 claims). The different colored sections of each bar represent the incremental increase in the percentage at each claim maturity.

In Illinois, claims with settlements developed slowly over time. For instance, 8 percent of the 2011 claims had settlements between 48 and 60 months compared with 3 to 5 percent in most of the other study states. Along with Illinois, two other states had longer development from 48 to 60 months: New Jersey (7 percent) and California (10 percent).

In Illinois, for claims filed to the IWCC, PPD determination cannot be made until the injured worker has reached MMI. This means that settlements likely occurred after a relatively long period of TD benefits (see notes on the next slide). This, combined with a lengthy dispute resolution process in some cases, may have resulted in relatively more long-tail claims in Illinois than in other study states. According to the rules of the IWCC. an arbitrator could continue a case for up to three years. Once that time limit (known as red line) passed, the case had to be set for trial by the arbitrator unless there was a written request that asked for it to be continued.



Key and definition: Other indemnity benefits: Mainly permanent total and fatality payments. **PPD:** Permanent partial disability. **TTD:** Temporary total disability.

*Note*: Lump-sum settlements are generally not allowed in Texas. Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey.

This chart shows the share of components in indemnity benefits for 2011/16 claims.

Payments for lump-sum settlements in Illinois accounted for 61 percent of indemnity benefits paid for 2011/16 claims. Illinois had among the highest percentage of all study states. In typical states, settlements represented about half of all paid indemnity benefits.

Examining claims with injuries in 2011 and payments made through March 2016 shows that before receiving a settlement, injured workers in Illinois received temporary disability benefits for, on average, 34 weeks. This was 4 weeks longer than in other states with PPD benefits. In Illinois, 37 percent of injured workers received temporary disability benefits and a lump-sum settlement. This percentage was the highest of all study states for 2011/16 claims.

# Major Findings For Illinois From CompScope™, 17th Edition

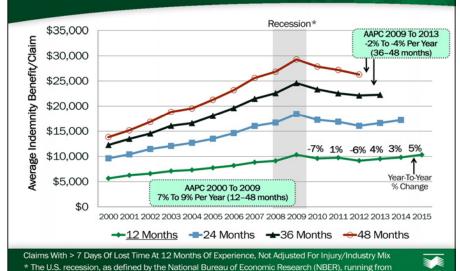
- Total costs/claim decreased 6% since 2010 (36 months), but were still higher than most other study states
- Indemnity benefits per claim were higher than other study states, reflecting system features and practices
- → Trends in indemnity benefits reflect: growth in AWW, decrease in % of claims with settlements, small changes in LS payments/claim
- Typical total litigation expenses per claim, although growing faster than all study states
- Medical payments per claim in higher group of study states, prices paid for professional services were one factor

Litigation expenses denote mainly defense attorney payments and medical-legal expenses allocated to individual claims.



Key: AWW: Average weekly wage (of injured workers). LS: Lump-sum settlements.

# IL Indemnity Benefits/Claim Decreased For More Mature Claims, Growth Resumed At 12 Months



Key: AAPC: Annual average percentage change. ppt: Percentage points. TD: Temporary disability, includes temporary total and temporary partial disability.

*Definition:* **Indemnity benefits:** Payments for temporary disability, permanent partial disability, and/or lump-sum settlements, which may include some amount for future medical payments.

*Note*: For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

This chart shows the trends in indemnity benefits per claim at different maturities in Illinois. After the peak of the recession (in 2009), indemnity benefits per claim decreased 3 percent per year for claims with an average maturity of 36 months. The decrease in indemnity benefits per claim was a result of decreases in the average duration of temporary disability and percentage of claims with lump-sum settlements. In 2015, indemnity benefits per claim rose 5.2 percent, driven mostly by fast growth in wages of injured workers (4.9 percent).

Cumulative % Change 2009/12 To 2013/16 In IL				
Indemnity Benefits	-9.5%			
TD Payments Per Claim With TD	-7.4%			
Average Weekly Wage Of Injured Workers	4.3%			
Duration Of Temporary Disability	-2.8% (0.5 weeks)			
% Of Claims With Lump- Sum Settlements	-5.2 ppt			
Average Lump-Sum Settlement Per Claim	-3.6%			

Changes in the Illinois industry

composition as a result of the 2007–2009 recession may explain some of

the results observed in the trend of indemnity benefits per claim.

Illinois' recession was more severe

than the nation's, and the economic

recovery has been slower. The state has lagged behind the region and

the country in income, output, and employment growth. Although the

labor market was improving, the growth was slower than in nearby

states. Furthermore, the decline in

labor force participation has been especially substantial in Illinois, the

largest among the Midwest states.

Illinois experienced among the largest employment losses in manufacturing compared with all nearby states. By 2015, Illinois was the only state in the region where employment in manufacturing had not recovered since the peak of the

## Aspects Of Illinois Post-Recession Economy Contributed To Indemnity Trends

- IL recession was more severe than the nation's, and the state's recovery has been slower
- IL has lagged the region and the nation in income, output, and employment growth over the last five years
- IL labor market was improving more slowly than neighboring states; mix of new jobs tilted toward low-paying positions
- IL was hit hard by the manufacturing slowdown
- IL had a higher out-migration rate than nearby states

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recession.

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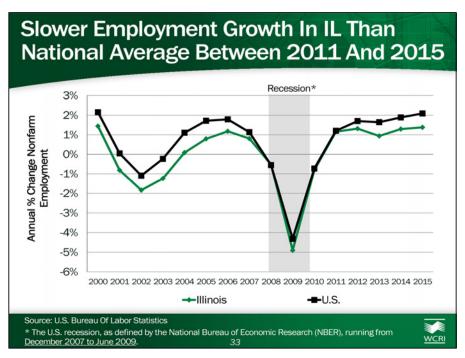
22

#### Sources

 $\underline{\text{U.S. Bureau of Labor Statistics}}, various economic indicators.$ 

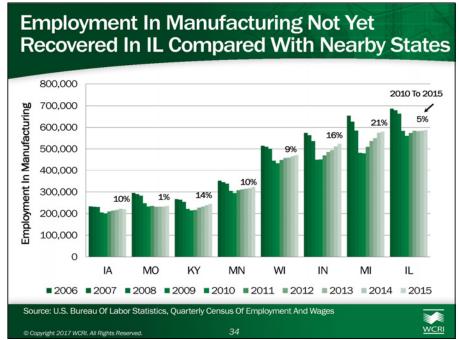
Quarterly Workforce Indicators, U.S. Census Bureau, various economic indicators.

Moody's Analytics' <u>State of Illinois Economic Forecast, January 2015</u> and <u>State of Illinois Economic Forecast, January 2016</u>.



Data from the Bureau of Labor Statistics show that between 2011 and 2015, employment in Illinois grew between 0.9 and 1.4 percent per year, compared with a range of 1.2 to 2.1 percent per year in the national average.

*Source*: U.S. Bureau of Labor Statistics. Statewide total nonfarm employment, not seasonally adjusted data. Illinois Series ID SMU170000000000001. U.S. Series ID: CEU0000000001.



almost all states surrounding Illinois had faster job growth, and as a result employment in manufacturing recovered to the pre-recession levels.

One of the biggest sectors in Illinois

jobs in Illinois in 2015, surpassed by health care services (17 percent) and

The job growth was slower during

Illinois—only a 5 percent increase

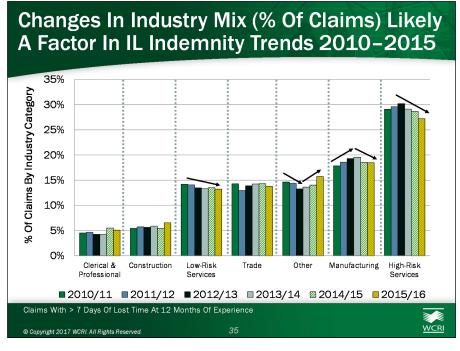
between 2010 and 2015. In contrast,

economy is manufacturing. This sector accounts for 10 percent of all

retail trade (11 percent).

the post-recession period in

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW). Series ID ENU2600040010 located at <a href="http://data.bls.gov/data">http://data.bls.gov/data</a>.



*Note*: According to the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), between 2010 and 2015, employment in Illinois increased in professional and technical services, transportation and utilities, accommodation and food services, administration and support.

Here we show the trend in the percentage of claims with more than seven days of lost time and work-related injuries in each of seven broad industry categories in Illinois.

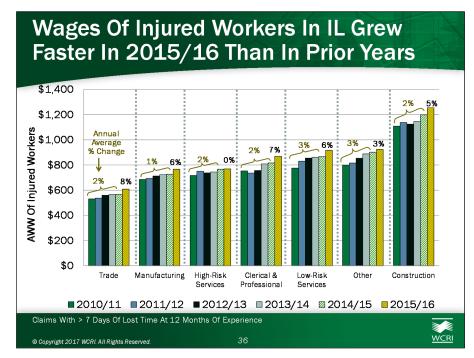
The data indicate a shift in the industry mix of the claims underlying the data we report, with relatively more claims arising from other industries and fewer claims in highrisk services, manufacturing, and low-risk services.

#### Notes:

**Low-risk services** include computer data processing, schools, commercial service and repair, and personal services such as beauty salons.

**High-risk services** include package delivery, hotels, restaurants, health care facilities, electric light/power, railroad, warehousing, and storage.

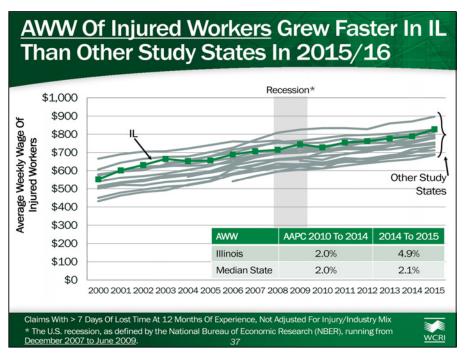
**Other industries** include agriculture, mining, quarrying, and miscellaneous occupations. For more details, see <u>Table TA.10</u> in the *Technical Appendix*.



Key: AWW: Average weekly wage (of injured workers).

The average weekly wage of injured workers grew steadily in Illinois from 2010/11 to 2015/16. In 2015, wages of injured workers increased on average 4.9 percent. This growth was faster than the rates in all prior years. All industries, except high-risk services, contributed to the result.

Note that the statewide average weekly wage (based on all industries and occupations) in Illinois grew about 3 percent per year during the economic recovery.

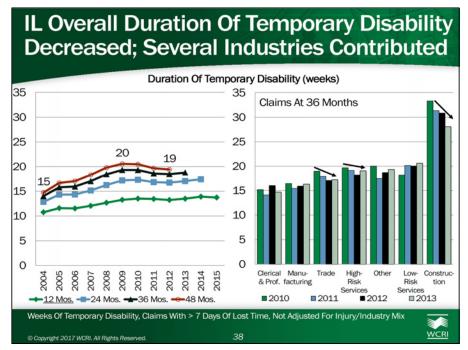


This chart provides another perspective on the average weekly wage of injured workers in Illinois compared with other study states.

In 2015, the average weekly wage of injured workers in Illinois grew faster than the 18-state median. Between 2010 and 2014, wages of injured workers in Illinois grew 2.0 percent per year, similar to the median study state.

Key: AAPC: Annual average percentage change. AWW: Average weekly wage (of injured workers).

*Note*: 2015 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.



Duration of temporary disability is another important cost component of indemnity benefits.

During the study period, duration of temporary disability benefits in Illinois was relatively stable for less mature claims. For more mature claims (36 and 48 months), the duration of temporary disability decreased one week.

Examining trends in duration of temporary disability by industry between 2010 and 2013 (36 months), shows a steady decrease in construction, trade, and high-risk services.

Key and definition: **Duration of temporary disability:** Weeks of temporary disability benefits paid to injured workers, not the time lost from work. Because the primary concern is the cost of these benefits, the duration of payments is more applicable than the duration of claims or the amount of time lost from work. **Mos.:** Months. **Prof.:** Professional.

*Note*: For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

### **Lump-Sum Settlements In Illinois**

- Addressed in 2011 reforms:
  - Introduced AMA Guides for impairment rating
  - Set cap for wage differential benefits
  - Set maximum benefits for carpal tunnel injuries
- Trends after 2009
  - % of claims with lump-sum settlements decreased
  - Shift in % of claims from lump-sum settlements to TTD benefits
  - Average lump-sum payment per claim changed little

Most provisions related to indemnity benefits were effective for injuries occurring on/after September 1, 2011

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Key: AMA: American Medical Association. PPD: Permanent partial disability. TTD: Temporary total disability. Notes: Wage differential benefits are paid when a worker obtains a new job that pays less than the preinjury job(s). An employee may be compensated for either the loss of wages or the permanent disability related to the same injury, but not both. Effective for new injuries on/after September 1, 2011, these benefits are capped at the age of 67 or 5 years of benefits, whichever comes later. Typically these cases are resolved by payment of a lump sum. Prior to 2011, wage differential benefits were paid for the life of the injured worker (§8(d) of Illinois Workers' Compensation Act). 2011 legislation set maximum benefits for carpal tunnel syndrome due to repetitive trauma at 15 percent loss of use of the hand (up to 30 percent in certain cases) (§8(e)(9)).

The <u>2011 reforms</u> addressed some of the biggest cost drivers of indemnity benefits in Illinois. The reforms introduced the AMA *Guides, Sixth Edition,* for evaluation of impairment and set limits on benefits for carpal tunnel injuries and wage differential benefits.

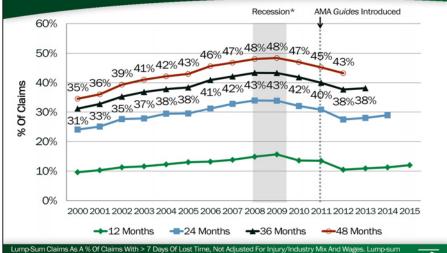
According to 820 ILCS 305/8.1b, five factors are considered when determining the degree of disability of the injured worker: (1) physical impairment based on the 6th edition AMA *Guides*; (2) the occupation of the injured employee; (3) the age of the employee at the time of the injury; (4) the employee's future earning capacity; and (5) evidence of disability corroborated by the treating medical records.

While the AMA rating is provided by the statute, there is no provision for automatic admissibility of these ratings. The law indicates that no single factor shall be the sole determinant of the degree of disability.

Lump-sum settlements can be approved even if there is no impairment rating on file. AMA *Guides* are not applicable to permanent total and wage differential benefits.

For more information on determination of permanent partial disability, see §8.1(b) of the Illinois Workers' Compensation Act. Additional discussion is available on Slide 27 and Slide 65.

# Since 2009 IL % Of Lump Sums Decreased From 4 To 5 PPT Depending On Maturity

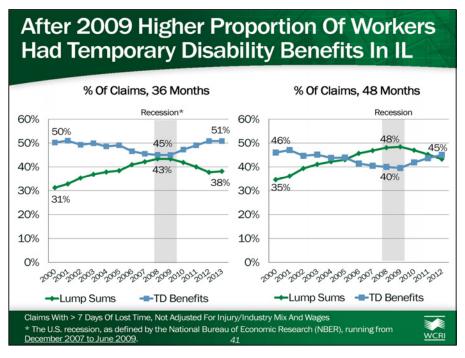


Key: AMA: American Medical Association. PPT: Percentage points.

*Note:* For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

The percentage of claims with lumpsum settlements in Illinois decreased continuously from 2009/12 to 2012/15 and changed little for 2013/16 claims. Similar results were observed for claims with an average maturity of 48 months. We observed a corresponding increase in the proportion of workers who received temporary disability payments during that period.

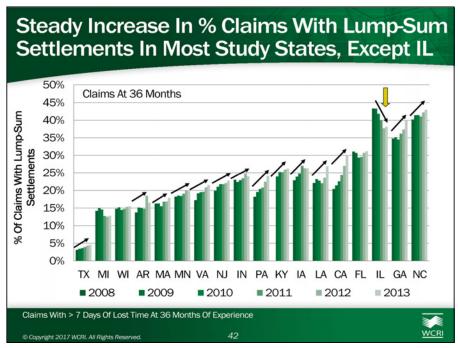
System participants indicated that this result likely reflects the impact of the recession and especially slower recovery in Illinois, when higher unemployment rates might have created limited opportunities for injured workers to return to work with their preinjury employers or to find a job with a new employer. In addition, uncertainty related to the application of the new law for impairment rating evaluation also may have contributed in part to the results after 2012.



System stakeholders also suggested that after 2009, some injured workers delayed the decision to settle their claim. During uncertain times, especially with high unemployment rates and limited job opportunities, some injured workers are more likely to exaggerate their injuries so that they remain on temporary disability benefits for extended periods. As indicated earlier, Illinois had higherthan-typical weekly benefit rates for temporary disability and no limits on duration of these benefits. Furthermore, in some cases the indemnity portion of the case only was settled. The parties agreed to keep the medical benefits open. This was often due to the fact that the injured worker was Medicare eligible.

Key: TD: Temporary disability.

*Note*: For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. For claims at 48 months: 2012 refers to injury year/evaluation 2012/16. Other injury year/evaluation combinations are denoted similarly.



This chart provides a snapshot of the percentage of claims with lump-sum settlements from 2008 to 2013 (36 months). During that period, the proportion of claims with lump-sum settlements increased in most study states. Illinois and Michigan were the only states with a steady decrease.

*Notes*: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly. Data for Kentucky are not available for 2008.

The average lump-sum settlement per claim is based on claims with lump-sum settlements. Lump-sum settlements may include some amount for future medical payments. Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey.

#### 3% Decrease In Lump-Sum Payments/Claim In IL At 48 Mos.; Stable For Other Maturities AMA Guides Introduced \$40,000 -3% .ump-Sum Payments/Clain \$35,000 \$30,000 \$25,000 \$20,000 7% 7% \$15,000

Claims With > 7 Days Of Lost Time And Lump-Sum Payments, Not Adjusted For Injury/Industry Mix And Wages \* The U.S. recession, as defined by the National Bureau of Economic Research (NBER), running from

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

→12 Months →24 Months →36 Months →48 Months

3% To 5% Per Year (12-48 months)

\$10,000

\$5,000

\$0

Key: AMA: American Medical Association. AAPC: Annual average percentage change. Mos.: months.

Note: For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

The average lump-sum payment per claim with lump-sum settlements in Illinois decreased 3 percent for claims with average maturity of 48 months; for all other maturities the average lumpsum payment per claim changed little after 2009. In earlier years, lump-sum payments per claim in Illinois grew in the range of 3 to 5 percent per year, depending on claim maturity.

The introduction of the AMA Guides for determination of the impairment rating may have a long-term impact on both frequency and average PPD/lump-sum payment per claim if the law is applied consistently in the majority of cases. Any sizeable impact from the AMA Guides may be seen only for more mature claims (36 months or higher maturity). Settlements at 12 and 24 months would typically have low AMA ratings, and this may not have a material impact on the overall average lump-sum payment per claim. In addition, system participants indicated that not all settlements have an impairment rating on file since it is not required.

In June 2016, the Illinois Appellate court ruled that the injured worker is not required to obtain an AMA impairment report in order to establish permanency under section 8.1b of the Illinois Workers' Compensation Act (Corn Belt Energy Corp. v. Illinois Workers' Compensation Comm'n, 2016 IL App (3d) 150311WC).

## **Major Findings For Illinois From** CompScope™, 17th Edition

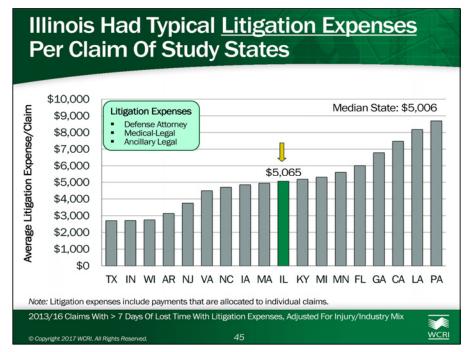
- Total costs/claim decreased 6% since 2010 (36 months), but still higher than most other study states
- Indemnity benefits per claim were higher than other study states. reflecting system features and practices
- Trends in indemnity benefits reflect: growth in AWW, decrease in % of claims with settlements, small changes in LS payments/claim
- → Typical total litigation expenses per claim, although growing faster than all study states
- Medical payments per claim in higher group of study states, prices paid for professional services were one factor

itigation expenses denote mainly defense attorney payments and medical-legal expenses allocated to individual claims.



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Key: AWW: Average weekly wage (of injured workers). LS: Lump-sum settlements.



Definitions: Ancillary legal expenses: Payments associated with the preparation and/or production of reports and transcripts, filing fees, performance of autopsies, private investigations, translator's fees, and costs associated with arbitration and alternate dispute resolution. Defense attorney payments: Payments for either or both in-house and outside defense counsel. Medical-legal expenses: Payments for medical-legal evaluations and reports, independent medical examinations (IMEs), depositions, medical expert fees, and medical testimony. Not all medical-legal expenses are related to litigation.

Litigation expenses include payments for defense attorneys, medical-legal expenses, and ancillary legal expenses that are allocated to individual claims.

Illinois had typical litigation expenses per claim of the study states. In Illinois, litigation expenses represented 6.0 percent of total payments for 2013/16 claims with more than seven days of lost time. In the other study states, litigation expenses ranged from 2.5 percent to 8.5 percent of total payments.

Several factors may contribute to a more costly dispute resolution process in general, such as

- the approach and process for determining permanent partial disability benefits;
- the complexity and length of agency processes for resolving
- the readiness of the parties to proceed with adjudication or negotiation; and
- the clarity in the law and how it is applied.

There are several factors that might have

contributed to the lower defense attorney payments per claim with payments greater

than \$500 in IL compared with most study states. The system relies on the experience of adjusters, attorneys, and arbitrators in determining permanent partial disability

awards. In addition, Q-Dex, a web-based

system, contains information about the workers' compensation court, as well as

indicated that discovery in IL is typically

IL had a higher percentage of defense

attorney involvement than most study states. Several features of the IL system

contribute to attorney involvement. In

attorney is assigned to the case when an

application (Application for Adjustment of

Section 7020.60 of the IWCC rules allows an arbitrator to continue a case for three years

(red line, see Slide 28); after that time, the

arbitrator must set the case for trial unless a party submits a written request to continue the case for good cause. According to system stakeholders, every 90 days a case appears before an arbitrator for a status

call. If a request for hearing is not filed (for a

trial date), the arbitrator will automatically

hearing. In some cases, this may add to the

length of the dispute resolution process.

continue the case until the next status

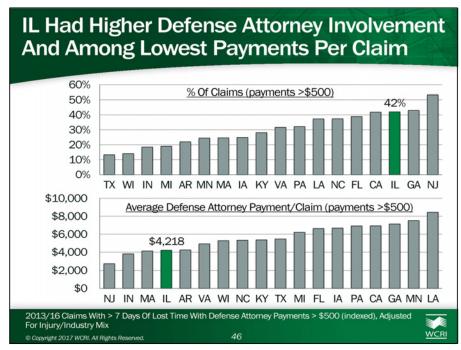
disputed cases, most employees and employers hire attorneys. Usually a defense

done by claims adjusters; other states may

IWCC decisions. System stakeholders

use more formal processes.

Claim) is filed with the IWCC.



Note and definitions: Defense attorney payments: A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See the *Technical Appendix*.

Discovery: The pre-trial procedure requiring disclosure of requested information to the other party. IWCC: Illinois Workers' Compensation Commission.

#### **Both Frequency And Payments For Medical-**Legal Expenses Higher Than Typical In IL 50% % Of Claims With Medical-Legal Expenses 40% 30% 20% 10% 0% \$4,000 Average Medical-Legal Expense/Claim \$2,898 \$3,000 \$2,000 \$1,000 \$0 TX AR GA MA IN MI IA VA KY 2013/16 Claims With > 7 Days Of Lost Time With Medical-Legal Expenses, Adjusted For Injury/Industry Mix WCRI

Key: IME: Independent medical examination. TTD: Temporary total disability.

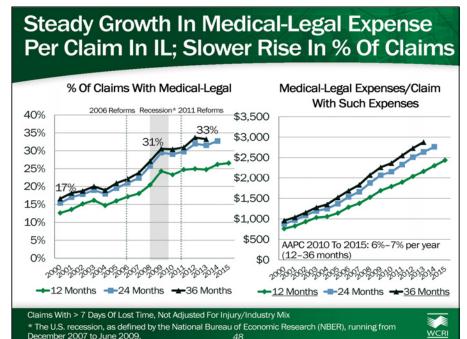
*Definition:* **Medical-legal expenses:** Payments for medical-legal evaluations and reports, independent medical examinations, depositions, medical expert fees, and medical testimony allocated to individual claims. Not all medical-legal expenses are related to litigation.

*Note:* Florida was excluded from these measures because underlying data in our sample are not necessarily representative of the state's experience.

Illinois had higher-than-typical medical-legal expenses per claim in 2013/16. Prior editions of CompScope™ Benchmarks indicated that Illinois used to have typical medical-legal expenses per claim, prior to the implementation of the 2006 reforms.

System participants suggested that higher-than-typical medical-legal expenses per claim in Illinois might reflect the use of IMEs and the higher cost of IMEs in Illinois than in other study states. Furthermore, IMEs are frequently used to establish maximum medical improvement (MMI) status and to determine continuation/ending of TTD benefits. See §12 (Employer may request employee medical examination) and §19(c) (Commission may order medical examination of petitioner).

Medical-legal expenses represented 1.8 percent of all payments for claims with more than seven days of lost time and 36 months of maturity in Illinois; this figure was about 1 percent in most of the study states.



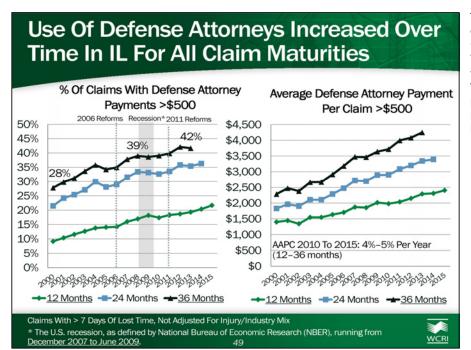
Key: AAPC: Annual average percentage change. IME: Independent medical examination.

*Note:* For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.

The trends in the use of medicallegal expenses and the average expense per claim in Illinois represent an interaction of three factors—the indirect impact of the 2006 reforms (2006–2009), the impact of the recession/postrecession (2009–2011), and the impact of the 2011 reforms (2012– 2015).

One important component of medical-legal expenses is payments for IMEs, and Illinois does not regulate payments for these exams. Prior to 2011, IMEs were used in various ways in Illinois: as part of the utilization review process, to determine permanency, to determine the need for medical treatment, and to terminate temporary total disability benefits. During the recession period, IMEs were used more often to determine the end of the healing period and to determine release to work.

In comparison with other study states, Illinois had among the fastest increases for both the percentage of claims with medical-legal expenses and the average payment for medical-legal expenses. See Slide 50.

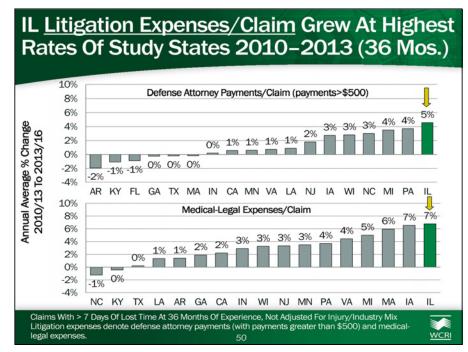


The percentage of claims with defense attorney involvement (where the payment was greater than \$500) was growing in Illinois at all claim maturities.

The average defense attorney payment per claim grew about 4–5 percent per year over the study period.

Key: AAPC: Annual average percentage change.

*Note*: For claims at 12 months: 2015 refers to injury year/evaluation 2015/16. For claims at 36 months: 2013 refers to injury year/evaluation 2013/16. Other injury year/evaluation combinations are denoted similarly.



Key: Mos.: Months. ppt: Percentage points.

*Note*: Florida was excluded from medical-legal measures because underlying data in our sample are not necessarily representative of the state's experience.

The chart shows the annual average percentage change from 2010/13 to 2013/16 in defense attorney payments (with payments greater than \$500) and medical-legal expenses per claim. We show the annual changes using more mature claims because changes in values at 12 months' maturity may not always indicate the magnitude of the growth/decrease in more mature claims, especially for payments occurring later in the life of the claim.

During the study period, Illinois had the largest increases in payments per claim for defense attorneys and medical-legal expenses. Most study states, including Illinois, do not regulate payments for medical-legal services. Furthermore, the use of these expenses (measured as the percentage of claims) also increased at faster rates in Illinois than in the median study state.

Annual Average PPT Change 2010/13 To 2013/16	Illinois	Median State
% Of Claims Defense Attorney	0.9 ppt	0.8 ppt
% Of Claims	0.9 ppt	0.5 ppt

## Major Findings For Illinois From CompScope™, 17th Edition

- Total costs/claim decreased 6% since 2010 (36 months), but still higher than most other study states
- Indemnity benefits per claim were higher than other study states, reflecting system features and practices
- Trends in indemnity benefits reflect: growth in AWW, decrease in % of claims with settlements, small changes in LS payments/claim
- Typical total litigation expenses per claim, although growing faster than all study states
- →Medical payments per claim in higher group of study states, prices paid for professional services were one factor

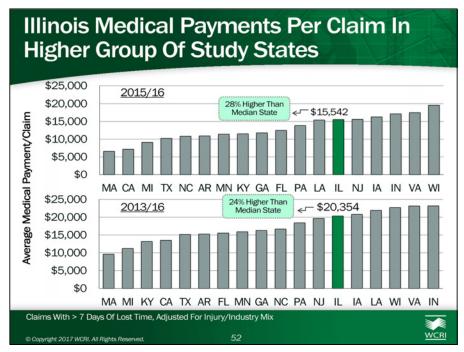
Litigation expenses denote mainly defense attorney payments and medical-legal expenses allocated to individual claims.

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Key: AWW: Average weekly wage (of injured workers). LS: Lump-sum settlements.



Definition: Medical payments: Payments for all medical services delivered to injured workers. Included are services delivered by physicians, physical/occupational therapists, chiropractors, and hospital outpatient and inpatient facilities. Included are only services for which payments were made. Medical payments reflect both price and utilization of services.

The average medical payment per claim with more than seven days of lost time in Illinois was higher than the median study state for both claims with 12 and 36 months of maturity. As indicated in previous editions of the report, prior to the reduction in the fee schedule rates for 2008/11 claims, Illinois had the highest average medical payment per claim of all study states (Radeva, 2016).

Illinois' regulations regarding the medical fee schedule are described in 820 ILCS 305/8.2.

## Prices And Utilization Drove Higher-Than-Typical Medical Payments Per Claim In IL

Metrics Related To Medical Payments	IL Relative To Other Study States	Source
Utilization (number of services) per claim	Among highest (due to physical medicine)	CompScope™ Medical Benchmarks for Illinois, 17th Edition. Included 18 states
Hospital payments per claim (inpatient and outpatient)	Middle	CompScope™ Medical Benchmarks for Illinois, 17th Edition. Included 18 states
Fee schedule, professional (nonfacility) services	Higher	WCRI's <u>Designing Workers' Compensation</u> <u>Medical Fee Schedules</u> . Included 43 states and District of Columbia
Prices paid, professional (nonfacility) services	Higher	WCRI Medical Price Index for Workers' Compensation. Included 28 states
Payments to facility (ASC and outpatient) associated with common surgeries	Higher	WCRI's Hospital Outpatient Payment Index. Included 32 states WCRI's Payments to Ambulatory Surgery Centers. Included 33 states

Key and definitions: ASC: Ambulatory surgery center. Fee schedule (FS): Reflects maximum allowable amount; comparison is based on the percentage over the Medicare rate in each state. Prices paid: Reflects network discounts and other price negotiations between the payors and the providers.

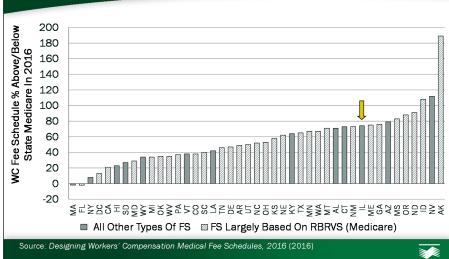
Sources: Radeva. 2016. CompScope™ Medical Benchmarks for Illinois, 17th Edition.
Fomenko and Liu. 2016. <u>Designing Workers' Compensation Medical Fee Schedules, 2016.</u>
Yang and Fomenko. 2016. <u>WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).</u>
Fomenko and Yang. 2016. <u>Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 5th Edition.</u>
Savych. 2016. <u>Payments to Ambulatory Surgery Centers, 2nd Edition</u>.

Various WCRI studies provide insights on medical payments and utilization. As documented in CompScope™ Medical Benchmarks, higher-thantypical medical payments per claim in Illinois reflected higher prices paid for professional services (except for evaluation and management services) and higher utilization due to physical medicine. In 2013 (evaluated as of 2015), after the reduction in the fee schedule rates, the average hospital payment per claim (both for inpatient and outpatient care) in Illinois was in the middle group of study states compared with 2009 (evaluated as of 2011), when overall hospital payments per claim were in the higher group of study states (Radeva, 2016).

Other WCRI research provides insights on fee schedule regulations, prices paid, and payments to facilities associated with surgery. When a surgery was done in an ASC setting, the average payment per surgical episode with knee and shoulder arthroscopy was higher in IL than in most other study states. Similar results were found when a surgery was done in a hospital outpatient department.

See more on prices paid and fee schedule rates on the next slides.

## IL Fee Schedule For Professional Services Higher Than Many States (March 2016)



*Key:* **DC:** District of Columbia. **FS:** Fee schedule. **RBRVS:** Resource-based relative value scale. **WC:** Workers' compensation.

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*Note*: Rhode Island, which is not shown on the chart, has a non-Medicare-based FS. See the notes in that study for more details.

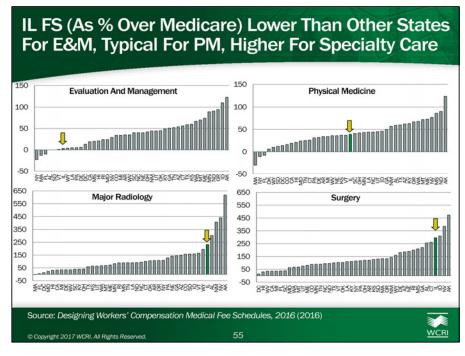
Source: Fomenko and Liu. 2016. Designing Workers' Compensation Medical Fee Schedules, 2016.

The WCRI report Designing Workers'
Compensation Medical Fee Schedules,
2016 compared workers'
compensation fee schedule rates
among 43 states and DC as of March
2016. Each state's workers'
compensation fee schedule rate was
compared with the Medicare fee
schedule in the state.

The 2016 data show that, compared with the other study states, Illinois had a higher percentage over Medicare. A previous edition of the study documented that prior to the 30 percent reduction in the fee schedule rates, Illinois was the second highest state after Alaska.

Out of 43 states with workers' compensation fee schedules and DC, 30 jurisdictions implemented Medicare RBRVS. Other states used usual and customary fees, percent of charges, or state-specific relative values.

Prices paid for professional services are not regulated in Indiana, Iowa, Missouri, New Jersey, Virginia, and Wisconsin.



Key: E&M: Evaluation and management (office visits). FS: Fee schedule. Major radiology: Computerized tomography (CT) scans and magnetic resonance imaging (MRIs). Physical medicine (PM): Physical medicine and chiropractic care. Surgery: Invasive surgical procedures, such as arthroscopic surgeries, carpal tunnel, and hernia repair.

Source: Fomenko and Liu. 2016. <u>Designing Workers' Compensation Medical Fee Schedules, 2016</u>.

After the 30 percent reduction in fee schedule rates, effective September 1, 2011, workers' compensation fee schedule rates remained higher than Medicare rates in Illinois. The only exception was fees for evaluation and management services. Effective for treatment on or after July 16, 2014, the Illinois Workers' Compensation Commission increased fee schedule amounts for some office visit codes to Medicare levels in Illinois. The results here reflect this change.

Illinois applies four fee schedule regions for professional services, which means that for the same procedure there are four fee schedule amounts depending on the region where the service was provided.

Note that the study also provides an example of actual workers' compensation fee rates for eight commonly billed procedures in all study states.

This chart uses actual prices paid for

professional services in 2015 in each of the 28 study states compared with

the typical state (designated by the solid line). A bar above the line means higher prices paid, and below

the line means lower prices paid. Relatively higher prices paid in

Illinois reflect a regulatory choice

about where to set the fee schedule levels, which are the primary

determinant of the reimbursement levels (as discussed on the previous

The price information is based on all claims, i.e., claims with more than

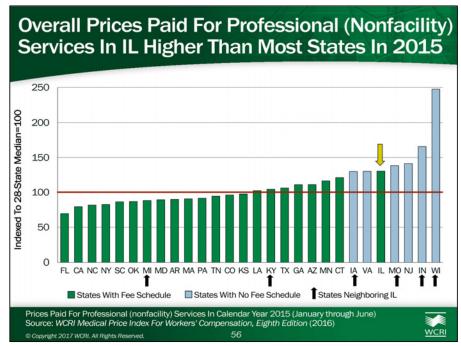
seven days of lost time and medicalonly claims. Prices paid may reflect network discounts and/or other price negotiations between the payors and medical providers. Prices paid do not include facility fees. In

addition, prices for prescription

drugs paid to pharmacies are not

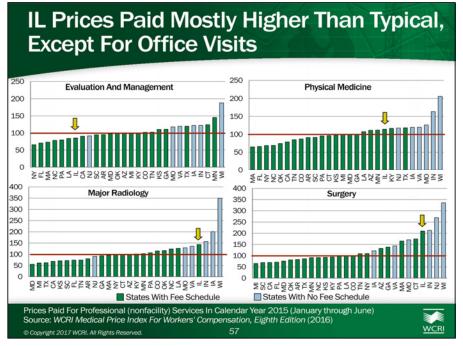
chart).

included.



Definition and Note: **Professional services:** Nonhospital, nonfacility services billed by physicians, physical therapists, and chiropractors, excluding bills for ambulatory surgery center facilities, durable medical equipment, or pharmaceuticals. Price information is reported on a calendar-year basis, as opposed to injury/evaluation year, as used for the rest of the metrics in this study. The price index measures the unit prices paid holding utilization constant. It is based on a marketbasket of common medical procedures used in workers' compensation cases, using detailed Current Procedural Terminology (CPT) billing codes.

Source: Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).



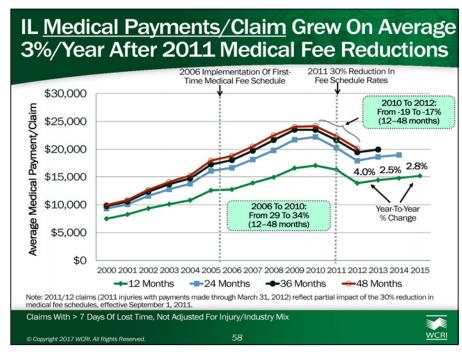
Definitions: Evaluation and management: Office visits. Major radiology: Computerized tomography (CT) scans and magnetic resonance imaging (MRIs). Physical medicine: Physical medicine and chiropractic care. Surgery: Invasive surgical procedures, such as arthroscopic surgeries and laminotomies.

Source: Yang and Fomenko. 2016. <u>WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC)</u>.

On this chart we show the interstate comparisons on prices paid in 2015 for four major types of professional services—evaluation and management (office visits), physical medicine, major surgery, and major radiology.

Prices paid in Illinois were higher than most study states for physical medicine, radiology, and surgery. In contrast, prices paid for evaluation and management were 20 percent lower than the median study state.

Note about other services not shown on the chart: Prices paid remained higher in Illinois in 2015 than in the typical study state for minor radiology (X rays), pain management injections (large joint injections), and neurological/neuromuscular testing (nerve conduction studies).



Key: ASC: Ambulatory surgery center. BLS: Bureau of Labor Statistics. CPI: Consumer Price Index.

Notes: Lump-sum settlements for future medical treatments are reported as indemnity payments in all study states.

2015 refers to injury year/evaluation 2015/16. Other injury year/evaluation combinations are denoted similarly. In this study, less mature claims denote claims with an average maturity of 12 months. More mature claims denote claims with an average maturity of 36 months or higher.

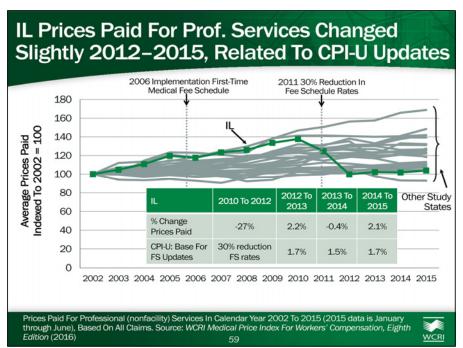
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This chart shows the trends in total medical payments per claim with more than seven days of lost time at different maturities in Illinois. Medical payments incorporate price and utilization of services provided by physicians, physical/occupational therapists, chiropractors, and hospitals.

For less mature claims, medical payments per claim grew moderately after 2011—3.1 percent per year, on average. Prior to that, the decrease in payments per claim reflects the reduction in the medical fee schedule rates. The moderate growth in medical payments per claim between 2012 and 2014 was partly driven by the updates in the fee schedule rates and partly by growth in facility payments to freestanding ASCs. Note that utilization of medical services was stable in Illinois before and after 2011 (CompScope™Medical Benchmarks for Illinois, 17th Edition).

Medical payments per claim are not adjusted for medical inflation. According to BLS, the CPI for medical care (may include services not relevant to workers' compensation) rose 2.6 percent in 2015 and 2.8 percent per year between 2011 and 2014.

Medical payments accounted for about 40 percent of total payments in Illinois for more mature claims with more than seven days of lost time. See Slide 8. Note that in Illinois, payments for future medical treatments can be settled. This may have an impact on the share of medical payments in total costs. However, the exact impact cannot be determined since lump-sum payments are rarely separated into medical and indemnity components in the data.



Key: CPI-U: Consumer Price Index for All Urban Consumers. FS: Fee schedule. Prof.: Professional.

Definition: **Prices** are benchmarked using a price index. The price index measures the unit prices paid holding utilization constant. It is based on a marketbasket of common medical procedures used in workers' compensation cases, using detailed Current Procedural Terminology (CPT) billing codes. Price information is reported on a calendar-year basis, as opposed to an injury/evaluation year basis as used for the medical payments per claim in this study. 2015 reflects data from January to June.

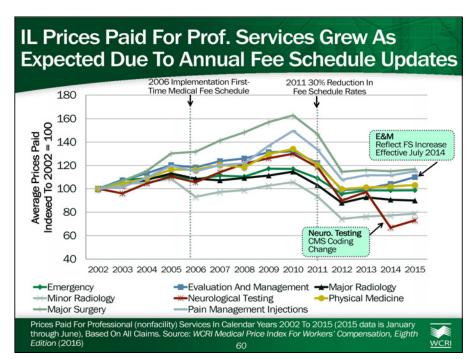
Source: Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).

One component of medical payments per claim, prices paid for professional (nonfacility) services, increased slightly in Illinois from 2012 to 2015. These increases were consistent with the design of the Illinois medical fee schedule to update fee schedule rates with the annual changes in the CPI-U.

As part of the 2005 reforms in Illinois, the growth in fee schedule rates was tied to the changes in the <u>CPI-U</u>. <u>Section 8.2(a)</u> of the Illinois Workers' Compensation Act provides that, each year, fee schedule rates will increase or decrease by the percentage change in the CPI-U in the previous year. The annual fee schedule updates are effective on January 1 of each year.

Note that prices paid may reflect network discounts and/or other price negotiations between the payors and medical providers. Price information includes services in and out of health care networks.

The next edition of CompScope™ Medical Benchmarks will analyze the trends in prices paid and utilization of services among nonhospital providers (comprises physicians, physical/occupational therapists, and chiropractors) and hospital providers.



Key and definitions: CMS: Centers for Medicare & Medicaid Services. CPI-U: Consumer Price Index for All Urban Consumers. CPT: American Medical Association's Current Procedural Terminology. E&M: Evaluation and management (office visits). FS: Fee schedule. Minor radiology: X rays and ultrasounds. Neurological (Neuro.) Testing: Neurological and neuromuscular testing. Pain management injections: Epidural or steroid injections on nerve roots and muscles for lumbar, sacral, cervical, or thoracic areas. Prof.: Professional.

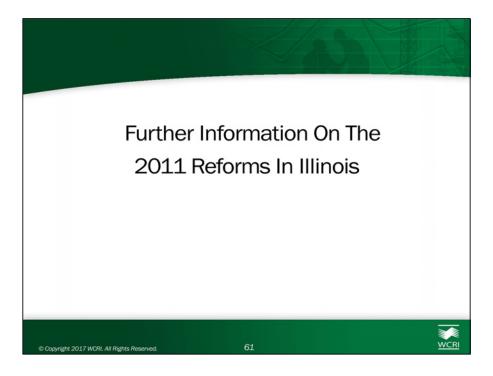
Source: Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).

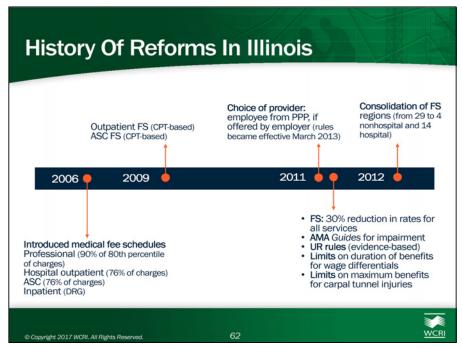
Effective for treatment on or after July 16, 2014, the Illinois Workers'
Compensation Commission increased fee schedule amounts for some office visit codes. By law, if the Commission finds that there is a significant limitation on access to quality health care in either a specific field of health care services or a specific geographic limitation on access to health care, it may change the CPI-U to address that limitation. (See IL Workers' Compensation Act. 820 ILCS.)

In July 2014, fee schedule rates were increased for those office visit CPT codes that had reimbursement rates below Medicare rates in Illinois. This report shows that prices paid for office visits increased 5.5 percent between 2014 and 2015, reflecting the increase in the fee schedule rates.

The CPI-U, which is used as a base for fee schedule updates in Illinois, increased 1.69 percent in 2013, 1.52 percent in 2015, and 1.70 percent in 2015.

The recent trend for neurological testing was affected by CMS changes. CMS implemented a fundamental change in the coding for nerve conduction studies in 2013, affecting the most commonly billed procedures in this service group.





A more detailed description is provided on the next slides.

Key: AMA: American Medical Association. ASC: Ambulatory surgery center. CPT: Current Procedural Terminology. CPT codes are published by AMA. DRG: Diagnosis-related group. FS: Fee schedule. PPP: Preferred provider program for selecting a treating physician. At the time of the injury, the employer provides a written list of physicians in the PPP to the employee. The worker has a choice to refuse treatment in the PPP and seek an out-of-network provider. The opt-out counts as a provider selection. In this case, the injured worker loses one choice of provider. If the employer does not have/does not lease a PPP, then the employee can select any provider. UR: Utilization review.

## 2011 Legislative Changes Addressing Higher Medical Costs In Illinois

Provision*	<u>HB 1698</u>	Prior Law
Fee schedule rates	Reduced by 30%	Fee schedule introduced in 2006
Regional fee schedules (effective Jan. 1, 2011)	4 for nonhospital; 14 for hospital providers	29 regions
Reimbursement of out- of-state treatment	The lesser of the state FS where worker resides or IL FS	The greater of 76% of charges in IL or state of treatment FS
Reimbursement of implants	25% above net manufacturer's invoice price	65% of charges
Rx dispensed/filled outside licensed pharmacies	AWP + \$4.18 dispensing fee	Usual and customary

The 2011 legislation addressed medical fee schedule rates, reimbursement of implants, and introduction of a fee schedule for prescription drugs filled and dispensed outside of a licensed pharmacy.

Key: AWP: Average wholesale price. FS: Fee schedule. HB: House bill. Rx: Prescriptions.

# 2011 Legislative Changes Addressing Higher Medical And Indemnity Costs In IL

Provision*	<u>HB 1698</u>	Prior Law
Choice of treating physician (effective June 28, 2011)	Employee choice from PPP, if offered by the employer	Employee choice
Utilization review	Required clinical report by physician; evidence-based guides	Allowed but not required
Impairment rating evaluation	AMA Guides, 6th edition	None
Maximum benefits for carpal tunnel injuries (effective June 28, 2011)	15% loss of use (up to 30% in certain cases)	None
Cap for wage differential benefits	Age of 67 or 5 years of benefits, whichever comes later	Lifetime

Key: AMA: American Medical Association. HB: House bill. PPP: Preferred provider program.

*Note:* Wage differential benefits are paid when a worker obtains a new job that pays less than the preinjury job(s). An employee may be compensated for either the loss of wages or the permanent disability related to the same injury, but not both. See the definition of wage differential benefits in the <u>Illinois Workers' Compensation Act, §8(d) 1</u>.

This table provides a brief summary of other key provisions in HB 1698. The new law

- created a preferred provider program for selecting treating physicians. The employee may decline the program in writing and choose his/her own physician;
- set utilization review standards the provider is required to provide a clinical report to support the request for treatment. The utilization review has to be based upon recognized treatment guidelines and evidence-based medicine;
- introduced AMA Guides in determining level of impairment;
- set maximum benefits for carpal tunnel at 15 percent loss of use (up to 30 percent in certain cases); and
- set cap for wage differential benefits—age of 67 or 5 years of benefits, whichever comes later.

The National Council on Compensation Insurance, Inc. estimated that provisions related to caps on wage differential benefits and carpal tunnel injuries could result in a decrease of 2.8 percent in indemnity costs or a decrease of 1.4 percent in overall system costs.

## AMA *Guides* Introduced To Provide Greater Uniformity In PPD Awards

- AMA Guides are one element of five when determining disability:
  - Other factors considered: occupation, age, future earning capacity, and evidence of disability from the medical records
  - No single factor to be the sole determinant of disability
  - While AMA rating is provided by the statute, there is no provision for automatic admissibility of these ratings

Illinois introduced the sixth edition of the AMA Guides.

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Key: AMA: American Medical Association. PPD: Permanent partial disability.

The introduction of the AMA Guides, Sixth Edition, for the determination of the degree of impairment, effective for injuries on or after September 1, 2011, was intended to standardize the approach of evaluation of permanent impairment. Prior to that, impairment ratings by physicians were not admissible as evidence in the final determination of PPD benefits. System stakeholders expect that use of the AMA Guides will lower the average PPD/lump-sum payment if the rating is applied in the majority of cases.

Note that, under the new legislation, no single factor shall be the sole determinant of the degree of disability. In addition to the level of impairment, the determination of the level of PPD shall reflect the injured worker's occupation, age, future earning capacity, and evidence of disability corroborated by the treating medical records (820 ILCS 305/8.1b).

While the AMA rating is provided by the statute, there is no provision for automatic admissibility of these ratings. Furthermore, in 2011, the <u>Illinois</u>

Workers' Compensation Commission provided guidance to arbitrators that they do not need an impairment rating to approve settlement contracts, and they are not prevented from awarding PPD benefits at a hearing if there is no impairment rating on the record.

## Metrics To Watch Following Implementation Of The 2011 Reforms

Performance Measure	WCRI Study
Fee schedule rates	WCRI Designing WC Fee Schedules
Prices paid for medical services	CompScope™ Medical Benchmarks WCRI Medical Price Index for WC
Utilization of medical services	CompScope™ Medical Benchmarks
Average medical cost containment expense per claim	CompScope™ Benchmarks
Average indemnity payment per claim	CompScope™ Benchmarks
% of claims and average lump-sum settlement per claim	CompScope™ Benchmarks
% of claims and average defense attorney payment per claim	CompScope™ Benchmarks
% of claims and average medical-legal expense per claim	CompScope™ Benchmarks

Key: WC: Workers' compensation.

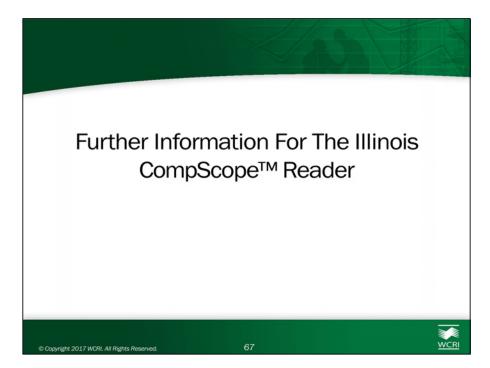
This slide summarizes some of the most important metrics to monitor to see if this legislative change achieves the intended goals and whether any unintended consequences occur.

The effects of the 2011 reforms will likely develop as a multi-year experience on claims observed.

The full effect of the 30 percent reduction in fee schedule rates on prices paid and medical payments per claim was observed and documented in CompScope™ Medical Benchmarks for Illinois.

Often when major legislation is enacted, there is an increase in disputes as the parties test the interpretation and parameters of the new provisions. Thus, defense attorney involvement and payments and the use and costs of medical-legal services may be expected to increase in the short term.

When policymakers and system stakeholders evaluate the effects of the legislative changes, they must also consider that the Great Recession and slow recovery might have also shaped the system performance and reported metrics.



## **Data And Methods In This Study**

- Data reasonably representative of state experience
  - 52% of IL claims; 40–74% across all 18 states
- Meaningful interstate comparisons
  - Definitions harmonized across states and data sources
  - Adjusted for differences in injury/industry mix and wages
  - Adjusted for differences in waiting periods (claims with > 7 days of lost time)
- Trends shown are unadjusted numbers
- Analysis focuses on cases with different maturities (12, 24, and 36 months of experience) to capture phenomena that occur earlier and later in a claim
- See the Technical Appendix for more detail



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### Scope Of CompScope™ Multistate **Benchmarks**

#### CompScope™

- Benefit amounts
- Timeliness
- Medical costs
- Disability duration
- Defense attorney involvement
- · Vocational rehabilitation use
- Benefit delivery expenses

#### CompScope™ Medical

- Medical costs
- Medical prices
- Utilization of services
- By provider type
- By service type

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## Other WCRI Studies Of Interest For Illinois

- CompScope™ Medical Benchmarks, 17th Edition (2016)
- WCRI Medical Price Index for Workers' Compensation, Eighth Edition (2016)
- Designing Workers' Compensation Medical Fee Schedules (2016)
- Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 5th Edition (2016)
- Payments to Ambulatory Surgery Centers, 2nd Edition (2016)
- Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments, 2nd Edition (2016)
- Longer-Term Use of Opioids, 3rd Edition (2016)
- Interstate Variations in Use of Opioids, 3rd Edition (2016)
- Workers' Compensation Laws (2016)
- Workers' Compensation MCC: National Inventory, 2015 (2015)



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Radeva. 2016. CompScope™ Medical Benchmarks for Illinois, 17th Edition.

Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).

Fomenko and Liu. 2016. Designing Workers' Compensation Medical Fee Schedules, 2016.

Fomenko and Yang. 2016. Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 5th Edition. Savych. 2016. Payments to Ambulatory Surgery Centers, 2nd Edition. Savych. 2016. Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments, 2nd Edition.

Wang. 2016. Longer-Term Use of Opioids, 3rd Edition. Thumula, Wang, and Liu. 2016. Interstate Variations in Use of Opioids, 3rd Edition.

WCRI and IAIABC. 2016. Workers' Compensation Laws as of January 1, 2016. Tanabe. 2015. Workers' Compensation Medical Cost Containment: A National Inventory, 2015.

### **DATA AND METHODS**

This section contains a short summary of data and methods used in this report. More detail can be found in the <u>Technical Appendix</u>. This analysis uses data from 24 data sources, including national and regional insurers, claims administration organizations, state funds, and self-insured employers. The data are collected in the Detailed Benchmark/Evaluation (DBE) database, which includes about 7.5 million claims that are reasonably representative of the entire system in each of the 18 states, including all market segments: self-insurance, residual market, voluntary insurance, and state funds. These data include 52 percent of Illinois claims in 2015/2016 (40 to 74 percent of the claims from each state).

We used a variety of techniques to increase the comparability of the measures from state to state, including (1) standardizing definitions of variables that state regulators might have defined differently from state to state, (2) standardizing the reporting on cases with more than seven days of lost time to control for differences in state waiting periods for income benefits, and (3) adjusting for interstate differences in injury and industry mix and in wage levels of injured workers. Interstate differences in the performance measures, therefore, should largely reflect variations in system features and/or in the practices and behavior of system participants.

#### **DATA VALIDATION**

To assess if our sample of claims was substantially representative of the state as a whole, we compared a number of measures from our sample data with published data from external sources, including state workers' compensation agencies, rating bureaus, and other sources. More specifically, we performed two types of validations: (1) we compared the incurred cost measures for the indemnity claims with the cost measures reported by the rating bureaus in each state, and (2) we examined data on injury and industry composition and worker age, gender, and marital status within each state. Those comparisons led us to conclude that the data we use for the CompScope™ analysis are substantially representative of each state as a whole. Thus, the results of the comparisons we report can be generalized to the claim population of each state.

#### **PUTTING ILLINOIS WORKERS' COMPENSATION IN A BROADER CONTEXT**

In this study, we report most results on a per claim basis (for example, the average total cost per all paid claims). Different metrics can be used to answer different questions concerning workers' compensation costs. Using data from research organizations outside of WCRI, we show how Illinois compares nationally on two relevant metrics—workers' compensation insurance premium rates (the cost of workers' compensation to employers) and the average cost per worker (discussed in the section titled "Is My State a High- or Low-Cost State?").

Every two years, the Oregon Department of Consumer and Business Services publishes a study that compares workers' compensation insurance premium rates across all states, using the Oregon industry mix as

<sup>&</sup>lt;sup>1</sup> The full DBE includes 43.5 million claims from 27 data sources across 36 states.

the base. The comparison of workers' compensation rates by state can be used as a factor in company relocation or expansion, as an indicator of possible differences in benefit levels, and to track changes in workers' compensation premium rates among states over time. The most recent study is for calendar year 2016. Premium rate indices were calculated based on data from 51 jurisdictions (all U.S. states and the District of Columbia) for rates in effect as of January 1 of the study year. Of approximately 450 active rate classes in Oregon, 50 were selected based on relative importance as measured by the share of losses in Oregon. To control for differences in industry distribution, each state's rates were weighted by the 2010–2012 Oregon payroll to obtain an average manual rate for that state. In 2016, Illinois premium rates were about 21 percent higher than the median of the 50 states plus the District of Columbia (ranking 8th out of 51). In the 2014 study, Illinois rates were 27 percent higher than the study median (ranking 7th of 51). States' relation to the median can change for a number of reasons, such as legislative changes that lead to significant increases or decreases in claim costs; ordinal rankings are often more volatile, depending on changes in other states. Table A shows the workers' compensation premium rate ranking for the 51 jurisdictions from the 2016 Oregon study.

<sup>&</sup>lt;sup>2</sup> Oregon Department of Consumer and Business Services. October 2016. *Oregon Workers' Compensation Premium Rate Ranking Calendar Year 2016*.

**Table A Workers' Compensation Premium Rate Ranking** 

State	2016 Index Rate	2016 Percentage of Study Median	2016 Ranking	Effective Date	2014 Index Rate	2014 Percentage of Study Median	2014 Ranking	
California	3.24	176%	1	January 1, 2016	3.48	188%		
New Jersey	2.92	158%	2	January 1, 2016	2.82	152%	3	
New York	2.83	154%	3	October 1, 2015	2.75	148%	4	
Connecticut	2.74	149%	5	January 1, 2016	2.87	155%	2	
Alaska	2.74	149%	5	January 1, 2016	2.68	145%	5	
Delaware	2.32	126%	6	December 1, 2015	2.31	125%	9	
Oklahoma	2.23	121%	8	January 1, 2016	2.55	137%	6	
Illinois	2.23	121%	8	January 1, 2015	2.35	127%	7	
Rhode Island	2.20	119%	9	August 1, 2014	1.99	107%	20	
Louisiana	2.11	115%	10	January 1, 2016	2.23	120%	10	
Montana	2.1	114%	11	July 1, 2015	2.21	119%	11	
Wisconsin	2.06	112%	12	October 1, 2015	1.92	104%	23	
Vermont	2.02	110%	14	April 1, 2015	2.33	125%	8	
Maine	2.02	110%	14	April 1, 2015	2.15	116%	13	
Washington	1.97	107%	15	January 1, 2016	2	108%	17	
Hawaii	1.96	107%	17	January 1, 2016	1.85	100%	27	
New Hampshire	1.96	106%	17	January 1, 2016	2.18	118%	12	
South Carolina	1.94	105%	18	September 1, 2015	2	108%	17	
Missouri	1.92	104%	20	January 1, 2016	1.98	107%	21	
New Mexico	1.92	104%	20	January 1, 2016	1.99	108%	20	
Minnesota	1.91	104%	22	January 1, 2016	1.99	107%	20	
North Carolina	1.91	103%	22	April 1, 2015	1.85	100%	27	
	1.87	101%	23	•	1.76	95%	31	
Wyoming Iowa	1.86	101%	24	January 1, 2016	1.88	101%	24	
Alabama	1.85	100%	25	January 1, 2016	1.81	97%	29	
	1.83	100%	26	March 1, 2015	2	108%		
Pennsylvania .				April 1, 2015			17	
Georgia	1.8	98%	27	March 1, 2015	1.75	95%	32	
Idaho	1.79	97%	28	January 1, 2016	2.01	109%	14	
Mississippi	1.7	92%	29	March 1, 2015	1.59	85%	38	
Tennessee	1.68	91%	30	March 1, 2015	1.95	105%	22	
Nebraska	1.67	91%	32	February 1, 2015	1.78	96%	30	
South Dakota Florida	1.67	91%	32	July 1, 2015	1.86	100% 98%	25 28	
	1.66 1.57	85%	34	January 1, 2016	1.68	91%	34	
Michigan Colorado	1.56	84%	35	January 1, 2015 January 1, 2016	1.5	81%	41	
Kentucky	1.52	82%	36	October 1, 2015	1.51	82%	40	
Arizona	1.50	82%	38	January 1, 2016	1.6	86%	37	
Maryland	1.5	82%	38	January 1, 2016	1.64	88%	35	
Texas	1.45	79%	40	July 1, 2015	1.61	87%	36	
Ohio	1.45	79%	40	July 1, 2015	1.74	94%	33	
Kansas	1.41	77%	41	January 1, 2016	1.55	83%	39	
District of Columbia	1.37	74%	42	November 1, 2015	1.31	70%	45	
Nevada	1.31	71%	43	March 1, 2015	1.26	68%	46	
Massachusetts	1.29	70%	44	April 1, 2014	1.17	63%	48	
Oregon	1.28	69%	45	January 1, 2016	1.37	74%	43	
Utah	1.27	69%	46	December 1, 2015	1.31	71%	45	
Virginia	1.24	67%	47	April 1, 2015	1.17	63%	48	
West Virginia	1.22	66%	48	November 1, 2015	1.37	74%	43	
Arkansas	1.06	57%	49	July 1, 2015	1.08	58%	49	
Indiana	1.05	57%	50	January 1, 2016	1.06	57%	50	
North Dakota	0.89	48%	51	July 1, 2015	0.88	47%	51	

Notes: Starting with the 2008 study, when two or more states' index rate values are the same, they are assigned the same ranking. The index rates reflect adjustments for the characteristics of each individual state's residual market. Rates vary by classification and insurer in each state. Actual cost to an employer can be adjusted by the employer's experience rating, premium discount, retrospective rating, and dividends.

Source: Table 2 from Oregon Workers' Compensation Premium Rate Ranking Calendar Year 2016. October 2016. Oregon Department of Consumer and Business Services, Information Technology and Research Section. The report is available at <a href="http://www.cbs.state.or.us/external/dir/wc\_cost/files/report\_summary.pdf">http://www.cbs.state.or.us/external/dir/wc\_cost/files/report\_summary.pdf</a>.

#### IS THE MEDIAN COMPSCOPETM STATE TYPICAL OF ALL STATES IN THE NATION?

This CompScope<sup>™</sup> report frequently compares the value for the state being analyzed with the median or *typical* state in the study. For the report to be most useful, it must meet two conditions. First, the states included should span the full range of states that have higher, lower, and medium costs per claim. Second, the cost measures in the median CompScope<sup>™</sup> state should be similar to those in the median state nationwide.

We chose the 18 states included in the study in part because they are geographically diverse. Together they represent a significant share of the U.S. population, a wide range of industries, and a variety of benefit structures and other system features. Further, the 18 states represent the full range of states nationally according to costs per claim. WCRI found that the average developed incurred cost per claim in the median of the CompScope™ states was similar to the median of all states—2.7 percent higher than the median of all states reported by the National Council on Compensation Insurance, Inc. (NCCI) in its *Annual Statistical Bulletin* (2014–2016, Exhibit XI). As a result, when this benchmarking report presents comparisons between the average total cost per claim and the median of the CompScope™ states, they are substantially similar to comparisons with the national median. Table B shows the average developed incurred cost per claim, state by state, for the 46 jurisdictions in the NCCI *Annual Statistical Bulletins*, average of policy years 2010–2012. The average cost per claim in Illinois was 70 percent higher when compared with the median state.

Using the NCCI data, the average medical cost per claim for the median CompScope™ state was 0.3 percent lower than the national median. The average indemnity benefit per claim, adjusted for wage differences, in the median of the CompScope™ states was 8 percent higher than the national median.

Table B Ranking by Cost per Claim Using Rating Bureau Information, Average of Policy Years 2010–2012

State	Average Incurred Cost per Claim,
<u> </u>	3-Year Average (developed)
Delaware	\$30,624
New York	\$29,195
California	\$26,965
_ouisiana	\$23,899
llinois	\$20,970
New Jersey	\$20,928
Oklahoma	\$18,785
Alaska	\$18,072
Connecticut	\$17,907
District of Columbia	\$17,114
Maryland	\$16,846
outh Carolina	\$16,311
North Carolina	\$16,229
New Mexico	\$14,382
Georgia	\$14,282
/ermont	\$13,774
Missouri	\$13,632
Massachusetts	\$13,211
/irginia	\$13,121
Pennsylvania	\$12,862
ławaii	\$12,835
Mississippi	\$12,517
owa	\$12,515
Alabama	\$12,206
ennessee	\$11,659
lew Hampshire	\$11,423
Minnesota	\$11,291
Montana	\$10,986
Wisconsin	\$10,906
Colorado	\$10,789
Nebraska	\$10,766
Гехаѕ	\$10,701
- Florida	\$10,529
Rhode Island	\$10,426
Kansas	\$10,117
Dregon	\$9,932
daho	\$9,823
Nevada	\$9,437
<b>Centucky</b>	\$9,320
Jtah	\$9,135
Arkansas	\$8,501
South Dakota	\$8,273
Arizona	\$8,014
Maine	\$7,905
ndiana	\$7,857
Michigan	\$7,706

*Notes:* These data are incurred values developed to ultimate maturity and cases developed to a 5th reporting basis, with the following exceptions. In Massachusetts, lost-time experience and medical-only losses were developed to a 5th report; the data exclude large deductibles. In New Jersey, losses were developed to a 5th reporting basis. In New York, losses and cases were developed to a 5th reporting basis. All state statistics exclude the F-classifications (except for Massachusetts and New York) as well as black lung experience. CompScope<sup>TM</sup> states are shown in bold.

Source: National Council on Compensation Insurance, Inc., Annual Statistical Bulletins 2014–2016, exhibit XI (available electronically at <a href="http://www.ncci.com">http://www.ncci.com</a>). Note that although NCCI publishes national comparisons of states, including those served by independent rating bureaus, it does so with the assistance of and clear attribution to those independent organizations.

#### IS MY STATE A HIGH- OR LOW-COST STATE?

This is one of the questions most frequently posed by policymakers and others. The answer could be fundamental to public policy debates or could be an important factor in an organization's decision to locate a new facility, expand operations, or maintain an established business in a given state. Cost per claim is only one element in the issue of whether a state is high cost or low cost. The other contributing factor to claim cost is claim frequency. The CompScope™ annual benchmarking series does not yet directly address this important issue. To do so would require analysis of how states differ in terms of costs per worker or other appropriate exposure base(s), a measure that captures both the frequency of claims and the average total cost per claim.

We used estimates of costs per worker that we developed using insurance rating bureau data on benefit costs per claim and frequency of claims per 100,000 workers (NCCI, 2014–2016, Exhibits XI and XII). Table C shows the average cost per worker, state by state, for the 46 jurisdictions in the NCCI bulletins, average of policy years 2010–2012. The NCCI data do not include self-insured claims, and the data on the number of workers were imputed from payroll data reported by insurers and from average wages by industry reported by the federal Bureau of Labor Statistics (BLS) in most states.<sup>3</sup> Cost per worker in Illinois was 43 percent higher than the median state. That result was driven mainly by cost per claim, which was 70 percent higher in Illinois than typical. Claim frequency was 20 percent lower, when compared with the median of 45 states plus the District of Columbia. Table D shows claim frequency per 100,000 workers, state by state, for the 46 jurisdictions in the NCCI bulletins, average of policy years 2010–2012. According to *Oregon Workers' Compensation Premium Rate Ranking Calendar Year 2016*, premium rates in Illinois were 21 higher than the median of 51 jurisdictions (see Table A).

<sup>&</sup>lt;sup>3</sup> Wage amounts in data provided by independent rating bureaus and included in the NCCI bulletins, which are used to estimate the effective number of full-time workers for calculating claim frequencies, differ, sometimes significantly, from wage amounts in the BLS data that NCCI relied on. These differences may distort comparisons of claims frequencies between states.

Table C Ranking by Cost per Worker Using Rating Bureau Information, Average of Policy Years 2010–2012

State	Average Cost per Worker
J.G.C	for All Claims, 3-Year Average
alifornia	\$1,077
elaware	\$921
aska	\$817
onnecticut	\$740
klahoma	\$733
ew York	\$718
lew Jersey	\$685
linois	\$651
ennsylvania	\$599
lontana	\$597
ouisiana	\$589
ermont	\$588
ew Mexico	\$563
owa	\$556
daho	\$509
levada	\$495
outh Carolina	\$495
/isconsin	\$494
orth Carolina	\$489
ew Hampshire	\$466
olorado	\$466
regon	\$463
ennessee	\$459
laryland	\$448
laine	\$446
innesota	\$443
lissouri	\$440
awaii	\$437
ieorgia	\$431
node Island	\$428
labama	\$422
e braska	\$415
outh Dakota	\$405
1ississippi	\$399
ansas	\$393
/lassachusetts	\$381
lorida	\$377
<b>Centucky</b>	\$375
	\$366
'irginia	\$322
ndiana	\$320
/lichigan	\$308
rizona	\$305
exas	\$272
rkansas	\$266
District of Columbia	\$209

Notes: These data are incurred values developed to ultimate maturity and cases developed to a 5th reporting basis, with the following exceptions. In Massachusetts, lost-time experience and medical-only losses were developed to a 5th report; the data exclude large deductibles. In New Jersey, losses were developed to a 5th reporting basis. In New York, losses and cases were developed to a 5th reporting basis. All state statistics exclude the F-classifications (except for Massachusetts and New York) as well as black lung experience. CompScope<sup>TM</sup> states are shown in bold.

Source: National Council on Compensation Insurance, Inc., Annual Statistical Bulletins 2014–2016, exhibits XI and XII (available electronically at <a href="http://www.ncci.com">http://www.ncci.com</a>). Note that although NCCI publishes national comparisons of states, including those served by independent rating bureaus, it does so with the assistance of and clear attribution to those independent organizations.

Table D Ranking by Claim Frequency per 100,000 Workers Using Rating Bureau Information, Average of Policy Years 2010–2012

State	Average Claim Frequency,						
State	3-Year Average						
Maine	5,597						
Montana	5,389						
levada	5,273						
daho	5,212						
outh Dakota	4,837						
Dregon	4,646						
Pennsylvania	4,591						
	4,500						
laska	4,486						
owa	4,409						
olorado	4,291						
ermont ermont	4,279						
Connecticut	4,070						
hode Island	4,049						
ndiana	4,039						
lew Hampshire	4,022						
ltah	3,987						
alifornia	3,973						
entucky	3,954						
lichigan	3,934						
linnesota	3,907						
ennessee	3,873						
e braska	3,828						
ew Mexico	3,828						
klahoma	3,826						
ansas	3,816						
rizona	3,768						
orida	3,554						
awaii	3,398						
labama	3,384						
lew Jersey	3,236						
lissouri	3,201						
1ississippi	3,140						
rkansas	3,067						
linois	3,046						
outh Carolina	3,003						
elaware	2,979						
ieorgia	2,977						
lorth Carolina	2,967						
lassachusetts	2,832						
laryland	2,621						
exas	2,517						
lew York	2,432						
.ouisiana	2,431						
/irginia	2,422						
District of Columbia	1,222						

Notes: These data are for first report and exclude claims payable under the U.S. Longshore & Harbor Workers Act. CompScope™ states are shown in bold.

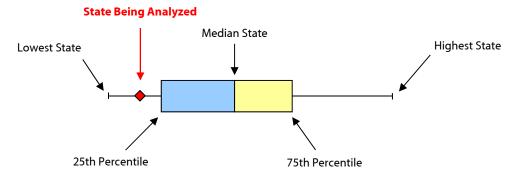
Source: National Council on Compensation Insurance, Inc., Annual Statistical Bulletins 2014–2016, exhibit XII (available electronically at <a href="http://www.ncci.com">http://www.ncci.com</a>). Note that although NCCI publishes national comparisons of states, including those served by independent rating bureaus, it does so with the assistance of and clear attribution to those independent organizations.

#### **READING BOX PLOTS**

This document uses a powerful presentation tool called a box plot. Although it might initially look complicated, the box plot is relatively easy to read and very informative. This section explains how to read a box plot.

A box plot presents a large amount of comparative information and allows the reader to see relationships among measures when several box plots appear on a page. The diagram below shows the six pieces of information contained in a box plot. The *whisker*—the horizontal line extending from the left and right sides of the box—shows the full range of values (e.g., average total cost per claim) in the 18 study states, from the lowest state on the left to the highest state on the right. The vertical line inside the box represents the 18-state median (between the 9th and 10th state); in other words, an equal number of study states (9) appear above and below that value. The left edge of the box represents the 25th percentile (the 5th state). The right edge of the box represents the 75th percentile (the 14th state). The 4 states whose values are the lowest among the 18 states are on the left end of the whisker (the line extending from the left edge of the box). The 4 states whose values are in the second-lowest group are between the median and the left edge of the box. Similarly, the 4 states whose values are the highest among the 18 states are on the right end of the whisker (the line extending from the right edge of the box). The 4 states that are in the second-highest group are between the median and the right edge of the box. The diamond, representing the value for the state being analyzed, shows where that state lies relative to other states in the study.

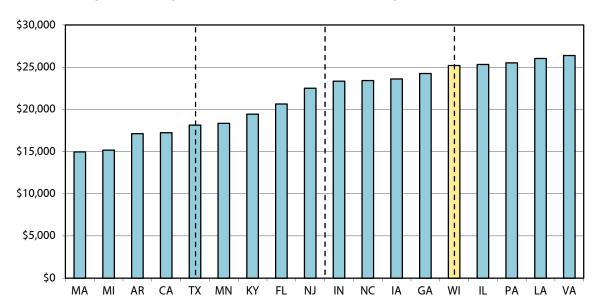
#### **Understanding a Box Plot**



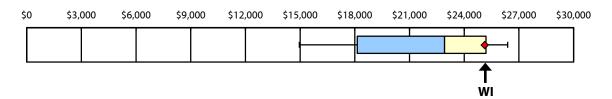
Some readers may find it useful to see how information in a typical bar chart is translated into a box plot. The bar chart on the next page shows the average benefit payment per claim with more than seven days of lost time. The dotted vertical lines appearing from left to right represent the 25th percentile, the median, and the 75th percentile, respectively. The box plot underneath the bar chart illustrates the same information as the bar chart does, presented as it would appear for a report focusing on Wisconsin. Notice the following:

- The lowest state, Massachusetts, is at the left end of the whisker.
- The highest state, Virginia, is at the right end of the whisker.
- The median falls between New Jersey and Indiana.
- The state at the 25th percentile is Texas.
- The state at the 75th percentile is Wisconsin.
- The diamond is Wisconsin, which is at the 75th percentile.

#### Average Benefit Payment per Claim with More Than 7 Days of Lost Time, 2015/2016

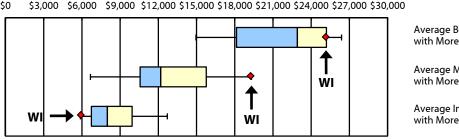


Average Benefit Payment per Claim with More Than 7 Days of Lost Time, 2015/2016



Box plots are particularly useful in showing relationships among various performance measures. The set of box plots below, for example, shows that Wisconsin is at the 75th percentile among the 18 states for the average paid benefit per claim with more than seven days of lost time (the top box plot). We also see that this result occurs because underlying measures counterbalance each other. Wisconsin had an average paid medical benefit per claim with more than seven days of lost time that was the highest of the 18 study states (the middle box plot). However, the average indemnity benefit per claim with more than seven days of lost time in Wisconsin was the lowest of the 18 states (the bottom box plot).

#### Multiple Box Plots Help to Show Relationships among Measures



Average Benefit Payment per Claim with More Than 7 Days of Lost Time

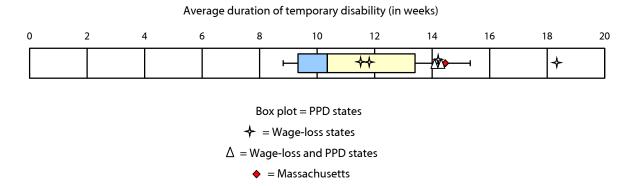
Average Medical Payment per Claim with More Than 7 Days of Lost Time

Average Indemnity Benefit per Claim with More Than 7 Days of Lost Time

Box plots also show clearly how much variability there is across states—the longer the whisker or the box associated with a given measure, the greater the variability for that measure. A state that is a marked outlier (positioned at or close to the end of a long whisker) on a performance measure for which there is otherwise little variability (i.e., showing a narrow box and a short opposite whisker) may be especially noteworthy.

It is not appropriate to compare permanent partial disability (PPD) and temporary disability measures among wage-loss states, PPD system states, and states with attributes of both wage-loss and PPD benefit systems. The CompScope™ study ensures that its interstate comparisons are meaningful by comparing wageloss states with wage-loss states and PPD states with PPD states, while treating states with attributes of both wage-loss and PPD systems as a separate category. To show how all 18 states compare, the report uses special notation: a star is used to represent a wage-loss state, and a triangle is used to represent a state with features of both wage-loss and PPD systems. For example, the box plot below shows the measure of duration of temporary disability. In the Massachusetts CompScope™ report, the box plot depicts the 11 PPD system states, the stars identify 4 wage-loss states (Louisiana, Michigan, Pennsylvania, and Virginia), and the triangles identify 2 states that have features of both wage-loss and PPD systems (Georgia and North Carolina). Because Massachusetts, the 5th wage-loss state, is the state being analyzed, it is represented by a diamond. The box plot whiskers shown when wage-loss states are being compared with other states are based only on the non-wage-loss states. In this example, 4 of the 5 wage-loss states fall within the range of the nonwage-loss states. If a non-wage-loss state was the subject of the analysis, the box plot would display 5 stars, each representing one of the 5 wage-loss states, while triangles would represent states with attributes of both wage-loss and PPD systems.

## Notation Distinguishes PPD System States, Wage-Loss System States, and States with Attributes of Both Systems



#### **TERMS WE USE TO DESCRIBE PERFORMANCE**

In characterizing an individual state's performance with respect to the median of the study states, we often use the terms *higher*, *lower*, and *typical of* or *close to*. *Higher* means more than 10 percent above the median of the 18 states, *lower* means more than 10 percent below the median of the 18 states, and *typical of* or *close to* means within 10 percent above or below the median of the 18 states.

When describing trends, or how performance in a state has changed over time, we typically report annual average change—percentage changes for cost and duration measures and percentage point changes for other measures that are themselves expressed as percentages, such as PPD/lump-sum claims as a percentage of

claims with more than seven days of lost time.

To avoid unnecessarily subjective characterizations, we use consistent criteria for selecting adjectives that describe multistate comparisons and growth trends. <u>Table 1</u> shows the categories and terms we use throughout the study. We recognize that the criteria and terms we use reflect judgment. However, we believe that it is important to use a consistent approach, and adhering to a disclosed framework helps us to accomplish that.

#### Naming Convention Used in Our Analysis

We applied a naming convention for pairs of injury years and evaluation dates to uniquely describe the set of claims used in our analysis. The first year is the year in which the injuries occurred, and the second year is the maturity of the claims. For example, 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, with experience through March 31, 2016—an average of 12 months' maturity. We denote other injury year/evaluations similarly. The injury year for the CompScope™ Benchmarks includes claims from the fourth quarter of the prior year and the first, second, and third quarters of the named injury year. For example, injury year 2015 includes claims arising from October 1, 2014, through September 30, 2015.

## INFORMATION FOR FIRST-TIME USERS

This section is intended to provide detail about the key benchmarks we analyze, the data we use, adjustments we make, and some presentational explanations for new CompScope™ users. This background information should help those who have not used the study before to better understand the objectives and scope of the report, what it contains and why, how the measures are constructed, and how the information it contains can be used.

#### THE COMPSCOPETM BENCHMARKS

Benchmarks of system performance can be powerful tools for public officials and system stakeholders working to maintain and/or improve their systems. These tools can be used to monitor the effects of legislative, regulatory, judicial, and behavioral changes. We present various measures in several areas:

- Time from injury to payor notice of injury and first indemnity payment
- Average total cost per claim, average payment per claim for medical benefits, and average payment per claim for indemnity benefits and components (temporary disability benefits, permanent partial disability benefits, and lump-sum settlements)
- Vocational rehabilitation use and costs
- Benefit delivery expenses per claim and defense attorney involvement
- Duration of temporary disability

These measures offer policymakers and stakeholders a comprehensive look at key aspects of the workers' compensation benefit delivery system, on a consistent and regular basis. Figure A shows the benefit and expense variables we examine, most of which we report in this study.

The unit of analysis in the CompScope™ benchmarking series is the individual workers' compensation claim, so most results are reported on a per claim basis. Costs per claim reflect the overall costs divided by the number of claims. Therefore, claim frequency does not directly factor into the measures we report. As reported by rating bureaus, however, claim frequency in virtually all states has been declining for well over a decade. At the same time, average costs per claim have increased in many study states. In some states, insurance rates have declined while average costs per claim have been growing—a seeming inconsistency. Generally, this results from the fact that total system costs are lower because the decline in the number of claims more than offsets increases in the average cost per claim. Insurance rates reflect the combination of all these cost considerations as well as other considerations.

The results of the key performance measures are provided for several claims bases. These include all claims, claims with more than seven days of lost time, and claims with specific types of benefits, i.e., temporary disability (which includes temporary total and temporary partial disability) or permanent partial disability.<sup>2</sup> Each measure may be useful for addressing different questions. For example, the broadest

<sup>&</sup>lt;sup>1</sup> The CompScope™ Medical Benchmarks, a companion study, focuses on the costs, prices, and utilization of medical care received by injured workers in the aggregate and by type of medical provider and type of medical service.

<sup>&</sup>lt;sup>2</sup> Claims are classified based on the type of benefits paid, from the least to the most severe—that is, medical-only, temporary disability, permanent partial disability, permanent total disability, and fatality. A claim's overall classification reflects the benefits paid as of the evaluation date for the most severe claim type.

measure—the average total cost per all paid claims (total costs per claim)—is the composite of all of the underlying cost components and offers an overall characterization of a state's costs as higher than, lower than, or typical of the study states as a group. However, we focus much of our analysis on claims with more than seven days of lost time for several reasons. Using a subset of claims with more than seven days of lost time offers more appropriate and meaningful interstate comparisons because it recognizes the cost impact of different waiting periods across states. Also, these claims account for the bulk of system costs and thus are the focus of most substantive public policy debate.

The following table shows the breakdown of total costs per claim for Illinois and the proportion of each component measure relative to the total costs per claim for claims in injury year 2013 with an average 36 months of experience. Total cost per claim is comprised of four components—medical payments per claim, indemnity benefits per claim, benefit delivery expenses per claim, and vocational rehabilitation expenses per claim. Some of the numbers shown under average cost per claim with more than seven days of lost time differ from what we show in the CompScope™ study because those results use a different base, typically claims with more than seven days of lost time that had a payment of the type being analyzed. For example, we report the average medical cost containment expense per claim with more than seven days of lost time with medical cost containment expenses. This table looks different from state to state because of the particular combination of benefit delivery system features and processes found in each. The distribution of payments shown here represents only a snapshot, and it may differ at shorter or longer maturities. Note that some cells on the table are purposely left blank for components that represent a small share of total costs (for example, other indemnity payments per claim).

Breakdown of Total Costs per Claim with M	lore Than 7 Days	of Lost	Time i	n Illinois, 20	13/2016
Performance Measure	Average Cost per Claim with More Than 7 Days of Lost Time	Total per 0	re of Costs Ilaim ntage)	Percentage of Claims with That Payment	Average Cost per Claim with That Payment
Average total cost per claim	\$48,898				
Average medical payment per claim	\$20,354	41.6%			
Average indemnity benefit per claim	\$21,275	43.5%			
Temporary disability payments per claim	\$9,375		19.2%	83.2%	\$11,268
Permanent partial disability or lump-sum payments per claim	\$11,202		22.9%	43.2%	\$25,927
Other indemnity payments per claim (includes permanent total and death payments)	\$698		1.4%		
Average benefit delivery expense per claim	\$7,180	14.7%			
Average medical cost containment expense per claim	\$3,797		7.8%	94.7%	\$4,012
Average defense attorney payment per claim	\$1,795		3.7%	48.0%	\$3,735
Average medical-legal expense per claim	\$950		1.9%	32.8%	\$2,898
Average other expense per claim	\$638		1.3%		
Average vocational rehabilitation provider expense per claim	\$89	0.2%			

*Notes*: 2013/2016 refers to claim arising in October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. These claims have an average maturity of 36 months.

The data in the table have been adjusted for interstate differences in injury and industry mix and in wages, one of the methods we use to achieve more meaningful multistate comparisons.

#### **DATA USED IN THE ANALYSIS**

We chose the states included in the study for a variety of reasons, including (1) representation of higher, lower, and medium costs per claim; (2) generally larger-than-average populations; (3) diverse benefit structures and other system features; (4) availability of funding sources within each state; and (5) geographic diversity. The states included in the study represent 61 percent of all workers' compensation benefits paid nationwide.

The sample data for this 17th edition include about 7.5 million claims from the systems of 24 data sources (national and regional insurance companies, claims administration organizations, and state funds) in the 18 study states. Along with information on the injured worker and claim characteristics, we received information on all payment transactions for each claim, including the amount paid, date paid, and period covered, what the payment was for, and to whom the payment was made (for example, the worker or a medical provider). The claims data were provided to us under agreement, which limits WCRI use of the data to specified research purposes. The data remain the property of the data providers. We employ a variety of safeguards to maintain the security and confidentiality of the data, including encrypting all worker- and employer-identifying information.

The sample data include claims from all market segments in each state, including the voluntary market, residual market, self-insurers, and state funds (where applicable). To ensure that the sample data are representative of the full insurance market, we weighted our sample claims to represent the population proportions of the insurance market segments in each state. The state datasets contain a substantial portion of the claims in the population of all study states and are large enough to support detailed analysis. For example, for 2015, the database contains 40 to 74 percent of the claims in each state.

Given that workers' compensation claims typically change in terms of costs and/or characteristics, or *develop*, over several years, the CompScope™ Benchmarks provide snapshots of system performance at various points in time to address the trade-off between recent information and complete information. Generally, the multistate comparisons focus on claims at an average 36 months of experience, as this is a better indicator of the ultimate costs per claim than earlier snapshots would be. For most trend measures, we use claims at an average 12 months of experience to show the results for the most recent year. For some measures, such as the frequency and cost of PPD/lump-sum claims, we also report trends at 24 and/or 36 months. The injury year for the CompScope™ Benchmarks includes claims from the fourth quarter of the prior year and the first, second, and third quarters of the named injury year. For example, injury year 2015 includes claims arising from October 1, 2014, through September 30, 2015.

#### COMPARABILITY OF COMPSCOPE<sup>TM</sup> BENCHMARKING MEASURES

We used a number of adjustments to make the data meaningful for interstate comparisons. Our goal was to create a similar set of claims for analysis to reduce the differences across states that have clouded the usefulness of some claim-based interstate comparisons. To do that, we standardized the data using common terms to classify them, analyzed a subset of claims with more than seven days of lost time, and controlled for injury and industry mix and wage levels. Those adjustments yielded performance measures that are much more likely to reflect differences across states in system design, system implementation, or the behavior of system participants—those elements that must change to cause change in the performance results we observed. More detailed discussion of each of these adjustments, summarized below, can be found in the *Technical Appendix*, along with estimations of the effects of the various adjustments.

To ensure valid comparisons across states and over time, we constructed variables that, to the fullest extent possible, reflect definitions common to the data sources and across states. To accomplish this, we mapped definitions from data sources or states to a set of standard definitions for payment transactions, injury groups, and industry categories. For example, expenses for medical-legal examinations may be required by the rating bureau to be reported as medical costs in some states, whereas we record all payments for medical-legal examinations as expenses. We also identified and calculated <a href="https://linear.google

Differences in the waiting period for indemnity benefits across states directly affect the ratio of medicalonly to indemnity claims and measures of claim frequency, and thus affect the comparability of the measures. Waiting periods in the 18 states we studied vary from three days to five days to seven days. To increase the validity of the interstate comparisons, we focused much of our analysis on the subset of claims with more than seven days of lost time.

We enhanced the comparability of the performance measures for interstate comparisons by applying adjustments to control for the state differences in injury and industry mix and wage levels—also referred to as case-mix adjustment. Workers in certain industries are at a greater or lesser risk of injuries; those injuries are more or less likely to be severe; and return to work is affected by the nature of employment. Based on our classifications of 12 injury groups and 7 industry categories, we adjusted the sample of claims in each state so that the claim distribution across injury and industry categories looked the same across the states. To accomplish this, we (1) determined the distribution of claims by injury and industry category for the pooled sample of all 18 states and for the sample claims in each state, (2) compared the sample distribution in each state with the pooled state distribution and calculated a unique set of injury and industry weights for each state, and (3) used those weights to adjust the sample claims in each state in calculating the performance measures so that the measures reflect a constant injury and industry mix across the states. Wages are related to both workers' and employers' characteristics and can affect the cost and duration of claims. For example, higher-wage workers tend to be older, more experienced, better educated, and more skilled. Further, higherwage workers tend to work for larger companies, be unionized, and be employed in more capital-intensive and hazardous industries. Thus, wage-level adjustments can be used to control, at least in part, for differences in worker characteristics and the economic characteristics of employers. We adjusted for interstate differences in wages in a similar way to what we did for differences in injuries and industries.

#### OTHER DEFINITIONAL/PRESENTATIONAL EXPLANATIONS

We often compare an individual state's performance with that of the median of the study states. We use the median of the 18 states rather than the mean (average) because it offers a more unbiased comparison—50 percent of the states are higher and 50 percent are lower. The mean is more sensitive to extreme high or low values than is the median.

For measures involving indemnity components—PPD and temporary disability measures—we separate out the states with a wage-loss benefit structure (Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia) in order to provide meaningful interstate comparisons. That is because, under a wage-loss benefit structure, most indemnity benefits are paid as temporary disability, generally resulting in longer duration, and PPD benefits are less frequent. For these measures, we use an 11-state median for comparison and use a special notation (the stars) on the box plots to denote the values for the wage-loss states. The range presented by the whiskers of the box plots is similarly derived from data excluding the wage-loss states. Two states that have the attributes of both a wage-loss system and a PPD benefit system are denoted and treated differently

from the wage-loss states and from the PPD states. Lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. To achieve consistency in the treatment of lump-sum payments among the data sources and to develop measures that are comparable across states, we grouped the lump-sum medical payments with other lump-sum payments, reporting them as indemnity payments. The current requirements of Medicare Set-Aside Arrangements might suggest that companies are, or will become, increasingly able to extract the medical component of settlements. We will continue to monitor any changes in data reporting that allow us to modify our current approach in constructing the lump-sum settlement measure.

The trends we report are based on data weighted to represent the full insurance market in the state. However, we did not adjust the trends for the interstate differences in injury and industry mix and wage levels. The unadjusted numbers used in the trend analysis provide the most relevant information on how the system performed in each state over time. We do recognize, however, that many study states have experienced considerable changes in injury and industry mix and wage levels over time. We factored these into our trend analysis whenever we believed the effect of these changes in the external factors could be a significant part of the trends. The trend figures in the report show the year-to-year change in the levels rather than showing the actual levels for a measure. For the state that is the focus of a report, we connect the change points for each year with a line. The downward or upward lines show deceleration or acceleration in growth from one year to another. A change point below zero on the vertical axis indicates a decrease; similarly, a change point above zero means an increase.

## QUICK REFERENCE GUIDE TO FIGURES AND TABLES

Measure	Interstate Comparison											
_	All Paid	Claims	Claims with Mo of Lost									
	2015/2016 (12-month maturity)	2013/2016 (36-month maturity)	2015/2016 (12-month maturity)	2013/2016 (36-month maturity)								
Costs and benefits, and major components	Figure 1 Table 2	Figure 2 Table 2	Figure 3 Table 2	<u>Figure 4</u> <u>Table 2</u>								
Incurred benefits and components	_	_	<u>Figure 5</u> <u>Table 2</u>	Figure 6 Table 2								
Indemnity benefits and components (including duration)	_	_	Figure 7 Table 2	Figure 8 Table 2								
Temporary disability benefits	_	_	<u>Figure 9</u> <u>Table 2</u>	Figure 10 Table 2								
Permanent partial disability benefits/lump-sum settlements	_	_	<u>Table 2</u>	Figure 11 Table 2								
Benefit delivery expenses and major components	<u>Table 2</u>	<u>Table 2</u>	<u>Figure 12</u> <u>Table 2</u>	Figure 13 Table 2								
Timing of reporting and payments	_	_	<u>Figure 14</u> <u>Table 2</u>	_								
Measure		Tre	nd									
- -	All Paid	Claims	Claims with Mo of Lost									
	2015/2016 (12-month maturity)	2013/2016 (36-month maturity)	2015/2016 (12-month maturity)	2013/2016 (36-month maturity)								
Total costs and major components	Figure 15 Table 3	<u>Table 3</u>	<u>Figure 17</u> <u>Table 3</u>	Table 3								
Percentage of claims with more than 7 days of lost time	Figure 16 Table 3	<u>Table 3</u>	_	_								
Incurred benefits and components	_	_	Figure 18 Table 3	Table 3								
Medical payments	<u>Table 3</u>	<u>Table 3</u>	Figure 19 Table 3	<u>Table 3</u>								
Indemnity benefits and components	_	_	Figure 20 Table 3	Table 3								
Duration of temporary disability	_	_	Figure 21 Table 3	Table 3								
Permanent partial disability benefits/lump-sum settlements	_	_	Figures 22, 24 Table 3	<u>Figures 23, 25</u> <u>Table 3</u>								
Benefit delivery expenses and major components	<u>Table 3</u>	<u>Table 3</u>	Figure 26 Table 3	Figure 27 Table 3								
Medical cost containment expenses	_	_	Figure 28 Table 3	Figure 29 Table 3								
Defense attorney payments	_	_	Figures 30, 32 Table 3	Figures 31, 33 Table 3								
Medical-legal expenses	_	_	Figure 34 Table 3	Figure 35 Table 3								
Timing of reporting and payments	_	_	Table 3	_								

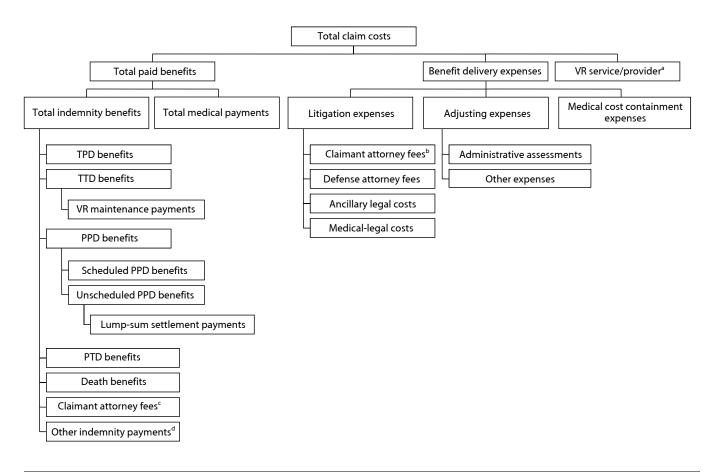
continued

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Table 5	Comparison of Statutory Maximum Weekly Temporary Total Disability Benefit and Statewide Average Weekly Wage, 2015
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### **Web Site Addresses for Supplementary Materials**

 $CompScope \ ^{\intercal} \textit{Benchmarks, 17th Edition: The DataBook:} \ \underline{\text{http://www.wcrinet.org/images/uploads/files/cs17\_databook.pdf}}$ 

#### Figure A WCRI Benefit and Expense Variables



<sup>&</sup>lt;sup>a</sup> We treat vocational rehabilitation provider expenses as a separate category; some readers might regard them as benefits, others as expenses.

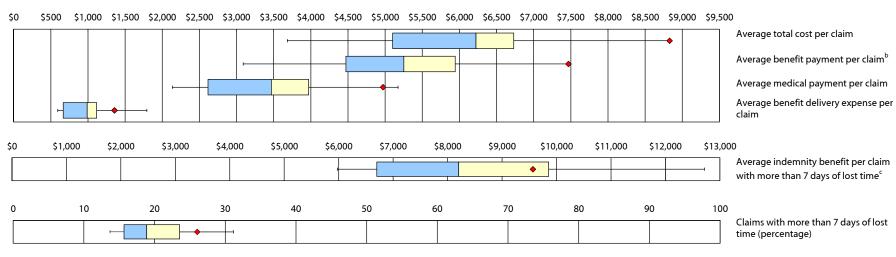
Key: PPD: permanent partial disability; PTD: permanent total disability; TPD: temporary partial disability; TTD: temporary total disability; VR: vocational rehabilitation.

<sup>&</sup>lt;sup>b</sup> Claimant attorney fees that are the worker's responsibility.

<sup>&</sup>lt;sup>c</sup>Claimant attorney fees that are the payor's responsibility.

<sup>&</sup>lt;sup>d</sup> Indemnity payments that are not elsewhere classified, including penalties and awards.

Figure 1 Average Costs for All Paid Claims at 12 Months' Average Maturity, a 2015/2016



Performance Measure, 2015/2016 Claims	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	18-State Median <sup>d</sup>
Average total cost per claim	\$3,907	\$6,611	\$6,558	\$7,061	\$6,032	\$8,830	\$5,174	\$4,558	\$8,616	\$6,179	\$3,685	\$5,106	\$6,145	\$8,715	\$6,700	\$6,271	\$6,056	\$6,809	\$6,225
Average benefit payment per claim <sup>b</sup>	\$3,300	\$5,224	\$5,461	\$5,943	\$5,362	\$7,470	\$4,473	\$3,822	\$7,194	\$5,160	\$3,089	\$4,334	\$5,175	\$6,921	\$5,665	\$5,167	\$5,282	\$6,163	\$5,253
Average medical payment per claim	\$2,325	\$2,615	\$3,726	\$3,381	\$3,971	\$4,972	\$3,555	\$2,572	\$4,748	\$2,597	\$2,137	\$3,062	\$2,743	\$5,175	\$3,557	\$3,238	\$3,958	\$5,064	\$3,468
Average benefit delivery expense per claim	\$606	\$1,381	\$1,093	\$1,116	\$668	\$1,357	\$700	\$735	\$1,414	\$1,016	\$593	\$650	\$966	\$1,793	\$1,033	\$1,103	\$772	\$644	\$991
Average indemnity benefit per claim with more than 7 days of lost time <sup>c</sup>	\$6,566	\$9,854	\$8,011	\$12,313	\$7,835	\$9,567	\$6,700	\$8,225	\$10,367	\$8,222	\$6,067	\$6,793	\$12,716	\$6,692	\$11,450	\$8,189	\$8,622	\$5,976	\$8,205
Claims with more than 7 days of lost time (percentage)	14.9%	26.3%	21.6%	20.8%	17.7%	26.1%	13.7%	15.2%	23.5%	31.2%	15.7%	18.7%	19.1%	26.1%	18.4%	23.6%	15.3%	18.2%	18.9%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

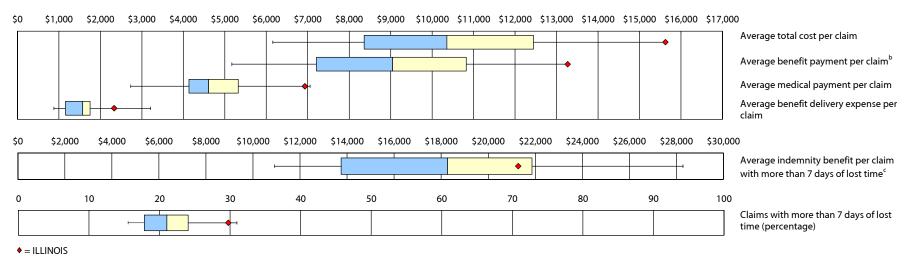
<sup>&</sup>lt;sup>a</sup> The average indemnity benefit per claim is reported for claims with more than seven days of lost time.

<sup>&</sup>lt;sup>b</sup> Benefits include both medical and indemnity benefits.

The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reinbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>d</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 2 Average Costs for All Paid Claims at 36 Months' Average Maturity, 2013/2016



Performance Measure, 2013/2016 Claims	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	18-State Median <sup>d</sup>
Average total cost per claim	\$6,482	\$14,145	\$9,684	\$12,274	\$10,500	\$15,626	\$7,449	\$7,022	\$14,666	\$11,057	\$6,158	\$8,655	\$12,555	\$14,057	\$10,859	\$8,911	\$10,209	\$8,448	\$10,354
Average benefit payment per claim <sup>b</sup>	\$5,544	\$10,891	\$7,980	\$10,520	\$9,278	\$13,268	\$6,568	\$5,860	\$12,251	\$9,487	\$5,172	\$7,210	\$10,820	\$11,379	\$9,223	\$7,302	\$8,871	\$7,542	\$9,047
Average medical payment per claim	\$3,369	\$4,758	\$4,699	\$4,522	\$5,047	\$6,931	\$4,870	\$2,948	\$6,290	\$3,576	\$2,732	\$4,138	\$4,452	\$7,057	\$4,457	\$4,522	\$5,325	\$5,471	\$4,611
Average benefit delivery expense per claim	\$937	\$3,209	\$1,698	\$1,752	\$1,213	\$2,332	\$879	\$1,160	\$2,327	\$1,539	\$972	\$1,169	\$1,716	\$2,677	\$1,626	\$1,608	\$1,297	\$899	\$1,574
Average indemnity benefit per claim with more than 7																			
days of lost time <sup>c</sup>	\$13,272	\$20,261	\$13,865	\$27,372	\$21,861	\$21,275	\$10,914	\$17,456	\$25,480	\$19,083	\$13,747	\$15,210	\$28,279	\$14,208	\$25,523	\$11,553	\$19,858	\$11,405	\$18,269
Claims with more than 7 days of lost time (percentage)	16.4%	30.1%	23.6%	21.9%	19.3%	29.8%	15.5%	16.7%	23.3%	31.0%	17.7%	20.2%	22.5%	30.4%	18.7%	24.1%	17.8%	18.1%	21.0%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

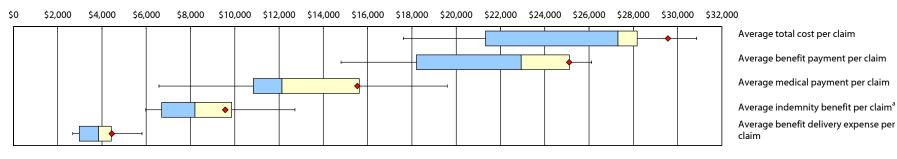
<sup>&</sup>lt;sup>a</sup> The average indemnity benefit per claim is reported for claims with more than seven days of lost time.

<sup>&</sup>lt;sup>b</sup> Benefits include both medical and indemnity benefits.

The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than rembursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>d</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 3 Average Costs for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



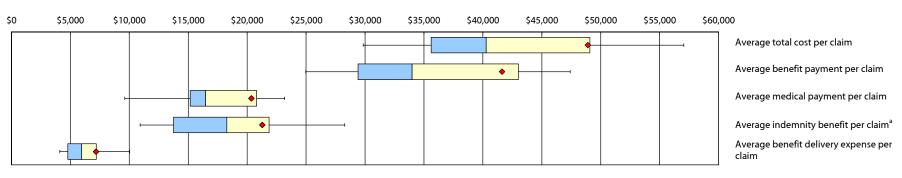
Performance Measure, 2015/2016 Claims	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>b</sup>
Average total cost per claim	\$20,554	\$21,404	\$24,647	\$28,559	\$27,021	\$29,566	\$27,589	\$23,456	\$30,865	\$17,615	\$18,184	\$21,653	\$27,832	\$28,128	\$29,717	\$22,402	\$29,774	\$28,258	\$27,305
Average benefit payment per claim	\$17,485	\$17,032	\$20,489	\$24,106	\$24,114	\$25,109	\$23,843	\$19,750	\$25,774	\$14,800	\$15,189	\$18,211	\$23,557	\$22,317	\$25,288	\$18,449	\$26,113	\$25,570	\$22,937
Average medical payment per claim	\$10,919	\$7,178	\$12,478	\$11,794	\$16,279	\$15,542	\$17,143	\$11,524	\$15,407	\$6,578	\$9,121	\$11,418	\$10,841	\$15,624	\$13,838	\$10,261	\$17,491	\$19,594	\$12,136
Average indemnity benefit per claim <sup>a</sup>	\$6,566	\$9,854	\$8,011	\$12,313	\$7,835	\$9,567	\$6,700	\$8,225	\$10,367	\$8,222	\$6,067	\$6,793	\$12,716	\$6,692	\$11,450	\$8,189	\$8,622	\$5,976	\$8,205
Average benefit delivery expense per claim	\$3,064	\$4,347	\$4,144	\$4,445	\$2,896	\$4,447	\$3,738	\$3,703	\$5,061	\$2,806	\$2,979	\$2,815	\$4,257	\$5,808	\$4,423	\$3,950	\$3,645	\$2,681	\$3,844

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 4 Average Costs for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016



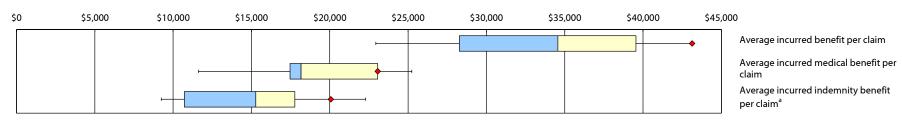
Performance Measure, 2013/2016 Claims	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>b</sup>
Average total cost per claim	\$33,200	\$43,963	\$35,734	\$50,848	\$48,166	\$48,898	\$38,725	\$36,631	\$57,044	\$33,298	\$29,837	\$37,601	\$51,908	\$41,824	\$51,553	\$32,662	\$49,133	\$38,250	\$40,274
Average benefit payment per claim	\$28,531	\$33,778	\$29,412	\$43,643	\$42,661	\$41,629	\$34,091	\$30,648	\$47,401	\$28,695	\$24,973	\$31,127	\$44,951	\$33,890	\$43,945	\$26,716	\$43,001	\$34,109	\$33,990
Average medical payment per claim		\$13,517	\$15,546	\$16,271	\$20,800	\$20,354	\$23,176	\$13,193	\$21,921	\$9,612	\$11,226	\$15,917	\$16,672	\$19,681	\$18,422	\$15,163	\$23,143	\$22,704	\$16,472
Average indemnity benefit per claim <sup>a</sup>	\$13,272	\$20,261	\$13,865	\$27,372	\$21,861	\$21,275	\$10,914	\$17,456	\$25,480	\$19,083	\$13,747	\$15,210	\$28,279	\$14,208	\$25,523	\$11,553	\$19,858	\$11,405	\$18,269
Average benefit delivery expense per claim	\$4,663	\$10,037	\$6,301	\$7,199	\$5,462	\$7,180	\$4,623	\$5,965	\$9,260	\$4,502	\$4,784	\$5,133	\$6,871	\$7,933	\$7,558	\$5,941	\$5,909	\$4,101	\$5,953

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 5 Average Incurred Benefits for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



Performance Measure, 2015/2016 Claims	AR	CA	FL	GA	IA	IL	IN <sup>b</sup>	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	17-State Median <sup>c</sup>
Average incurred benefit per claim	\$29,981	\$32,981	\$27,808	\$37,347	\$40,044	\$43,131	n/a	\$34,229	\$42,632	\$26,194	\$22,942	\$27,902	\$40,449	\$37,328	\$39,362	\$28,274	\$39,547	\$34,563	\$34,563
Average incurred medical benefit per claim	\$18,055	\$17,703	\$17,462	\$18,098	\$22,270	\$23,060	n/a	\$18,766	\$25,079	\$11,615	\$13,698	\$17,186	\$18,169	\$19,988	\$19,762	\$15,853	\$25,239	\$24,555	\$18,169
Average incurred indemnity benefit per claim <sup>a</sup>	\$11,926	\$15,278	\$10,346	\$19,250	\$17,774	\$20,071	n/a	\$15,463	\$17,553	\$14,579	\$9,245	\$10,716	\$22,280	\$17,340	\$19,600	\$12,420	\$14,308	\$10,009	\$15,278

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

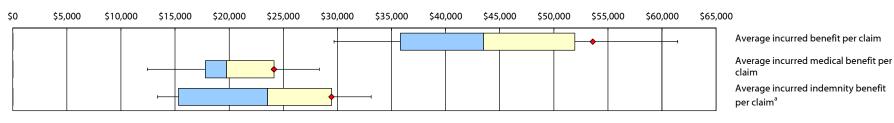
Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

b Incurred measures are not shown because Indiana results may not be comparable to those of the other study states. Indiana's second injury fund may be petitioned to pay compensation to permanently and totally disabled workers who have received the maximum compensation allowable under Indiana law but remain permanently and totally disabled.

The 17-state median is the state ranked 9th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure. Indiana is excluded for the incurred measures because those measures in Indiana may not be comparable to those of the other study states.

Figure 6 Average Incurred Benefits for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016



Performance Measure, 2013/2016 Claims	AR	CA	FL	GA	IA	IL	IN <sup>b</sup>	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	17-State Median <sup>c</sup>
Average incurred benefit per claim	\$32,574	\$46,478	\$32,714	\$50,358	\$51,479	\$53,603	n/a	\$40,144	\$61,452	\$35,828	\$29,696	\$37,262	\$52,379	\$43,505	\$51,936	\$31,296	\$52,285	\$39,518	\$43,505
Average incurred medical benefit per claim	\$17,795	\$22,483	\$17,403	\$19,126	\$23,514	\$24,139	n/a	\$16,586	\$28,330	\$12,456	\$12,838	\$18,999	\$19,753	\$21,602	\$21,227	\$17,919	\$27,443	\$25,027	\$19,753
Average incurred indemnity benefit per claim <sup>a</sup>	\$14,780	\$23,995	\$15,310	\$31,232	\$27,965	\$29,464	n/a	\$23,558	\$33,122	\$23,371	\$16,858	\$18,263	\$32,626	\$21,903	\$30,709	\$13,377	\$24,841	\$14,491	\$23,558

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

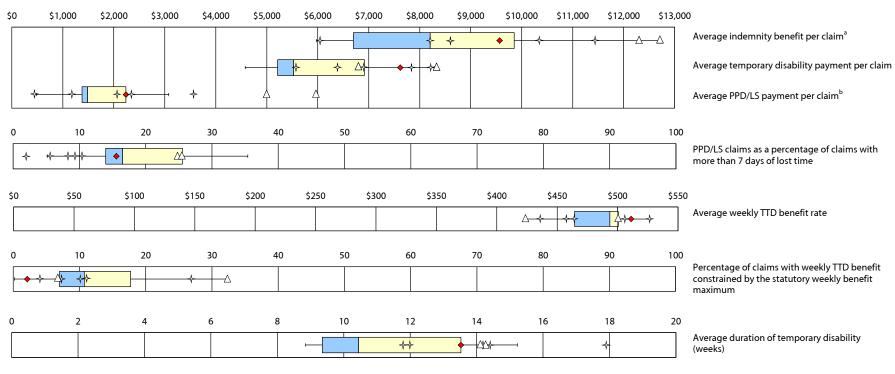
Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

b Incurred measures are not shown because Indiana results may not be comparable to those of the other study states. Indiana's second injury fund may be petitioned to pay compensation to permanently and totally disabled workers who have received the maximum compensation allowable under Indiana law but remain permanently and totally disabled.

<sup>&</sup>lt;sup>c</sup> The 17-state median is the state ranked 9th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure. Indiana is excluded for the incurred measures because those measures in Indiana may not be comparable to those of the other study states.

Figure 7 Average Indemnity Benefits for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



Performance Measure, 2015/2016 Claims	AR	CA	FL	GA <sup>c</sup>	IA	IL	IN	KY	LA <sup>d</sup>	MA <sup>d</sup>	MI <sup>d</sup>	MN	NC°	ИJ	PA <sup>d</sup>	ТХ	VA <sup>d</sup>	WI		11-State Median <sup>e</sup>
Average indemnity benefit																				
per claim <sup>a</sup>	\$6,566	\$9,854	\$8,011	\$12,313	\$7,835	\$9,567	\$6,700	\$8,225	\$10,367	\$8,222	\$6,067	\$6,793	\$12,716	\$6,692	\$11,450	\$8,189	\$8,622	\$5,976	\$8,205	n/a
Average temporary disability payment per claim	\$5,312	\$8,279	\$5,526	\$6,822	\$4,955	\$7,620	\$5,375	\$6,916	\$8,240	\$6,923	\$5,588	\$5,213	\$8,348	\$6,171	\$7,854	\$6,907	\$6,406	\$4,578	n/a	\$5,526
Average PPD/LS payment per claim <sup>b</sup>	\$1,452	\$1,620	\$2,642	\$5,973	\$3,078	\$2,238	\$1,487	\$1,063	\$2,084	\$1,205	\$458	\$1,591	\$5,011	\$480	\$3,588	\$1,379	\$2,363	\$1,440	n/a	\$1,487
PPD/LS claims as a percentage of claims with more than 7 days of lost time	21.9%	14.7%	35.4%	25.5%	32.1%	15.6%	16.5%	8.2%	10.4%	5.6%	1.9%	14.0%	25.0%	5.2%	9.4%	25.5%	8.4%	23.9%	n/a	16.5%
Average weekly TTD benefit rate	\$462	\$499	\$486	\$424	\$494	\$511	\$479	\$483	\$436	\$464	\$458	\$501	\$501	\$497	\$527	\$494	\$506	\$494	\$494	n/a
Percentage of claims with weekly TTD benefit constrained by the statutory weekly benefit maximum	23.1%	6.8%	10.4%	32.4%	0.2%	2.1%	17.7%	14.9%	26.9%	4.0%	10.1%	7.1%	7.0%	19.4%	11.1%	15.9%	7.4%	11.3%	10.8%	n/a
Average duration of temporary disability (weeks)	10.3	15.2	9.4	14.1	9.1	13.5	10.4	13.7	17.9	14.4	11.8	9.6	14.2	11.9	14.2	12.7	12.0	8.8	n/a	10.4

continued

## Figure 7 Average Indemnity Benefits for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016 (continued)

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

<sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

Key: n/a: not applicable; PPD: permanent partial disability; PPD/LS: permanent partial disability or lump sum; TTD: temporary total disability.

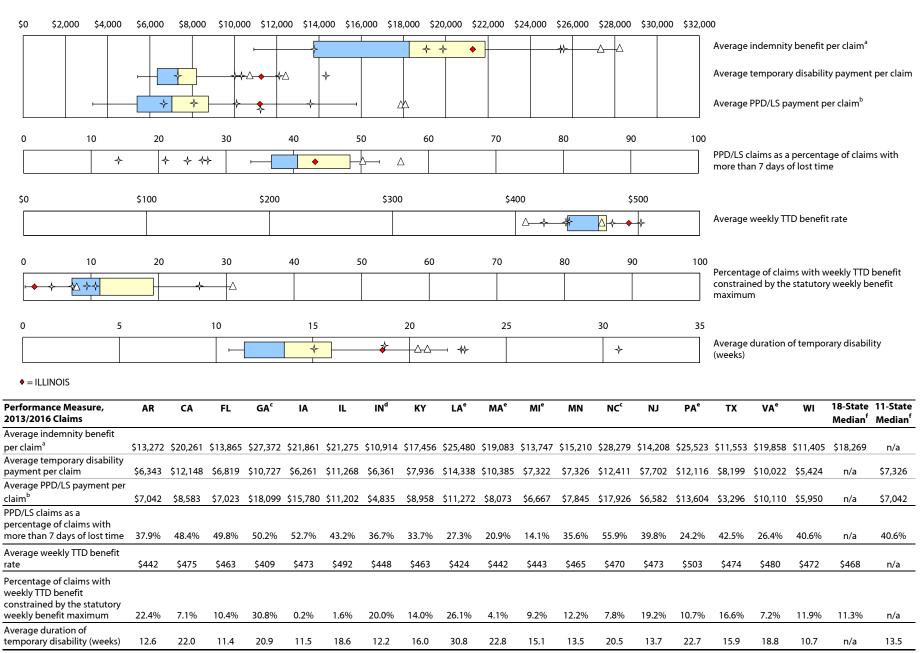
b Includes both PPD benefits and lump-sum settlements.

 $<sup>^{\</sup>mathsf{c}}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\Delta$  " on the box plot.

<sup>&</sup>lt;sup>d</sup> Wage-loss states are marked with a " ★ " on the box plot.

<sup>&</sup>lt;sup>e</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure. In the box plots for the following measures, the median line represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system): average temporary disability payment per claim, average PPD/LS payment per claim, PPD/LS claims as a percentage of claims with more than 7 days of lost time, and average duration of temporary disability. The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated.

Figure 8 Average Indemnity Benefits for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016



## Figure 8 Average Indemnity Benefits for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016 (continued)

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: n/a: not applicable; PPD: permanent partial disability; PPD/LS: permanent partial disability or lump sum; TTD: temporary total disability.

<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, lowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>b</sup> Includes both PPD benefits and lump-sum settlements.

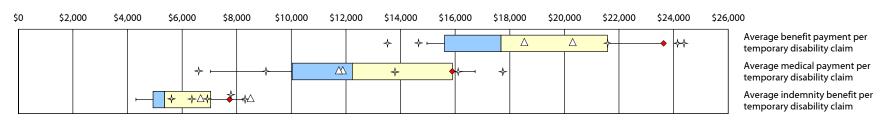
 $<sup>^{\</sup>circ}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>d</sup> For claims with more than 24 months' maturity, average temporary disability payments per claim and average PPD/LS payments per claim may not be comparable to those of other study states because temporary disability payments in excess of 125 weeks can be credited against any permanent impairment benefits due to the worker once maximum medical improvement has been reached. However, these payments may not be consistently recorded by the data sources.

<sup>&</sup>lt;sup>e</sup> Wage-loss states are marked with a "♦" on the box plot.

The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure. In the box plots for the following measures, the median line represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system): average temporary disability payment per claim, average PPD/LS payment per claim, PPD/LS claims as a percentage of claims with more than 7 days of lost time, and average duration of temporary disability. The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated.

Figure 9 Average Costs for Temporary Disability Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



Performance Measure, 2015/2016 Claims	AR	CA	FL	GAª	IA	IL	IN	КҮ	LA <sup>b</sup>	MA <sup>b</sup>	MI <sup>b</sup>	MN	NCª	NJ	PA <sup>b</sup>	TX	VA <sup>b</sup>	WI	11-State Median <sup>c</sup>
Average benefit payment per temporary disability claim	\$14,965	\$15,265	\$17,445	\$18,545	\$17,680	\$23,635	\$22,086	\$18,505	\$24,398	\$13,509	\$14,674	\$15,985	\$20,309	\$21,576	\$21,625	\$15,613	\$24,145	\$20,536	\$17,680
Average medical payment per temporary disability claim	\$10,033	\$7,036	\$12,238	\$11,873	\$13,215	\$15,896	\$16,730	\$11,460	\$16,103	\$6,575	\$9,073	\$10,922	\$11,804	\$15,380	\$13,820	\$9,021	\$17,769	\$16,230	\$12,238
Average indemnity benefit per temporary disability claim	\$4,933	\$8,229	\$5,208	\$6,672	\$4,465	\$7,739	\$5,356	\$7,045	\$8,295	\$6,935	\$5,601	\$5,063	\$8,506	\$6,195	\$7,805	\$6,592	\$6,376	\$4,306	\$5,356

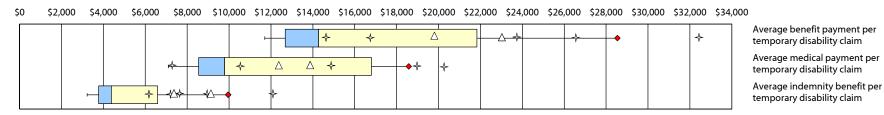
Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

 $<sup>^{\</sup>rm a}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

 $<sup>^{\</sup>rm b}$  Wage-loss states are marked with a " $\updownarrow$ " on the box plot.

<sup>&</sup>lt;sup>c</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 10 Average Costs for Temporary Disability Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016



Performance Measure, 2013/2016 Claims	AR	CA	FL	GAª	IA	IL	IN <sup>b</sup>	KY	LA <sup>c</sup>	MA <sup>c</sup>	ΜI <sup>c</sup>	MN	NCª	ИJ	PA <sup>c</sup>	TX	VA <sup>c</sup>	WI	11-State Median <sup>d</sup>
Average benefit payment per temporary disability claim	\$12,366	\$14,025	\$12,926	\$19,772	\$12,683	\$28,539	\$21,833	\$15,721	\$32,423	\$14,621	\$16,726	\$14,271	\$23,039	\$24,427	\$23,797	\$11,703	\$26,610	\$14,443	\$14,271
Average medical payment per temporary disability claim	\$8,552	\$7,106	\$9,152	\$12,392	\$9,457	\$18,582	\$16,803	\$9,787	\$20,319	\$7,265	\$10,543	\$10,001	\$13,877	\$17,840	\$14,874	\$7,325	\$18,980	\$11,006	\$9,787
Average indemnity benefit per temporary disability claim	\$3,815	\$6,920	\$3,775	\$7,381	\$3,227	\$9,957	\$5,030	\$5,934	\$12,104	\$7,356	\$6,183	\$4,270	\$9,163	\$6,587	\$8,923	\$4,378	\$7,630	\$3,436	\$4,378

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: PPD: permanent partial disability; PPD/LS: permanent partial disability or lump sum.

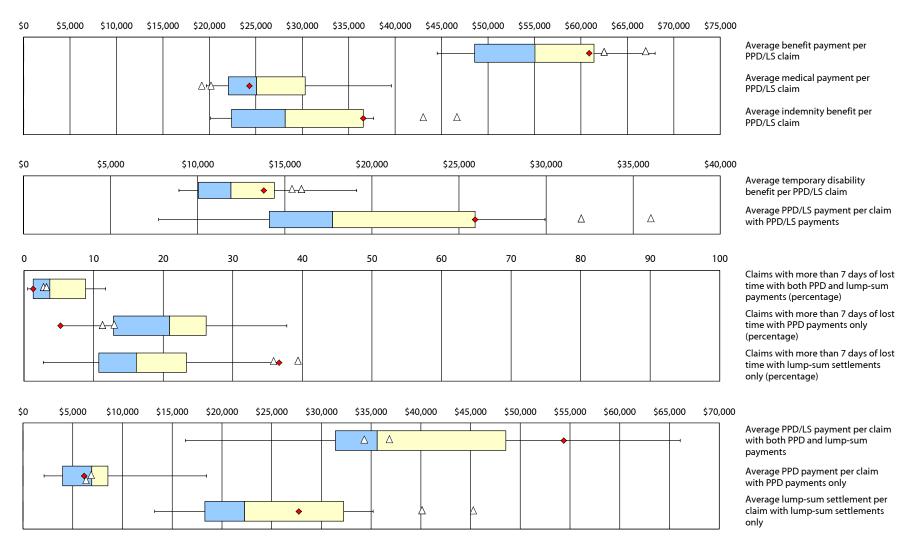
<sup>&</sup>lt;sup>a</sup> States with attributes of both wage-loss and PPD systems are marked with a " $\triangle$ " on the box plot.

<sup>&</sup>lt;sup>b</sup> For claims with more than 24 months' maturity, average temporary disability payments per claim and average PPD/LS payments per claim may not be comparable to those of other study states because temporary disability payments in excess of 125 weeks can be credited against any permanent impairment benefits due to the worker once maximum medical improvement has been reached. However, these payments may not be consistently recorded by the data sources.

<sup>&</sup>lt;sup>c</sup> Wage-loss states are marked with a "♦" on the box plot.

<sup>&</sup>lt;sup>d</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 11 Average Costs for Permanent Partial Disability/Lump-Sum Claims<sup>a</sup> with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 11 Non-Wage-Loss States and 2 States with Attributes of both Wage-Loss and PPD Systems, 2013/2016



continued

Figure 11 Average Costs for Permanent Partial Disability/Lump-Sum Claims<sup>a</sup> with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 11 Non-Wage-Loss States and 2 States with Attributes of both Wage-Loss and PPD Systems, 2013/2016 (continued)

Performance Measure, 2013/2016 Claims	AR	CA	FL	GΑ <sup>b</sup>	IA	IL	IN <sup>c</sup>	KY	MN	NC <sup>b</sup>	ИJ	тх	WI	11-State Median <sup>d</sup>
Average benefit payment per PPD/LS claim	\$53,616	\$53,624	\$44,532	\$67,115	\$67,976	\$60,885	\$55,046	\$56,923	\$61,404	\$62,537	\$48,557	\$45,230	\$61,982	\$55,046
Average medical payment per PPD/LS claim	\$25,460	\$20,152	\$22,055	\$20,385	\$30,314	\$24,317	\$34,820	\$19,671	\$27,118	\$19,366	\$23,132	\$25,089	\$39,595	\$25,089
Average indemnity benefit per PPD/LS claim	\$28,156	\$33,472	\$22,477	\$46,730	\$37,662	\$36,568	\$20,226	\$37,252	\$34,286	\$43,171	\$25,425	\$20,141	\$22,387	\$28,156
Average temporary disability benefit per PPD/LS claim	\$11,908	\$19,129	\$10,269	\$15,517	\$9,597	\$13,790	\$10,035	\$12,928	\$14,401	\$16,042	\$10,151	\$14,879	\$8,926	\$11,908
Average PPD/LS payment per claim with PPD/LS payments	\$18,567	\$17,743	\$14,110	\$36,038	\$29,937	\$25,927	\$13,168	\$26,608	\$22,061	\$32,069	\$16,522	\$7,757	\$14,645	\$17,743
Claims with more than 7 days of lost time with both PPD and lump-sum payments (percentage)	6.2%	11.3%	7.7%	2.7%	11.7%	1.3%	0.5%	1.3%	3.1%	3.1%	8.8%	2.0%	3.7%	3.7%
Average PPD/LS payment per claim with both PPD and lump-sum payments	\$47,111	\$32,512	\$35,121	\$36,967	\$66,083	\$54,371	\$31,408	\$47,203	\$48,541	\$34,470	\$18,080	\$16,336	\$35,611	\$35,611
Claims with more than 7 days of lost time with PPD payments only (percentage)	21.9%	20.9%	24.4%	11.4%	26.6%	5.2%	12.9%	8.0%	16.3%	13.1%	16.6%	37.8%	26.2%	20.9%
Average PPD payment per claim with PPD payments only	\$8,323	\$7,398	\$2,121	\$6,416	\$12,531	\$6,144	\$3,172	\$6,120	\$3,979	\$6,841	\$18,466	\$6,910	\$8,541	\$6,910
Claims with more than 7 days of lost time with lump-sum settlements only (percentage)	9.8%	16.2%	17.8%	36.1%	14.4%	36.7%	23.3%	24.4%	16.2%	39.7%	14.4%	2.8%	10.7%	16.2%
Average lump-sum settlement per claim with lump-sum settlements only	\$23,240	\$20,804	\$21,505	\$45,345	\$32,565	\$27,731	\$18,285	\$32,237	\$35,206	\$40,217	\$13,325	\$13,239	\$22,273	\$22,273

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: PPD: permanent partial disability; PPD/LS: permanent partial disability or lump-sum settlement.

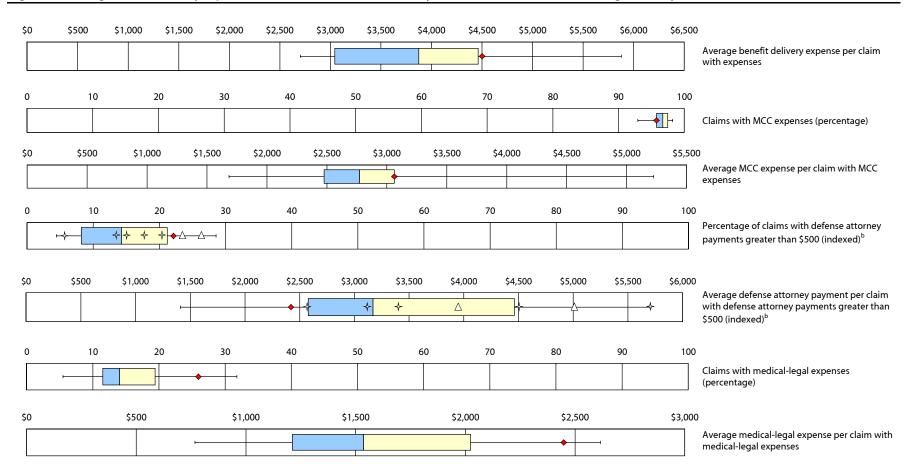
<sup>&</sup>lt;sup>a</sup> The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. The reader should further note that lump-sum settlements in California reflect payments based on the agreed amount at the time of Compromise and Release (C&R) or Stipulation and do not include any potential subsequent payments for outstanding liens.

 $<sup>^{\</sup>mathrm{b}}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>c</sup> For claims with more than 24 months' maturity, average temporary disability payments per claim and average PPD/LS payments per claim may not be comparable to those of other study states because temporary disability payments in excess of 125 weeks can be credited against any permanent impairment benefits due to the worker once maximum medical improvement has been reached. However, these payments may not be consistently recorded by the data sources.

<sup>&</sup>lt;sup>d</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 12 Average Benefit Delivery Expenses<sup>a</sup> for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



continued

Figure 12 Average Benefit Delivery Expenses for Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016 (continued)

Performance Measure, 2015/2016 Claims	AR°	CA	FL°	GA <sup>d</sup>	IA	IL	IN	KY	LA <sup>e</sup>	MA <sup>e</sup>	MI <sup>e</sup>	MN	NC <sup>d</sup>	NJ	PA <sup>e</sup>	TX	VA <sup>e</sup>	WI	18-State Median <sup>f</sup>
Average benefit delivery expense per claim with expenses	\$3,092	\$4,366	\$4,261	\$4,469	\$2,928	\$4,501	\$3,752	\$3,732	\$5,146	\$2,865	\$3,044	\$2,838	\$4,289	\$5,879	\$4,461	\$3,996	\$3,696	\$2,704	\$3,874
Claims with MCC expenses (percentage)	97.4%	98.0%	92.9%	96.0%	97.5%	95.8%	98.2%	97.4%	95.6%	95.3%	96.4%	95.1%	96.0%	97.5%	97.3%	97.5%	96.6%	96.8%	96.7%
Average MCC expense per claim with MCC expenses	\$2,582	\$2,780	\$2,570	\$2,637	\$2,321	\$3,063	\$3,245	\$2,900	\$3,230	\$1,903	\$2,477	\$1,684	\$2,862	\$5,224	\$2,766	\$3,255	\$2,847	\$2,077	\$2,773
Percentage of claims with defense attorney payments greater than \$500 (indexed) <sup>b</sup>	8.2%	19.7%	28.6%	26.3%	9.6%	22.1%	7.5%	8.9%	20.4%	13.5%	5.7%	11.5%	23.5%	21.2%	17.7%	6.1%	15.1%	4.4%	14.3%
Average defense attorney payment per claim with defense attorney payments greater than \$500 (indexed) <sup>b</sup>	\$2,992	\$3,711	\$4,461	\$5,016	\$2,913	\$2,420	\$2,199	\$3,222	\$5,710	\$2,578	\$3,119	\$4,826	\$3,956	\$1,410	\$4,511	\$3,016	\$3,413	\$2,470	\$3,170
Claims with medical-legal expenses (percentage)	n/a	11.8%	n/a	12.2%	8.2%	25.9%	6.5%	18.9%	12.3%	19.4%	15.8%	12.1%	11.2%	17.2%	20.4%	31.8%	5.5%	19.4%	14.0%
Average medical-legal expense per claim with medical-legal expenses	n/a	\$1,975	n/a	\$1,197	\$1,252	\$2,449	\$1,226	\$1,674	\$2,073	\$1,235	\$1,399	\$2,616	\$768	\$1,022	\$2,155	\$953	\$1,767	\$1,787	\$1,536

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

Key: MCC: medical cost containment; n/a: not applicable; PPD: permanent partial disability.

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

b A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See CompScope™ Benchmarks: Technical Appendix, 17th Edition.

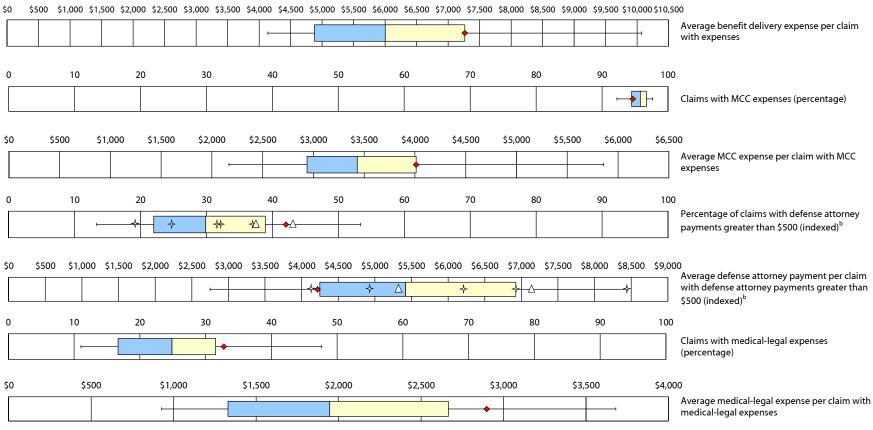
<sup>&</sup>lt;sup>c</sup> Percentage of claims with medical-legal expenses and average medical-legal expense per claim at 12 months' average maturity are not reported for Arkansas and Florida because underlying data in our sample are not necessarily representative of each state's experience.

 $<sup>^{</sup>m d}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

e Wage-loss states are marked with a "♣" on the box plot.

The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 13 Average Benefit Delivery Expenses<sup>a</sup> for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016



continued

Figure 13 Average Benefit Delivery Expenses for Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity, 2013/2016 (continued)

Performance Measure, 2013/2016 Claims	AR	CA	FLʻ	GA <sup>d</sup>	IA	IL	IN	KY	LA <sup>e</sup>	MA <sup>e</sup>	MI <sup>e</sup>	MN	NCd	NJ	PA <sup>e</sup>	TX	VA <sup>e</sup>	WI	18-State Median <sup>f</sup>
Average benefit delivery expense per claim with expenses	\$4,672	\$10,069	\$6,476	\$7,227	\$5,512	\$7,264	\$4,643	\$6,000	\$9,363	\$4,573	\$4,881	\$5,164	\$6,917	\$8,004	\$7,599	\$6,007	\$5,962	\$4,137	\$6,003
Claims with MCC expenses (percentage)	96.7%	97.5%	92.3%	94.5%	96.0%	94.7%	97.3%	96.4%	94.9%	95.8%	92.8%	94.5%	95.1%	92.9%	97.0%	97.7%	96.6%	95.9%	95.8%
Average MCC expense per claim with MCC expenses	\$3,302	\$4,523	\$3,160	\$3,272	\$2,901	\$4,012	\$3,507	\$3,357	\$4,749	\$2,451	\$2,937	\$2,168	\$3,705	\$5,857	\$3,580	\$4,411	\$3,687	\$2,409	\$3,432
Percentage of claims with defense attorney payments greater than \$500 (indexed) <sup>b</sup>	22.0%	41.9%	38.9%	43.0%	24.9%	42.1%	18.5%	28.1%	37.4%	24.7%	19.1%	24.5%	37.4%	53.4%	32.2%	13.3%	31.7%	14.1%	29.9%
Average defense attorney payment per claim with defense attorney payments greater than \$500 (indexed) <sup>b</sup>	\$4,249	\$6,938	\$6.634	\$7,138	\$6,687	\$4,218	\$3,807	\$5,366	\$8,448	\$4,131	\$6,212	\$7,525	\$5,331	\$2,750	\$6,924	\$5,474	\$4.927	\$5,284	\$5,420
Claims with medical-legal expenses (percentage)	12.1%	30.9%	n/a	17.1%	20.0%	32.8%	11.0%	32.2%	19.4%	27.2%	24.9%	22.0%	16.3%	47.7%	28.8%	32.4%	12.9%	27.2%	24.9%
Average medical-legal expense per claim with medical-legal expenses	\$1,309	\$3,681	n/a	\$1,351	\$1,946	\$2,898	\$1,501	\$2,088	\$2,456	\$1,500	\$1,766	\$2,952	\$927	\$1,228	\$2,874	\$1,264	\$1,968	\$2,192	\$1,946

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: MCC: medical cost containment; n/a: not applicable; PPD: permanent partial disability.

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

b A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See CompScope™ Benchmarks: Technical Appendix. 17th Edition.

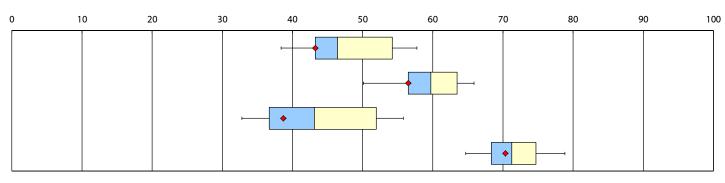
<sup>&</sup>lt;sup>c</sup> Percentage of claims with medical-legal expenses and average medical-legal expense per claim at 36 months' average maturity are not reported for Florida because underlying data in our sample are not necessarily representative of the state's experience.

 $<sup>^{</sup>m d}$  States with attributes of both wage-loss and PPD systems are marked with a " $\triangle$ " on the box plot.

<sup>&</sup>lt;sup>e</sup> Wage-loss states are marked with a "♣" on the box plot.

The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

Figure 14 Timing of First Indemnity Payments and Reporting of Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity, 2015/2016



Claims with first indemnity payment within 21 days of injury (percentage)<sup>a</sup>

Claims with payor notice within 3 days of injury (percentage)

Claims with first indemnity payment within 14 days of payor notice (percentage)

Claims with payor notice within 3 days of employer notice of injury (percentage)

♦ = ILLINOIS

Performance Measure, 2015/2016 Claims	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИЛ	PA	TX	VA	WI	18-State Median <sup>b</sup>
Claims with first indemnity payment within 21 days of injury (percentage) a	57.3%	44.8%	46.3%	42.2%	48.5%	43.3%	42.8%	44.5%	46.5%	57.7%	47.5%	56.2%	38.4%	53.7%	44.4%	55.6%	41.1%	54.2%	46.4%
Claims with payor notice within 3 days of injury (percentage)	64.3%	50.1%	65.7%	63.5%	57.7%	56.5%	59.4%	61.4%	59.9%	56.2%	54.8%	57.8%	61.2%	62.4%	64.6%	59.6%	65.9%	54.8%	59.7%
Claims with first indemnity payment within 14 days of payor notice (percentage)	53.9%	44.6%	43.3%	35.5%	45.9%	38.7%	37.7%	36.7%	42.0%	55.8%	43.0%	55.6%	33.3%	47.3%	32.8%	51.9%	33.4%	54.4%	43.1%
Claims with payor notice within 3 days of employer notice of injury (percentage)	72.8%	66.6%	78.8%	74.8%	67.5%	70.4%	70.0%	71.2%	68.3%	70.4%	64.7%	71.4%	72.4%	74.7%	77.1%	71.7%	76.9%	68.2%	71.3%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> The measure shown here does not purport to show compliance with individual state requirements for timely payment, and WCRI results will differ from numbers from the workers' compensation agency. Our data include claims that were denied and/or litigated but paid within the evaluation cutoff, as well as claims in which the workers were not continuously disabled from the date of injury, so the obligation to pay did not arise until later in the claim.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the vertical line within the box of the box plot figure for a measure.

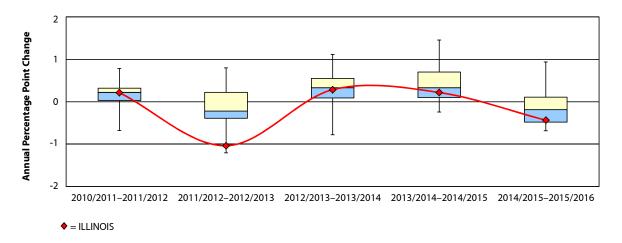
15 10 5 5 0 0 -5 -5 -10 2010/2011-2011/2012 2011/2012-2012/2013 2012/2013-2013/2014 2013/2014-2014/2015 2014/2015-2015/2016

Figure 15 Trend of Average Total Cost per All Paid Claims at 12 Months' Average Maturity

Period					Ave	erage T	otal C	ost pe	r All Pa	aid Cla	ims (aı	nnual	percen	tage c	hange	·)			
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	5.1	5.0	4.8	3.9	10.7	-0.5	6.5	3.8	9.4	0.9	2.6	0.0	1.2	3.6	4.8	2.9	1.6	5.8	3.8
2011/2012 to 2012/2013	-2.7	3.7	1.6	2.9	-1.2	-12.8	0.6	7.8	-0.9	3.8	-0.8	3.1	3.0	2.3	4.8	-0.5	10.4	3.1	2.6
2012/2013 to 2013/2014	3.4	0.9	2.0	7.4	12.4	5.4	8.7	-5.3	7.9	9.1	7.2	6.6	3.3	5.6	5.4	3.8	3.2	9.2	5.5
2013/2014 to 2014/2015	0.4	2.8	5.3	6.9	1.6	3.5	4.5	9.4	5.8	4.5	1.9	3.4	1.7	5.5	7.4	3.8	4.6	8.2	4.5
2014/2015 to 2015/2016	-3.6	27	15	-0.8	4.8	2.5	-73	33	5 1	3.2	-2.8	0.8	-0.4	0.0	6.0	-1 1	-0.1	-1 2	0.4

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

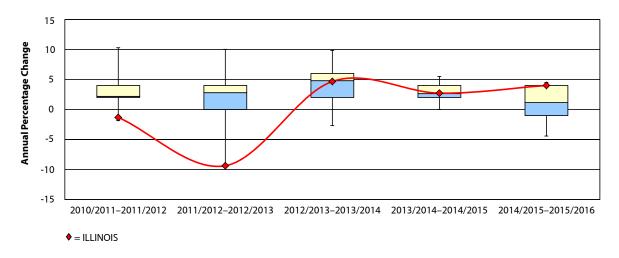
Figure 16 Trend of Percentage of Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period			Perc	entag	e of C	laims v	with M	ore Th	nan 7 🛭	Days o	f Lost <sup>*</sup>	Γime (a	annua	l perce	ntage	point	chang	je)	
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	-0.7	0.8	0.7	0.3	0.2	0.2	0.2	0.2	0.4	-0.3	0.3	0.1	0.0	0.7	0.2	-0.4	-0.1	0.3	0.2
2011/2012 to 2012/2013	-0.4	0.5	-0.5	0.1	-0.3	-1.0	-0.2	0.8	-0.4	0.3	-0.3	-0.1	0.2	-0.3	-0.3	-1.2	0.4	-0.1	-0.2
2012/2013 to 2013/2014	0.2	0.3	-0.2	0.4	0.8	0.3	0.4	-0.8	0.6	1.1	0.1	0.5	0.3	0.8	0.1	-0.7	0.6	0.5	0.3
2013/2014 to 2014/2015	-0.2	0.1	0.1	1.5	-0.2	0.2	0.2	1.0	0.3	1.0	-0.2	0.4	0.4	0.5	0.8	0.4	-0.2	0.7	0.3
2014/2015 to 2015/2016	0.3	-0.2	0.1	-0.2	0.9	-0.4	-0.5	-0.5	0.4	-0.1	-0.7	-0.2	0.1	-0.5	0.3	-0.3	-0.5	-0.5	-0.2

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 17 Trend of Average Total Cost per Claim with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period			Aver	age To	otal Co	st per	Claim	with N	/lore T	han 7	Days o	f Lost	Time (	annua	l perc	entag	e chan	ge)	_
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	МІ	MN	NC	ИJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	9.0	2.2	2.0	1.7	10.3	-1.3	5.6	2.7	8.9	2.2	1.1	-1.8	1.0	0.2	4.2	3.4	1.4	3.5	2.2
2011/2012 to 2012/2013	-2.0	1.7	3.7	3.2	-0.3	-9.4	0.7	4.5	0.0	3.1	0.3	3.6	2.3	2.5	6.5	3.4	10.0	3.7	2.8
2012/2013 to 2013/2014	3.5	0.0	2.1	6.0	9.9	4.7	6.3	-2.7	5.1	6.2	7.4	4.5	1.6	3.0	4.9	6.9	1.1	6.2	4.8
2013/2014 to 2014/2015	1.6	2.1	5.4	1.3	2.2	2.7	2.7	4.6	4.9	1.8	2.5	2.1	0.0	4.2	4.4	2.6	5.4	5.5	2.6
2014/2015 to 2015/2016	-3.6	3.0	1.7	-0.8	0.1	4.0	-4.4	4.5	3.7	3.6	1.3	1.0	-0.6	1.0	4.5	0.5	1.4	-0.6	1.2

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

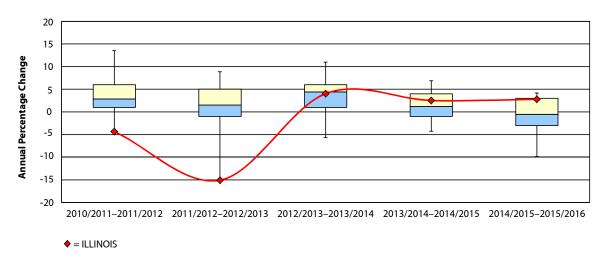
20 15 10 5 5 0 0 -5 -10 2010/2011-2011/2012 2011/2012-2012/2013 2012/2013-2013/2014 2013/2014-2014/2015 2014/2015-2015/2016

Figure 18 Trend of Average Incurred Benefit per Claim with More Than 7 Days of Lost Time at 12 Months' Average Maturity

Period					Avera	ige Inc	urred	Benefi (aı	•	laim v percen				ays of	Lost T	ime			
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	14.0	1.0	1.9	-1.1	7.8	-0.8	3.3	0.6	7.6	-0.8	0.0	-2.2	-0.8	0.8	2.1	1.4	-1.0	3.6	0.9
2011/2012 to 2012/2013	-5.5	0.8	3.6	3.6	0.7	-6.4	2.9	10.8	4.8	4.7	1.7	4.9	2.3	4.3	12.2	5.8	13.3	5.4	4.0
2012/2013 to 2013/2014	4.3	1.4	1.1	10.1	6.7	2.3	5.7	-5.9	9.0	12.4	4.0	3.1	0.7	3.6	3.2	6.6	-0.6	4.1	3.8
2013/2014 to 2014/2015	4.6	0.3	4.8	-4.0	2.1	3.2	3.4	1.3	-2.7	-3.4	0.6	-1.2	-1.6	2.0	0.5	3.2	3.5	4.5	1.7
2014/2015 to 2015/2016	-1.1	0.3	-1.0	-0.5	0.1	0.9	-3.9	3.9	4.6	5.6	-1.9	1.7	1.6	0.3	5.5	0.2	-0.7	-3.2	0.3

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

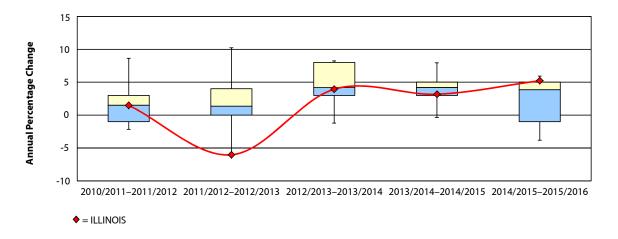
Figure 19 Trend of Average Medical Payment per Claim with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period		Av	erage	Medi	cal Pay	ment <sub> </sub>	per Cla	aim wi	th Mo	re Tha	n 7 Da	ys of L	ost Tir	ne (an	nual p	ercen	tage cl	hange	e)
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	7.3	1.1	2.7	3.0	13.5	-4.4	6.1	1.8	10.5	2.1	5.0	-2.3	1.4	1.5	4.8	7.3	2.5	3.0	2.9
2011/2012 to 2012/2013	-1.1	0.7	5.0	0.7	-1.9	-15.1	1.3	4.9	0.1	1.7	-0.9	4.3	-1.9	2.7	6.0	2.9	8.9	4.6	1.5
2012/2013 to 2013/2014	4.5	-4.6	0.7	5.3	11.0	4.0	6.5	-5.7	2.6	5.0	6.5	4.3	-1.1	0.5	6.0	7.5	-2.4	6.3	4.4
2013/2014 to 2014/2015	-0.4	-2.2	6.9	-1.8	0.7	2.5	2.4	6.0	3.8	-0.8	1.5	-0.7	-4.3	1.0	2.0	0.2	5.1	6.9	1.2
2014/2015 to 2015/2016	-5.9	-2.4	-0.5	-2.5	1.1	2.8	-9.9	4.0	3.2	0.7	-0.7	-0.6	-7.8	1.1	4.2	-3.7	2.5	-1.2	-0.5

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

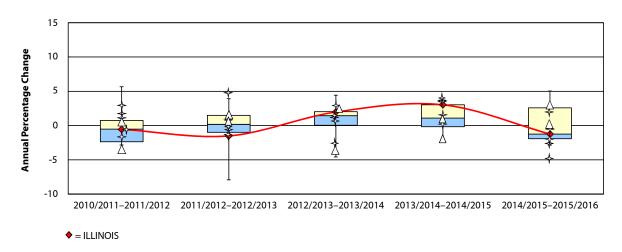
Figure 20 Trend of Average Indemnity Benefit per Claim with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period		Αv	erage	Indem	nity B	enefit	per Cl	aim w	ith Mo	re Tha	n 7 Da	ays of I	Lost Ti	ime (ar	nual	percer	itage o	hang	e)
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ΝJ	PA	TX	VA	WI	18-State Median <sup>a</sup>
2010/2011 to 2011/2012	8.6	1.7	1.5	-1.3	6.2	1.5	2.6	2.5	6.6	0.9	-2.2	-2.2	0.3	-1.2	2.5	-0.2	-1.1	3.5	1.5
2011/2012 to 2012/2013	-1.0	3.3	1.1	6.0	-0.4	-6.0	-1.2	1.7	-1.1	3.7	0.7	1.0	5.1	1.6	8.5	2.6	10.2	0.2	1.4
2012/2013 to 2013/2014	-1.2	2.2	4.4	8.1	8.1	3.9	3.7	2.1	8.2	7.8	3.9	6.0	2.6	2.7	2.9	4.9	7.8	4.5	4.2
2013/2014 to 2014/2015	7.9	5.3	4.0	2.4	5.7	3.2	-0.4	1.9	4.4	3.2	4.2	4.3	2.9	5.6	7.5	4.3	5.3	1.4	4.2
2014/2015 to 2015/2016	-3.8	5.9	4.2	1.3	-3.8	5.2	4.9	5.1	3.7	5.9	0.9	1.0	5.2	-0.8	4.0	5.5	-0.8	-1.7	3.9

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 21 Trend of Average Weeks of Temporary Disability per Claim with More Than 7 Days of Lost Time at 12 Months' Average Maturity



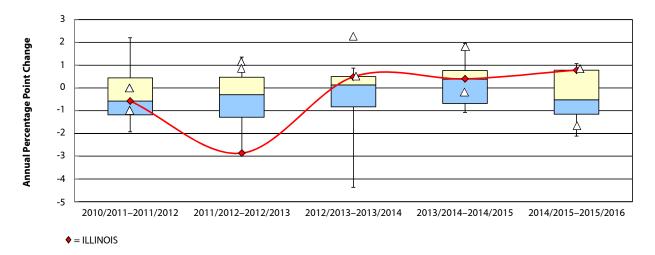
Period				Avera	ge We	eks of	Tempo	•		ity per percen				nan 7 [	Days of	f Lost <sup>-</sup>	Time		
	AR	CA	FL	GAª	IA	IL	IN	KY	LA <sup>b</sup>	MA <sup>b</sup>	ΜI <sup>b</sup>	MN	NCª	ИJ	PA <sup>b</sup>	тх	VA <sup>b</sup>	WI	11-State Median <sup>c</sup>
2010/2011 to 2011/2012	5.7	-0.6	0.2	0.3	-0.4	-0.5	0.8	-2.8	1.7	2.9	0.7	-2.5	-3.8	-2.4	-1.7	-0.5	-0.7	1.1	-0.5
2011/2012 to 2012/2013	-7.9	1.6	-0.7	1.4	0.2	-1.5	-0.8	3.9	-0.8	-0.2	-1.5	0.7	0.4	1.5	0.7	-1.0	4.7	0.9	0.2
2012/2013 to 2013/2014	-2.0	0.1	-4.6	2.2	2.0	2.0	4.4	1.4	2.4	0.7	1.3	2.4	-3.9	1.3	1.0	1.0	-2.6	1.5	1.4
2013/2014 to 2014/2015	3.6	0.8	1.5	-2.2	1.1	3.0	-2.1	-1.9	0.4	3.6	3.9	-0.2	0.6	3.5	1.2	1.4	3.4	0.0	1.1
2014/2015 to 2015/2016	-1.9	-1.6	0.4	-0.1	-2.9	-1.2	3.6	5.0	1.9	-0.1	-2.6	0.7	2.8	-2.3	-2.0	2.6	-4.9	-1.5	-1.2

<sup>&</sup>lt;sup>a</sup> States with attributes of both wage-loss and PPD systems are marked with a "  $\Delta$  " on the box plot.

<sup>&</sup>lt;sup>b</sup> Wage-loss states are marked with a "♦" on the box plot.

<sup>&</sup>lt;sup>c</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 22 Trend of PPD/Lump-Sum Claims as a Percentage of Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period PPD/Lump-Sum Claims as a Percentage of Claims with More Than 7 Days of Lost Time (annual percentage point change) 11-State  $GA^{a}$  $NC^{a}$ AR CA FL IA IL IN KY MN NJ TX WI **Median**<sup>b</sup> 2010/2011 to 2011/2012 0.2 -0.4 -0.8 -0.1 2.2 -0.6 0.4 -1.2 -1.9 -1.0 -0.7 -1.9 0.7 -0.6 2011/2012 to 2012/2013 1.4 -1.0 0.5 0.8 -1.3 -2.9 -0.3 0.5 0.2 1.0 -0.7 0.5 -1.4 -0.3 2012/2013 to 2013/2014 -0.8 -4.4 0.9 0.5 8.0 0.5 -1.5 0.1 -0.3 2.2 0.1 0.5 0.1 0.1 2013/2014 to 2014/2015 2.0 -1.1 0.6 1.8 1.6 0.4 0.3 0.8 -0.1 -0.2 -0.7-0.8 0.4 0.4 2014/2015 to 2015/2016 -2.0 8.0 0.3 -1.7 1.1 0.8 -2.1 -0.5 -0.6 8.0 -0.6 -1.2 -0.5 -0.5

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

 $<sup>^{\</sup>rm a}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>b</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 23 Trend of PPD/Lump-Sum Claims as a Percentage of Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity

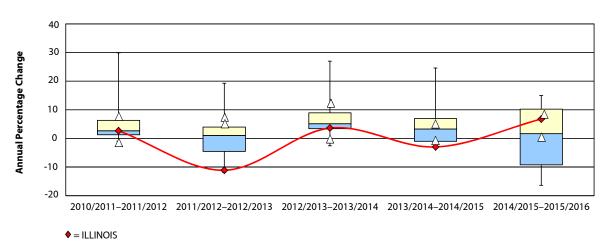
Period			PPD/Lu	ımp-Sum	Claims		_	of Claims ntage po			7 Days o	of Lost Ti	me	
	AR	CA	FL	GAª	IA	IL	IN	KY	MN	NC <sup>a</sup>	NJ	тх	WI	11-State Median <sup>b</sup>
2010/2013 to 2011/2014	-0.8	-1.6	-1.2	1.5	1.1	-1.8	-0.3	-1.1	-1.5	-1.1	-0.3	-2.9	0.2	-1.1
2011/2014 to 2012/2015	2.1	-1.1	0.6	0.9	-0.3	-2.2	1.6	0.9	0.5	1.5	-0.5	0.6	-0.4	0.5
2012/2015 to 2013/2016	-1.1	-1.1	0.5	2.0	0.5	0.2	-1.9	1.3	-0.9	0.3	0.8	1.2	-0.4	0.2

Key: PPD: permanent partial disability.

♦ = ILLINOIS

<sup>&</sup>lt;sup>b</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 24 Trend of Average PPD/Lump-Sum Payment per PPD/Lump-Sum Claim with More Than 7 Days of Lost Time at 12 Months'
Average Maturity

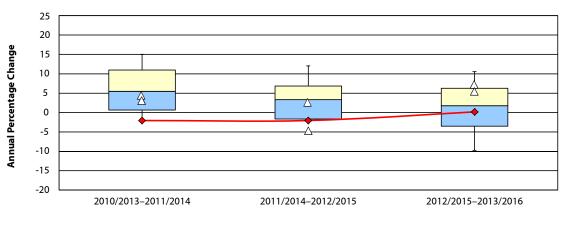


Period		Avera	ge PPD	/Lump-S	um Payr	•		mp-Sum centage			Than 7	Days of	Lost Tin	ne
	AR	CA	FL	GA <sup>a</sup>	IA	IL	IN	КҮ	MN	NC <sup>a</sup>	ИJ	тх	WI	11-State Median <sup>b</sup>
2010/2011 to 2011/2012	-0.9	8.6	3.0	-2.3	6.3	2.7	-0.5	29.9	2.3	7.2	1.3	1.8	3.9	2.7
2011/2012 to 2012/2013	12.2	19.3	1.4	6.3	1.0	-11.1	-4.5	-11.9	0.2	5.2	2.2	3.9	-2.5	1.0
2012/2013 to 2013/2014	-2.6	26.9	9.9	11.6	7.3	3.6	2.9	3.4	8.9	-0.5	3.8	5.2	6.2	5.2
2013/2014 to 2014/2015	3.3	24.5	4.6	-1.2	-1.0	-3.0	-2.3	0.7	16.6	4.4	6.9	4.8	2.8	3.3
2014/2015 to 2015/2016	-16.4	10.2	2.6	7.8	-9.2	6.8	15.0	-14.1	-1.6	-0.3	11.1	1.7	-8.9	1.7

 $<sup>^{\</sup>rm a}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>b</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wageloss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 25 Trend of Average PPD/Lump-Sum Payment per PPD/Lump-Sum Claim with More Than 7 Days of Lost Time at 36 Months'
Average Maturity



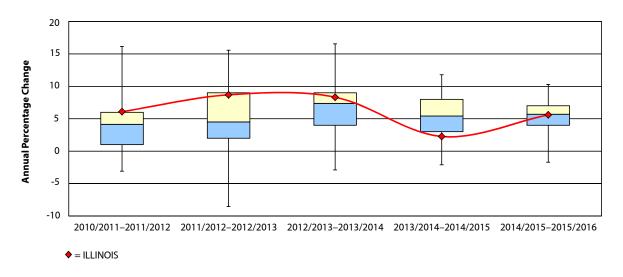
Period		Aver	age PPD	/Lump-S	um Payn	nent per (anr		np-Sum ( entage c		th More	Than 7 D	ays of Lo	st Time	
	AR	CA	FL	GAª	IA	IL	IN	KY	MN	NCª	NJ	TX	WI	11-State Median <sup>b</sup>
2010/2013 to 2011/2014	13.6	8.3	1.4	2.6	5.5	-2.1	0.6	11.0	15.0	3.7	-0.7	1.7	7.0	5.5
2011/2014 to 2012/2015	0.6	6.5	3.3	2.2	12.1	-2.1	-2.3	4.4	-1.7	-4.7	2.3	6.8	7.5	3.3
2012/2015 to 2013/2016	9.0	2.5	-0.2	6.9	-7.7	0.2	6.2	-9.8	10.6	4.9	1.8	3.3	-3.5	1.8

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016; similar notation is used for other years.

 $<sup>^{\</sup>rm a}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>b</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 26 Trend of Average Benefit Delivery Expense<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Expenses at 12 Months' Average Maturity

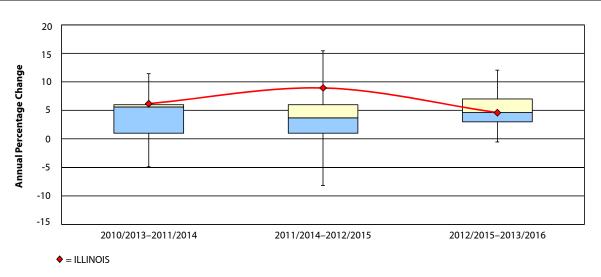


Period			Aver	age Be	enefit C	Delive	ry Expe				h More		•	s of Lo	st Time	e with	Expen	ses	
	AR	CA	FL	GA	IA	IL	IN	КҮ	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>b</sup>
2010/2011 to 2011/2012	16.2	5.7	0.2	4.2	3.1	6.1	9.6	4.1	8.7	6.5	-3.1	3.0	1.3	-2.3	6.4	0.1	2.1	6.9	4.2
2011/2012 to 2012/2013	-8.5	0.3	4.0	2.9	11.2	8.7	0.3	9.0	2.1	5.1	1.5	6.3	10.6	2.7	2.6	7.0	15.6	6.2	4.5
2012/2013 to 2013/2014	8.7	4.0	2.4	3.1	8.2	8.3	9.9	-2.9	6.3	3.6	16.5	2.4	8.8	11.9	6.5	9.2	4.6	10.9	7.4
2013/2014 to 2014/2015	-2.1	2.9	3.1	7.8	1.9	2.3	10.5	5.8	9.8	3.6	2.7	8.5	5.8	11.8	4.1	6.3	6.7	5.1	5.4
2014/2015 to 2015/2016	6.5	5.8	3.7	-1.7	5.9	5.6	10.3	4.9	6.6	3.4	8.8	8.5	5.4	3.7	6.8	1.6	1.3	6.0	5.7

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 27 Trend of Average Benefit Delivery Expense<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Expenses at 36 Months' Average Maturity

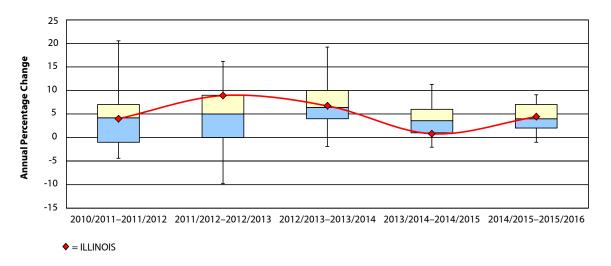


Period			Avera	ge Bei	nefit D	eliver	у Ехре					e Than :hange	•	s of Lo	st Tim	ne with	ı Expei	nses	
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	18-State Median <sup>b</sup>
2010/2013 to 2011/2014	11.4	4.1	-2.1	6.3	1.3	6.2	8.0	6.3	7.7	5.4	-4.9	6.2	2.6	-0.8	5.8	0.7	-1.9	9.0	5.6
2011/2014 to 2012/2015	-8.2	2.0	1.2	-1.8	12.8	8.9	4.5	5.0	3.1	2.7	1.0	0.9	5.1	3.9	3.5	6.4	15.5	7.7	3.7
2012/2015 to 2013/2016	3.8	3.0	-0.6	1.0	4.3	4.6	8.6	-0.2	11.5	4.7	7.4	4.0	4.9	12.1	7.1	8.0	3.1	6.4	4.6

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 28 Trend of Average Medical Cost Containment Expense aper Claim with More Than 7 Days of Lost Time with Medical Cost Containment Expenses at 12 Months' Average Maturity

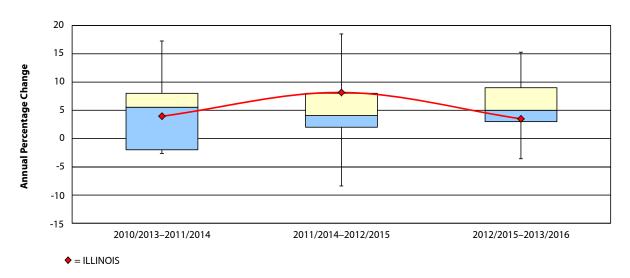


Period			Avera	ge Me			ontaini Cost C		•	•					•		Time	with	
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИЛ	PA	TX	VA	WI	18-State Median <sup>b</sup>
2010/2011 to 2011/2012	20.5	4.4	-0.8	6.6	1.6	4.0	9.7	4.8	9.0	7.6	-4.4	6.5	-0.7	-3.3	5.7	-2.3	1.4	3.1	4.2
2011/2012 to 2012/2013	-9.8	-0.1	5.7	-1.7	11.3	8.9	0.7	9.0	1.0	5.4	4.6	-1.6	8.3	1.6	0.3	6.9	16.2	10.1	5.0
2012/2013 to 2013/2014	8.2	3.9	4.1	4.5	8.5	6.7	10.4	-1.9	5.0	1.7	19.2	3.5	9.7	13.6	6.1	10.7	2.1	10.5	6.4
2013/2014 to 2014/2015	-2.1	-1.4	2.8	5.8	1.3	0.8	11.3	2.8	6.4	1.7	3.0	4.6	4.2	10.8	1.1	4.5	9.8	5.4	3.6
2014/2015 to 2015/2016	4.2	1.9	2.5	-1.0	7.0	4.4	6.7	5.3	2.1	2.3	6.1	9.1	7.1	3.7	2.0	-0.1	-0.7	6.5	4.0

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 29 Trend of Average Medical Cost Containment Expense<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Medical Cost Containment Expenses at 36 Months' Average Maturity

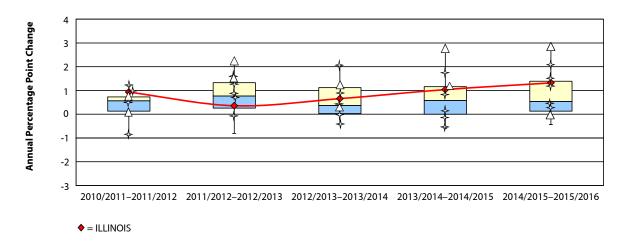


Period			Aver	age Me	edical (		ontain Cost C		•	•					•		Time w	/ith	
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	тх	VA	WI	18-State Median <sup>b</sup>
2010/2013 to 2011/2014	17.3	2.5	0.9	7.5	-2.0	4.0	8.9	8.1	16.2	7.3	-1.8	9.3	2.6	-2.6	7.1	-1.6	-1.9	7.2	5.5
2011/2014 to 2012/2015	-8.4	3.2	2.3	-3.8	12.5	8.2	3.5	8.2	4.2	5.0	3.9	-4.6	6.5	2.7	0.7	6.7	18.5	10.0	4.1
2012/2015 to 2013/2016	0.9	2.9	3.1	3.7	5.8	3.5	10.3	-3.6	8.3	1.6	13.8	7.7	8.5	15.3	4.2	9.6	2.4	6.5	5.0

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 30 Trend of Claims with Defense Attorney Payments<sup>a</sup> Greater Than \$500 (indexed)<sup>b</sup> as a Percentage of Claims with More Than 7 Days of Lost Time at 12 Months' Average Maturity



Period	c	laims	with D	efense	Attori	•	•			nan \$50 nnual	•				_	f Clain	ns with	More	Than
	AR <sup>c</sup>	CA	FL	GA <sup>d</sup>	IA	IL	IN	ΚΥ <sup>c</sup>	LA <sup>e</sup>	MA <sup>e</sup>	MI <sup>e</sup>	MN	NC <sup>d</sup>	NJ	PA <sup>e</sup>	тх	VA <sup>e</sup>	WI°	18-State Median <sup>f</sup>
2010/2011 to 2011/2012	-0.2	0.7	0.7	0.6	0.5	0.9	0.7	0.9	0.9	0.5	-0.9	-0.5	0.0	0.5	0.5	0.6	1.2	0.1	0.6
2011/2012 to 2012/2013	1.1	0.8	-0.8	2.1	1.5	0.4	0.1	0.7	1.2	0.8	-0.1	1.8	1.5	0.6	1.3	0.2	0.7	0.3	0.8
2012/2013 to 2013/2014	-0.4	1.1	1.1	1.2	0.4	0.7	0.3	0.0	0.8	-0.4	0.0	-0.1	0.2	1.7	0.3	0.4	2.0	0.0	0.4
2013/2014 to 2014/2015	0.0	1.5	-0.3	1.1	0.5	1.0	-0.1	0.6	1.7	0.1	-0.2	1.3	2.6	1.2	0.8	0.4	-0.6	0.5	0.6
2014/2015 to 2015/2016	0.1	1.7	1.4	-0.1	0.2	1.3	1.0	0.6	2.0	1.1	0.4	-0.4	2.7	0.0	1.5	0.5	0.2	-0.4	0.5

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See *CompScope™ Benchmarks: Technical Appendix, 17th Edition.* 

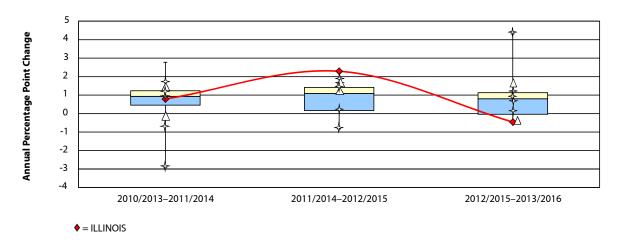
<sup>&</sup>lt;sup>c</sup> Results in Arkansas, Kentucky, and Wisconsin should be used with caution since the small cell sizes (< 300) in these states for claims with 12 months of experience underlying this measure may lead to volatile trends. For trends based on claims with 36 months of experience, please refer to Figure 31.

 $<sup>^{\</sup>rm d}$  States with attributes of both wage-loss and PPD systems are marked with a "  $\triangle$  " on the box plot.

<sup>&</sup>lt;sup>e</sup> Wage-loss states are marked with a " $\updownarrow$ " on the box plot.

<sup>&</sup>lt;sup>f</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 31 Trend of Claims with Defense Attorney Payments<sup>a</sup> Greater Than \$500 (indexed)<sup>b</sup> as a Percentage of Claims with More Than 7 Days of Lost Time at 36 Months' Average Maturity



Period	c	laims	with D	efense	Attor					nan \$50 nnual						f Clain	ns with	More	Than
	AR	CA	FL	GA <sup>c</sup>	IA	IL	IN	KY	LA <sup>d</sup>	MA <sup>d</sup>	MI <sup>d</sup>	MN	NC°	NJ	PA <sup>d</sup>	TX	VA <sup>d</sup>	WI	18-State Median <sup>e</sup>
2010/2013 to 2011/2014	1.3	1.3	-0.3	1.2	1.0	0.8	0.6	1.7	-0.8	0.8	-2.9	1.0	-0.3	2.8	0.9	0.9	1.6	1.2	0.9
2011/2014 to 2012/2015	1.1	1.1	-0.5	1.1	0.8	2.3	0.4	1.3	1.3	0.1	-0.8	1.5	1.4	-0.8	1.7	0.7	1.5	0.2	1.1
2012/2015 to 2013/2016	1.1	1.1	0.0	1.5	0.5	-0.5	1.1	1.4	4.3	0.8	0.1	-0.3	-0.5	2.8	1.1	0.8	0.7	-0.3	0.8

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

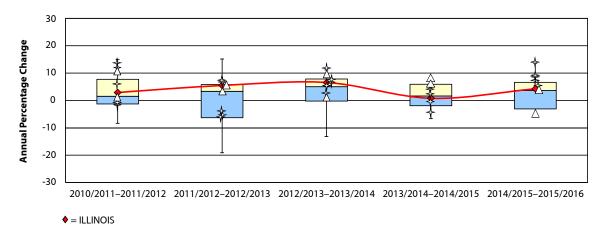
<sup>&</sup>lt;sup>b</sup> A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See *CompScope™ Benchmarks: Technical Appendix, 17th Edition.* 

 $<sup>^{\</sup>mathsf{c}}$  States with attributes of both wage-loss and PPD systems are marked with a " $\triangle$ " on the box plot.

<sup>&</sup>lt;sup>d</sup> Wage-loss states are marked with a "♣" on the box plot.

<sup>&</sup>lt;sup>e</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 32 Trend of Average Defense Attorney Payment<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Defense Attorney Payments Greater Than \$500 (indexed)<sup>b</sup> at 12 Months' Average Maturity



**Period** Average Defense Attorney Payment<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Defense Attorney Payments Greater Than \$500 (indexed)<sup>b</sup> (annual average percentage change) 18-State  $AR^{c}$ CA FL  $GA^d$ IΑ KY<sup>c</sup> LA<sup>e</sup> MA<sup>e</sup> ΜI<sup>e</sup> MN  $NC^d$ PAe TX VA<sup>e</sup> WIc Median 2010/2011 to 2011/2012 -0.5 1.8 -0.14.1 0.3 -5.7 2.9 -8.4 -7.0 13.2 11.2 1.3 9.7 -1.4 5.7 1.8 -1.2 15.0 1.5 2011/2012 to 2012/2013 -19.1 -2.0 4.3 2.4 9.3 5.5 -6.4 15.1 -4.2 -6.5 -6.2 6.1 10.5 5.1 2.3 5.1 -9.0 3.3 2012/2013 to 2013/2014 10.8 2.6 -2.1 0.5 3.1 6.5 7.0 -13.2 11.2 5.1 6.1 4.9 8.6 -1.2 1.6 -1.0 7.1 11.1 5.0 2013/2014 to 2014/2015 6.2 7.4 -0.4 -2.0 -5.2 1.6 5.6 2.0 0.8 7.2 1.9 3.3 -4.7 -1.9 1.4 4.7 -0.5 2014/2015 to 2015/2016 1.3 4.3 0.9 -5.4 -5.6 4.2 -4.9-2.2 8.8 7.0 13.6 6.2 3.0 -0.2 8.3 4.4 4.8 -4.03.6

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; similar notation is used for other years.

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See *CompScope™ Benchmarks: Technical Appendix, 17th Edition.* 

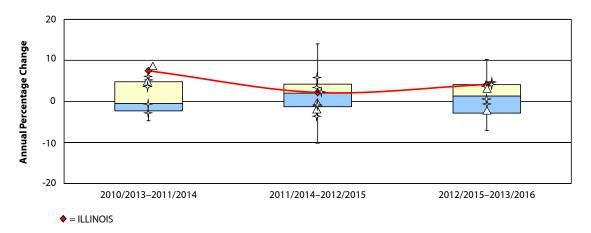
<sup>&</sup>lt;sup>c</sup> Results in Arkansas, Kentucky, and Wisconsin should be used with caution since the small cell sizes (< 300) in these states for claims with 12 months of experience underlying this measure may lead to volatile trends. For trends based on claims with 36 months of experience, please refer to Figure 33.

 $<sup>^{\</sup>rm d}$  States with attributes of both wage-loss and PPD systems are marked with a " $\!\!\!\! \triangle$  " on the box plot.

e Wage-loss states are marked with a "♣" on the box plot.

<sup>&</sup>lt;sup>f</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 33 Trend of Average Defense Attorney Payment<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Defense Attorney Payments Greater Than \$500 (indexed)<sup>b</sup> at 36 Months' Average Maturity



Period	Ave	erage	Defen	se Atto	•	•				More T ) <sup>b</sup> (ann		•					Attorn	ey Pa	yments
	AR	CA	FL	GΑ <sup>c</sup>	IA	IL	IN	KY	LA <sup>d</sup>	MA <sup>d</sup>	MI <sup>d</sup>	MN	NC°	NJ	PA <sup>d</sup>	TX	VA <sup>d</sup>	WI	18-State Median <sup>e</sup>
2010/2013 to 2011/2014	-4.7	1.2	-1.4	4.5	-2.4	7.5	-0.6	-2.2	3.5	-0.8	5.7	-2.7	8.1	-0.4	5.1	1.9	-3.1	-0.8	-0.5
2011/2014 to 2012/2015	-10.2	-1.2	1.8	-2.3	14.0	2.2	9.0	1.9	-1.0	-4.1	5.5	2.0	-1.3	5.0	2.1	2.4	2.9	3.4	2.0
2012/2015 to 2013/2016	10.2	1.8	-3.0	-2.8	-2.6	4.1	-7.1	-2.9	0.2	4.5	-0.5	2.6	2.5	0.9	4.0	-4.7	2.5	5.9	1.3

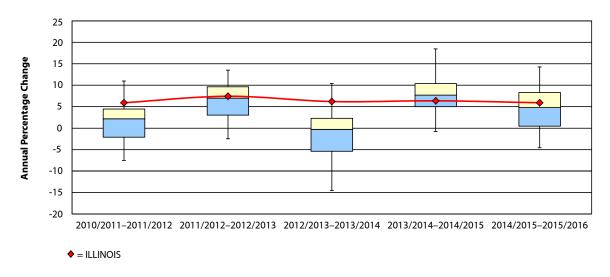
<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See *CompScope™ Benchmarks: Technical Appendix, 17th Edition.* 

 $<sup>^{\</sup>rm c}$  States with attributes of both wage-loss and PPD systems are marked with a " $\triangle$ " on the box plot.

<sup>&</sup>lt;sup>e</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 34 Trend of Average Medical-Legal Expense<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Medical-Legal Expenses at 12 Months' Average Maturity



Period	Average Medical-Legal Expense <sup>a</sup> per Claim with More Than 7 Days of Lost Time with Medical-Legal Expenses (annual average percentage change)																		
	AR <sup>b</sup>	CA	FL <sup>b</sup>	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI	16-State Median <sup>c</sup>
2010/2011 to 2011/2012	n/a	3.0	n/a	-1.6	1.6	5.9	7.6	-2.6	-4.5	1.4	2.9	5.5	-7.5	3.5	-0.1	-4.4	11.0	2.7	2.2
2011/2012 to 2012/2013	n/a	-2.0	n/a	5.4	3.4	7.4	7.1	2.7	13.5	12.9	6.8	10.2	11.8	9.1	7.3	-1.2	5.4	-2.5	7.0
2012/2013 to 2013/2014	n/a	3.8	n/a	-0.5	-1.6	6.2	-6.8	0.5	-9.9	1.7	10.4	0.0	-14.6	-3.9	0.6	-0.7	-8.3	2.9	-0.3
2013/2014 to 2014/2015	n/a	0.2	n/a	-0.8	4.4	6.4	6.8	8.4	16.5	9.2	4.6	7.3	17.5	8.1	9.7	11.0	18.5	5.4	7.7
2014/2015 to 2015/2016	n/a	8.5	n/a	12.1	14.3	5.9	4.0	-4.5	-0.2	6.9	8.1	12.1	-0.8	1.8	5.7	-2.8	1.1	3.8	4.8

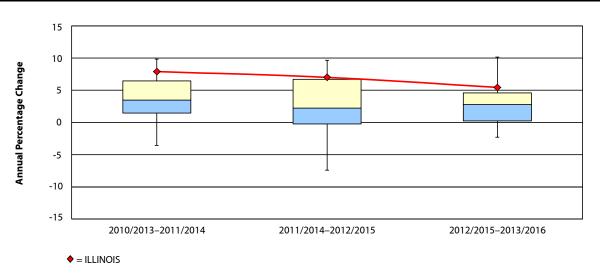
Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> Trends in medical-legal expenses are not reported for claims with 12 months of experience for Arkansas and Florida because underlying data in our sample are not necessarily representative of each state's trends.

<sup>&</sup>lt;sup>c</sup> The 16-state median is the average of the states ranked 8th and 9th on a given measure; these states change depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

Figure 35 Trend of Average Medical-Legal Expense<sup>a</sup> per Claim with More Than 7 Days of Lost Time with Medical-Legal Expenses at 36 Months' Average Maturity



Period	Average Medical-Legal Expense <sup>a</sup> per Claim with More Than 7 Days of Lost Time with Medical-Legal Expenses (annual average percentage change)												ises						
	AR <sup>b</sup>	CA	FL <sup>c</sup>	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI	17-State Median <sup>d</sup>
2010/2013 to 2011/2014	9.3	8.0	n/a	2.2	2.8	7.9	9.8	2.4	3.7	3.7	2.3	5.0	-1.4	0.8	0.5	-3.6	3.5	5.0	3.5
2011/2014 to 2012/2015	-7.4	-0.7	n/a	2.0	6.8	7.0	0.8	-1.4	2.0	9.7	6.6	4.6	-4.4	5.5	6.1	0.2	7.1	2.2	2.2
2012/2015 to 2013/2016	3.1	-0.4	n/a	1.5	10.1	5.4	-1.6	-2.3	-1.6	4.5	6.1	0.9	2.2	3.8	4.6	4.1	2.8	2.6	2.8

Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> For benefit delivery expense and its component measures (including the measure shown in this figure), we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>b</sup> Results in Arkansas should be used with caution since the small cell sizes (< 300) in this state for claims with 36 months of experience underlying this measure may lead to volatile trends.

<sup>&</sup>lt;sup>c</sup> Trends in medical-legal expenses are not reported for claims with 36 months of experience for Florida because underlying data in our sample are not necessarily representative of the state's trends.

<sup>&</sup>lt;sup>d</sup> The 17-state median is the state ranked 9th on a given measure; this state changes depending on the measure being evaluated. The median is also shown as the horizontal line within the box of the box plot figure for a measure.

**Table 1 Terms We Use to Describe Performance** 

Multistate Values	Comparison with Median State	
Higher	More than 10 percent above median	
Lower	More than 10 percent below median	
Typical or close to	Within 10 percent above or below median	
Trends <sup>a</sup>	Change in Cost Measures (annual average percentage)	Change in Frequency Measures (annual average percentage points)
Very rapid increase	+9% and higher	+4 points and higher
Rapid increase	+6% to 8.9%	+2 to 3.9 points
Moderate increase	+3% to 5.9%	+1 to 1.9 points
Flat, little change	+2.9% to -2.9%	+0.9 points to -0.9 points
Moderate decrease	-3% to -5.9%	–1 to –1.9 points
Rapid decrease	-6% to -8.9%	-2 to −3.9 points
Very rapid decrease	–9% and lower	–4 points and lower

<sup>&</sup>lt;sup>a</sup> Other words used to describe an increase include *growth, rise,* and *acceleration* (movement up at least one category over the period analyzed). Other words used to describe a decrease include *fall, drop, decline,* and *deceleration* (movement down at least one category over the period analyzed).

Table 2 Comparing Illinois with Other States: Selected Performance Measures, Adjusted for Injury and Industry Mix and Wages

		2015/201	6 Claims		For More Details, Refer to		
Performance Measure	IL	18-State Median <sup>a</sup>	Percentage or Percentage Point Difference <sup>b</sup>	IL	18-State Median <sup>a</sup>	Percentage or Percentage Point Difference <sup>b</sup>	CompScope™ Benchmarks, 17th Edition: The DataBook <sup>c</sup>
Time to notice and first indemnity paymen	t						
Claims with payor notice within 3 days of injury (percentage)	56.5%	59.7%	-3.2	_	_	_	Table 2.1
Claims with first payment within 14 days of payor notice (percentage)	38.7%	43.1%	-4.4	_	_	_	Table 2.1
Claims with first payment within 21 days of injury (percentage)	43.3%	46.4%	-3.1	_	_	_	Table 2.1
Benefit payments and costs per claim							
All paid claims							
Average total cost per claim	\$8,830	\$6,225	41.9	\$15,626	\$10,354	50.9	Table 2.2
Average benefit payment per claim	\$7,470	\$5,253	42.2	\$13,268	\$9,047	46.6	Table 2.2
Average medical payment per claim	\$4,972	\$3,468	43.4	\$6,931	\$4,611	50.3	Table 2.2
Average benefit delivery expense per claim d	\$1,357	\$991	37.0	\$2,332	\$1,574	48.2	Table 2.2
Average incurred total cost per claim	\$15,263	\$9,764	56.3	\$19,923	\$12,525	59.1	Table 2.2
Average incurred medical benefit per claim	\$7,565	\$5,098	48.4	\$8,280	\$5,238	58.1	Table 2.2
Claims with more than 7 days of lost time							
Percentage of all paid claims	26.1%	18.9%	7.2	29.8%	21.0%	8.7	Table 2.12
Average total cost per claim	\$29,566	\$27,305	8.3	\$48,898	\$40,274	21.4	Table 2.4
Average benefit payment per claim	\$25,109	\$22,937	9.5	\$41,629	\$33,990	22.5	Table 2.4
Average medical payment per claim	\$15,542	\$12,136	28.1	\$20,354	\$16,472	23.6	Table 2.4
Average indemnity benefit per claim <sup>e</sup>	\$9,567	\$8,205	16.6	\$21,275	\$18,269	16.5	Table 2.4
Average incurred total cost per claim	\$49,273	\$38,904	26.7	\$61,521	\$51,498	19.5	Table 2.4
Average incurred medical benefit per claim	\$23,060	\$18,169	26.9	\$24,139	\$19,753	22.2	Table 2.4
Average incurred indemnity benefit per claim <sup>e</sup>	\$20,071	\$15,278	31.4	\$29,464	\$23,558	25.1	Table 2.4
Temporary disability claims with more than 7 do	ays of lost tir	ne <sup>f</sup>					
Average benefit payment per claim	\$23,635	\$17,680	33.7	\$28,539	\$14,271	100.0	Table 2.5
Average medical payment per claim	\$15,896	\$12,238	29.9	\$18,582	\$9,787	89.9	Table 2.5
Average indemnity benefit per claim	\$7,739	\$5,356	44.5	\$9,957	\$4,378	127.4	Table 2.5
PPD/lump-sum claims with more than 7 days of	lost time f						
PPD/lump-sum claims as a percentage of							
claims with more than 7 days of lost time	15.6%	16.5%	-0.9	43.2%	40.6%	2.6	Table 2.6
Average benefit payment per claim	\$36,484	\$33,232	9.8	\$60,885	\$55,046	10.6	Table 2.6
Average medical payment per claim	\$16,171	\$16,009	1.0	\$24,317	\$25,089	-3.1	Table 2.6
Average indemnity benefit per claim	\$20,313	\$14,755	37.7	\$36,568	\$28,156	29.9	Table 2.6
Average PPD/lump-sum payment per claim <sup>9</sup>	\$14,386	\$9,275	55.1	\$25,927	\$17,743	46.1	Table 2.6
Claims with more than 7 days of lost time Claims with lump-sum settlements							
(percentage) <sup>f</sup>	12.1%	5.8%	6.3	38.2%	24.0%	14.2	Table 2.9
Average lump-sum settlement per claim	£16.155	612 70 /	10.3	£20.205	¢22 =4 4	20.1	T.I.I. 2.2
with lump-sum settlement	\$16,453	\$13,794	19.3	\$28,309	\$23,514	20.4	Table 2.9
Benefit delivery expenses <sup>d</sup> Average benefit delivery expense per claim with benefit delivery expenses	\$4,501	\$3,874	16.2	\$7,264	\$6,003	21.0	Table 2.11
Average medical cost containment expense per claim with medical cost containment	1001	43,07 T	10.2	71,204	÷0,003	21.0	TABLE Z.II
expenses Claims with medical-legal expenses	\$3,063	\$2,773	10.5	\$4,012	\$3,432	16.9	Table 2.11
(percentage) <sup>h</sup> Average medical-legal expense per claim	25.9%	14.0%	11.9	32.8%	24.9%	7.9	Table 2.11
with medical-legal expenses h	\$2,449	\$1,536	59.4	\$2,898	\$1,946	48.9	Table 2.11

continued

Table 2 Comparing Illinois with Other States: Selected Performance Measures, Adjusted for Injury and Industry Mix and Wages (continued)

		2015/2010	5 Claims		2013/201	6 Claims	For More Details, Refer to
Performance Measure	IL	18-State Median <sup>a</sup>	Percentage or Percentage Point Difference <sup>b</sup>	IL	18-State Median <sup>a</sup>	Percentage or Percentage Point Difference <sup>b</sup>	CompScope™ Benchmarks, 17th Edition: The DataBook <sup>c</sup>
Attorney involvement <sup>d</sup>							
Percentage of claims with defense attorney payments greater than \$500 (indexed) <sup>i</sup>	22.1%	14.3%	7.8	42.1%	29.9%	12.2	Table 2.11
Average defense attorney payment per claim with defense attorney payments greater than \$500 (indexed) <sup>i</sup>	\$2,420	\$3,170	-23.7	\$4,218	\$5,420	-22.2	Table 2.11
Duration of disability <sup>f</sup>							
Average duration of temporary disability (weeks)	13.5	10.4	29.5	18.6	13.5	37.5	Table 2.12
Vocational rehabilitation (VR) benefits and	expenses <sup>i</sup>						
Claims with VR provider expenses (percentage)	n/a	n/a	n/a	2.7%	2.9%	-0.3	Table 2.10
Average VR provider expense per claim with VR provider expenses	n/a	n/a	n/a	\$3,319	\$3,656	-9.2	Table 2.10

Notes: Unless specified, measures are shown for claims with more than seven days of lost time. PPD/LS claims are those claims with PPD payments and/or lump-sum settlements. 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: n/a: not applicable; PPD: permanent partial disability; PPD/LS: permanent partial disability or lump sum.

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated. If a measure is not applicable or meaningful for a state, the state is not included in the calculation of the median. For example, Indiana is excluded for the average incurred benefit per claim; therefore, we report a 17-state median for this measure. The vocational rehabilitation measures for 2013/2016 claims with more than seven days of lost time are not meaningful for 8 states due to small cell sizes. Therefore, we report a 10-state median instead of the 18-state median by excluding the results of these 8 states. The 10-state median is the average of the states ranked 5th and 6th on these measures.

<sup>&</sup>lt;sup>b</sup> Differences between the state values and 18-state median values may not be exactly equal to the percentage or percentage point difference shown due to rounding.

<sup>&</sup>lt;sup>c</sup> Available in CompScope™Benchmarks, 17th Edition: The DataBook (http://www.wcrinet.org/images/uploads/files/cs17\_databook.pdf).

<sup>&</sup>lt;sup>d</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

e The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. The reader should further note that lump-sum settlements in California reflect payments based on the agreed amount at the time of Compromise and Release (C&R) or Stipulation and do not include any potential subsequent payments for outstanding liens. In most study states (California, Illinois, Indiana, lowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>f</sup> We use an 11-state median for measures for temporary disability claims, PPD/LS claims, lump-sum settlements, and duration of temporary disability, excluding Georgia, Louisiana, Massachusetts, Michigan, North Carolina, Pennsylvania, and Virginia. In these 7 states, permanent partial disability means something fundamentally different, so comparisons with the 11 non-wage-loss states may not be meaningful. The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated.

<sup>&</sup>lt;sup>9</sup> Includes both PPD benefits and lump-sum settlements.

h Percentage of claims with medical-legal expenses and average medical-legal expense per claim are not reported for Arkansas at 12 months' experience and Florida at 12 and 36 months' experience because underlying data in our sample are not necessarily representative of each state's experience.

i A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See CompScope™ Benchmarks: Technical Appendix, 17th Edition.

<sup>&</sup>lt;sup>j</sup> Measures for vocational rehabilitation provider expenses are not shown for claims with 12 months of experience because the small cell sizes underlying these measures in most of the study states make the interstate comparisons not meaningful. For claims with 36 months of experience, Arkansas, Georgia, Iowa, Indiana, Kentucky, and New Jersey are excluded from the interstate comparisons due to small cell sizes. Data for Texas and Wisconsin are not shown because underlying data in our sample are not necessarily representative of each state's experience. The medians for these measures are based on 10 states. We do not show interstate comparisons of vocational rehabilitation maintenance benefits due to small claim cell sizes underlying this measure in the vast majority of the study states.

Table 3 Trends in Illinois: Selected Performance Measures, Not Adjusted for Injury and Industry Mix and Wages

	Clai	ms at 12 Month	ıs' Average Ma	turity	Claims at 3	6 Months' Avera	age Maturity	For More
Performance Measure	Unadjusted Values	•	ual average pe entage point ch	_	Unadjusted Values	percentage o	ual average or percentage :hange)	Details, Refer to CompScope™ Benchmarks,
	2015/2016 Claims	2014/2015 to 2015/2016	2013/2014 to 2015/2016	2010/2011 to 2015/2016	2013/2016 Claims	2012/2015 to 2013/2016	2010/2013 to 2013/2016	17th Edition: The DataBook <sup>a</sup>
Time to notice and first inde	emnity payme	nt						
Claims with payor notice within 3 days of injury (percentage)	56.6%	-0.5	0.5	0.5	_	_	_	Table 4.1
Claims with first payment within 14 days of payor notice (percentage)	37.6%	-0.7	-0.9	-0.5	_	_	_	Table 4.1
Claims with first payment within 21 days of injury (percentage)	42.5%	-0.9	-0.5	-0.3	_	_	_	Table 4.1
Benefit payments and costs	per claim							
All paid claims								
Average total cost per claim	\$9,133	2.5	3.0	-0.6	\$16,076	2.5	-2.9	Table 4.2
Average benefit payment per claim	\$7,755	2.2	2.8	-1.5	\$13,692	2.2	-4.1	Table 4.2
Average medical payment per claim	\$4,981	1.4	2.3	-2.7	\$6,915	3.2	-5.8	Table 4.2
Average benefit delivery expense per claim	\$1,375	4.3	3.8	5.8	\$2,357	4.9	5.8	Table 4.2
Average incurred total cost per claim	\$15,923	0.1	2.1	0.0	\$20,468	2.2	-2.3	Table 4.2
Average incurred medical benefit per claim	\$7,621	-0.7	1.7	-1.3	\$8,261	2.1	-5.0	Table 4.2
Claims with more than 7 days o	of lost time							
Percentage of all paid claims	26.8%	-0.4	-0.1	-0.2	30.4%	0.1	-0.2	Table 4.12
Average total cost per claim	\$29,922	4.0	3.4	0.0	\$49,405	2.0	-2.2	Table 4.4
Average benefit payment per claim	\$25,522	3.8	3.3	-0.9	\$42,209	1.6	-3.4	Table 4.4
Average medical payment per claim	\$15,205	2.8	2.7	-2.3	\$19,955	2.5	-5.3	Table 4.4
Average indemnity benefit per claim <sup>b</sup>	\$10,317	5.2	4.2	1.5	\$22,254	0.7	-1.6	Table 4.4
Average incurred total cost per claim	\$50,293	1.5	2.3	0.5	\$62,055	1.7	-1.7	Table 4.4
Average incurred medical benefit per claim	\$22,709	0.5	1.9	-0.8	\$23,661	1.5	-4.5	Table 4.4
Average incurred indemnity benefit per claim <sup>b</sup>	\$21,494	1.4	2.2	0.4	\$30,568	1.1	-1.3	Table 4.4
Temporary disability claims wit		lays of lost time						
Average benefit payment per claim	\$24,017	3.8	3.2	-0.7	\$28,595	1.8	-3.5	Table 4.5
Average medical payment per claim	\$15,602	3.9	2.8	-2.3	\$18,138	1.4	-5.4	Table 4.5
Average indemnity benefit per claim	\$8,415	3.6	3.8	2.8	\$10,456	2.5	0.1	Table 4.5
PPD/lump-sum claims with mo	re than 7 days o	of lost time						
PPD/lump-sum claims as a percentage of claims with more than 7 days of lost time	15.3%	0.8	0.6	-0.4	43.0%	0.2	-1.3	Table 4.0
Average benefit payment per claim		3.7	3.2	-0.4	\$62,477	1.1	-2.2	Table 4.8 Table 4.8
Average medical payment per claim	\$15,588	-0.5	3.4	-1.9	\$24,066	2.4	-5.0	Table 4.8
Average indemnity benefit per claim	\$21,782	6.9	3.4	0.7	\$38,411	0.4	-0.2	Table 4.8
Average PPD/lump-sum payment per claim <sup>c</sup>	\$15,377	6.8	1.8	-0.4	\$27,123	0.4	-1.3	Table 4.8
payment per ciaiiii	1 / 6,6 : 4	0.0	1.0	-0.7	741,143	V.Z	د.۱-	10012 4.0

Table 3 Trends in Illinois: Selected Performance Measures, Not Adjusted for Injury and Industry Mix and Wages (continued)

	Clai	ms at 12 Month	ıs' Average Ma	turity	Claims at 3	6 Months' Avera	age Maturity	For More
Performance Measure	Unadjusted Values		ual average pe entage point ch		Unadjusted Values	percentage o	ual average or percentage :hange)	Details, Refer to CompScope™ Benchmarks,
	2015/2016 Claims	2014/2015 to 2015/2016	2013/2014 to 2015/2016	2010/2011 to 2015/2016	2013/2016 Claims	2012/2015 to 2013/2016	2010/2013 to 2013/2016	17th Edition: The DataBook <sup>a</sup>
Claims with more than 7 days o	of lost time							
Claims with lump-sum settlements (percentage)	12.0%	0.7	0.6	-0.3	38.1%	0.4	-1.2	Table 4.9
Average lump-sum settlement per claim with lump-sum settlement	\$17,633	7.1	0.0	-0.7	\$29,596	0.2	-0.9	Table 4.9
Benefit delivery expenses <sup>d</sup>								
Average benefit delivery expense per claim with benefit delivery expenses	\$4,446	5.6	3.9	6.2	\$7,191	4.6	6.6	Table 4.11
Average medical cost containment expense per claim with medical cost containment expenses	\$3,012	4.4	2.6	4.9	\$3,937	3.5	5.2	Table 4.11
Claims with medical-legal expenses (percentage) <sup>e</sup>	26.5%	0.4	0.9	0.7	33.2%	-0.4	0.9	Table 4.11
Average medical-legal expense per claim with								
medical-legal expenses e	\$2,436	5.9	6.1	6.4	\$2,878	5.4	6.8	Table 4.11
Attorney involvement <sup>r</sup>								
Percentage of claims with defense attorney payments greater than \$500 (indexed) <sup>f</sup>	21.7%	1.3	1.2	0.9	41.7%	-0.5	0.9	Table 4.11
Average defense attorney payment per claim with defense attorney payments greater than \$500								
(indexed) <sup>f</sup>	\$2,407	4.2	2.5	4.0	\$4,253	4.1	4.6	Table 4.11
Duration of disability								
Average duration of temporary disability payments (weeks)	13.7	-1.2	0.9	0.3	18.8	1.7	-0.9	Table 4.12
Vocational rehabilitation (V								
Percentage of claims with VR provider expenses	n/a	n/a	n/a	n/a	2.7%	0.3	0.1	Table 4.10
Average VR provider expense per claim with VR provider		- 1-	/	/-	¢2.260	10.0	0.4	T.I. 440
expenses	n/a	n/a	n/a	n/a	\$3,268	-19.9	-8.4	Table 4.10

Notes: Unless specified, measures are shown for claims with more than seven days of lost time. PPD/LS claims are those claims with PPD payments and/or lump-sum settlements. 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; 2013/2016 refers to claims arising in October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. Similar notation is used to describe other injury years and valuations. We performed a two-tailed test for statistical significance of the difference of the means for the years being compared at an 80 percent confidence level. The null hypothesis was that the difference between the two means was zero. In most cases, the result of that test was statistically significant and is shown in regular typeface. For some measures, the result of the test was not statistically significant, although the percentage or percentage point change is large for some measures; these results are shown in italics. A result that is not statistically significant may be caused by large variance and/or small sample size associated with the means. We did not test the medians for statistical significance.

<sup>&</sup>lt;sup>a</sup> Available in CompScope™Benchmarks, 17th Edition: The DataBook (http://www.wcrinet.org/images/uploads/files/cs17\_databook.pdf).

b The reader should be aware that we report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report. See CompScope™ Benchmarks: Technical Appendix, 17th Edition.

# Table 3 Trends in Illinois: Selected Performance Measures, Not Adjusted for Injury and Industry Mix and Wages (continued)

Key: n/a: not applicable; PPD: permanent partial disability; PPD/LS: permanent partial disability or lump sum.

<sup>&</sup>lt;sup>c</sup> Includes both PPD benefits and lump-sum settlements.

<sup>&</sup>lt;sup>d</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

e Trends in medical-legal expenses are not reported for Arkansas at 12 months' average maturity and Florida at 12 and 36 months' average maturity because underlying data in our sample are not necessarily representative of each state's trends.

f A \$500 threshold was used in reporting the frequency of defense attorney involvement and the average payment made to defense attorneys to identify where defense attorneys were more likely to be involved in disputes, rather than involved in a more nominal way, such as drafting settlement agreements. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year. See *CompScope™ Benchmarks: Technical Appendix, 17th Edition.* Results in Arkansas, Kentucky, and Wisconsin should be used with caution since the small cell sizes (< 300) in these states for claims with 12 months of experience underlying these measures may lead to volatile trends.

<sup>&</sup>lt;sup>9</sup> Measures for vocational rehabilitation provider expenses are only shown in California, Minnesota, Pennsylvania, and Virginia for claims with 12 months of experience because the cell sizes underlying these measures in the other study states are too small to support meaningful trend analysis. For claims with 36 months of experience, Arkansas, Georgia, Iowa, Indiana, Kentucky, and New Jersey are excluded from the trend analysis due to small cell sizes. We do not show measures for vocational rehabilitation expenses for Florida and Illinois at 12 months of experience and for Florida, Texas, and Wisconsin at 36 months of experience because underlying data in our sample are not necessarily representative of each state's experience. We do not show trends of vocational rehabilitation maintenance benefits due to small claim cell sizes underlying this measure in the vast majority of the study states.

Table 4 Trend in Average Weekly Wages of Injured Workers, 2010–2015

Wage Measure	AR	CA	FL	GAª	IA	IL	IN <sup>a</sup>	KY	LA	MA	MI	MN <sup>b</sup>	NC	ИJ	PA	тх	VA	WI
Average weekl	ly wage of i	injured worl	kers (data f	rom WCRI'	s Detailed I	Benchmark/	Evaluation	database)										
2010/2011	\$611.87	\$735.03	\$634.74	\$611.36	\$659.31	\$728.00	\$642.36	\$644.93	\$701.05	\$833.66	\$726.80	\$713.65	\$631.03	\$778.12	\$719.65	\$711.07	\$681.59	\$754.71
2011/2012	\$657.30	\$744.50	\$648.10	\$627.35	\$692.57	\$754.36	\$669.63	\$659.34	\$717.86	\$834.07	\$747.36	\$727.68	\$647.51	\$793.13	\$753.08	\$730.95	\$689.36	\$776.29
2012/2013	\$643.99	\$750.98	\$651.77	\$640.94	\$702.33	\$761.56	\$662.84	\$666.94	\$717.54	\$828.03	\$753.73	\$727.94	\$647.70	\$796.66	\$773.47	\$757.94	\$711.24	\$768.12
2013/2014	\$674.92	\$753.10	\$669.29	\$653.27	\$734.33	\$776.41	\$681.04	\$684.67	\$736.76	\$859.81	\$755.20	\$740.59	\$680.61	\$802.76	\$782.68	\$780.31	\$717.05	\$789.66
2014/2015	\$716.36	\$763.06	\$681.56	\$662.37	\$751.82	\$788.78	\$702.22	\$697.08	\$760.70	\$870.35	\$780.44	\$738.85	\$682.41	\$815.16	\$798.26	\$800.92	\$732.96	\$800.53
2015/2016	\$730.46	\$784.71	\$690.09	\$686.21	\$779.56	\$827.28	\$711.43	\$731.77	\$777.64	\$897.01	\$796.19	\$754.78	\$688.16	\$826.19	\$809.86	\$820.02	\$745.07	\$813.32
2010/2011 to 2011/2012	7.4%	1.3%	2.1%	2.6%	5.0%	3.6%	4.2%	2.2%	2.4%	0.0%	2.8%	2.0%	2.6%	1.9%	4.6%	2.8%	1.1%	2.9%
2011/2012 to 2012/2013	-2.0%	0.9%	0.6%	2.2%	1.4%	1.0%	-1.0%	1.2%	0.0%	-0.7%	0.9%	0.0%	0.0%	0.4%	2.7%	3.7%	3.2%	-1.1%
2012/2013 to 2013/2014	4.8%	0.3%	2.7%	1.9%	4.6%	2.0%	2.7%	2.7%	2.7%	3.8%	0.2%	1.7%	5.1%	0.8%	1.2%	3.0%	0.8%	2.8%
2013/2014 to 2014/2015	6.1%	1.3%	1.8%	1.4%	2.4%	1.6%	3.1%	1.8%	3.2%	1.2%	3.3%	-0.2%	0.3%	1.5%	2.0%	2.6%	2.2%	1.4%
2014/2015 to 2015/2016	2.0%	2.8%	1.3%	3.6%	3.7%	4.9%	1.3%	5.0%	2.2%	3.1%	2.0%	2.2%	0.8%	1.4%	1.5%	2.4%	1.7%	1.6%
Statewide aver	rage weekl	y wage for v	vorkers' co	mpensatio	n purposes	(as of June	30 each ye	ar)										
2010	\$661.66	\$984.83	\$772.00	n/a	\$706.50	\$922.45	n/a	\$711.79	\$768.83	\$1,094.70	\$828.73	n/a	\$758.18	\$1,059.00	\$845.00	\$773.00	\$895.00	\$740.90
2011	\$676.49	\$979.90	\$782.00	n/a	\$710.00	\$930.39	n/a	\$721.97	\$772.18	\$1,088.06	\$823.35	n/a	\$760.00	\$1,056.00	\$858.00	\$766.00	\$885.00	\$745.45
2012	\$686.71	\$1,003.55	\$803.00	n/a	\$728.50	\$966.72	n/a	\$736.19	\$789.00	\$1,135.82	\$886.66	n/a	\$783.64	\$1,080.00	\$888.00	\$787.00	\$905.00	\$776.36
2013	\$707.91	\$1,059.38	\$816.00	n/a	\$749.00	\$990.02	n/a	\$752.69	\$807.07	\$1,173.06	\$886.66	n/a	\$803.64	\$1,101.33	\$917.00	\$818.00	\$935.00	\$799.09
2014	\$725.88	\$1,067.25	\$827.00	n/a	\$771.50	\$1,002.68	n/a	\$769.06	\$825.54	\$1,181.28	\$894.44	\$945.00	\$821.82	\$1,124.00	\$932.00	\$850.00	\$955.00	\$810.91
2015	\$740.00	\$1,095.70	\$842.00	n/a	\$786.00	\$1,021.34	n/a	\$773.61	\$839.76	\$1,214.99	\$911.11	\$961.00	\$836.36	\$1,140.00	\$951.00	\$861.00	\$967.00	\$828.18
2010 to 2011	2.2%	-0.5%	1.3%	2.9%	0.5%	0.9%	2.6%	1.4%	0.4%	-0.6%	-0.6%	-1.1%	0.2%	-0.3%	1.5%	-0.9%	-1.1%	0.6%
2011 to 2012	1.5%	2.4%	2.7%	3.0%	2.6%	3.9%	2.7%	2.0%	2.2%	4.4%	7.7%	3.2%	3.1%	2.3%	3.5%	2.7%	2.3%	4.1%
2012 to 2013	3.1%	5.6%	1.6%	1.2%	2.8%	2.4%	1.1%	2.2%	2.3%	3.3%	0.0%	2.2%	2.6%	2.0%	3.3%	3.9%	3.3%	2.9%
2013 to 2014	2.5%	0.7%	1.3%	2.7%	3.0%	1.3%	2.2%	2.2%	2.3%	0.7%	0.9%	3.2%	2.3%	2.1%	1.6%	3.9%	2.1%	1.5%
2014 to 2015	1.9%	2.7%	1.8%	2.9%	1.9%	1.9%	3.2%	0.6%	1.7%	2.9%	1.9%	1.7%	1.8%	1.4%	2.0%	1.3%	1.3%	2.1%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. Similar notation is used to describe other injury years and valuations.

 $\textit{Key:} \ n/a: not \ applicable; \ TTD: temporary \ total \ disability.$ 

<sup>&</sup>lt;sup>a</sup> In Georgia and Indiana, the weekly maximum TTD benefit was adjusted periodically by statute, rather than being tied to annual changes in the statewide average weekly wage as it was in the other study states. The annual changes in the statewide average weekly wage for Georgia and Indiana shown in this table come from Bureau of Labor Statistics data for the average weekly wage for private industries, total covered employment, and all establishment sizes (available at <a href="http://www.bls.gov">http://www.bls.gov</a>).

<sup>&</sup>lt;sup>b</sup> Effective October 1, 2013 (and each October 1 thereafter), the maximum weekly TTD compensation payable to Minnesota injured workers was changed from a statutorily-set fixed amount of \$850 to 102 percent of the statewide average weekly wage for the period ending December 31 of the preceding year. The annual changes in the statewide average weekly wage for Minnesota shown in this table come from the average weekly wage data of nonfederal workers covered under unemployment insurance, reported in *Common Minnesota Workers' Compensation Benefit Adjustments* (<a href="https://www.dli.mn.gov/WC/ComBenExp.asp">https://www.dli.mn.gov/WC/ComBenExp.asp</a>).

Table 5 Comparison of Statutory Maximum Weekly Temporary Total Disability Benefit and Statewide Average Weekly Wage, 2015

Wage Measure	AR	CA	FL	GAª	IA	IL	INª	КҮ	LA	МА	МІ	MN <sup>a</sup>	NC	ИЛ	PA	ΤX <sup>b</sup>	VA	WI	18-State Median <sup>c</sup>
Statewide	average v	veekly wag	e for work	ers' comp	ensation p	urposes (as	of July 1,	2015)											
2015	\$740.53	\$1,103.29	\$842.00	\$939.00	\$814.00	\$1,021.34	\$822.00	\$773.61	\$839.76	\$1,214.99	\$910.71	\$961.00	\$836.36	\$1,140.00	\$951.00	\$978.41	\$975.00	\$828.18	\$924.86
Maximum	weekly st	atutory tem	porary di	sability be	enefit (as of	July 1, 201	5)												
2015	\$629.00	\$1,103.29	\$842.00	\$550.00	\$1,628.00	\$1,361.79	\$736.67	\$773.61	\$630.00	\$1,214.99	\$820.00	\$980.22	\$920.00	\$855.00	\$951.00	\$861.00	\$975.00	\$911.00	\$886.00
Maximum	weekly st	atutory tem	porary di	sability be	enefit as a p	ercentage	of the stat	ewide ave	rage wee	kly wage (a	s of July 1,	2015)							
2015	85%	100%	100%	59%	200%	1331/3%	90%	100%	75%	100%	90%	102%	110%	75%	100%	88%	100%	110%	100%
Average w	eekly wag	ge of injured	d workers	(2015 clai	ms at 12 m	onths' mat	urity, adju	sted for in	jury/indu	stry mix)									
2015	\$718.87	\$784.07	\$698.33	\$695.24	\$764.17	\$826.58	\$709.28	\$739.08	\$780.11	\$896.31	\$789.29	\$755.82	\$687.70	\$836.06	\$814.58	\$804.62	\$744.68	\$808.96	\$772.14
Average w	eekly TTD	benefit rat	e (2015 cl	aims at 12	2 months' m	naturity, ad	justed for	injury/ind	ustry mix	)									
2015	\$461.79	\$498.99	\$486.10	\$424.14	\$493.50	\$511.29	\$479.15	\$482.93	\$436.21	\$464.42	\$458.01	\$500.81	\$500.66	\$496.84	\$526.80	\$494.37	\$505.89	\$493.64	\$493.57
Percentag	e of claim	s with week	ly TTD be	nefit cons	trained by t	the statuto	ry weekly	benefit ma	aximum (2	015 claims	at 12 mont	hs' matur	ity)						
2015	23.1%	6.8%	10.4%	32.4%	0.2%	2.1%	17.7%	14.9%	26.9%	4.0%	10.1%	7.1%	7.0%	19.4%	11.1%	15.9%	7.4%	11.3%	10.8%
Statutory	temporary	disability l	benefit ra	te (as a pe	rcentage of	f average w	eekly wag	je unless o	therwise	noted; as o	f July 1, 201	5)							
					80% of spendable						80% of spendable								
2015	66 3/3%	66 3/3%	66 3/3%	66 3/3%	earnings	66 3/3%	66 3/3%	66 3/3%	66 3/3%	60%	earnings	66 3/3%	66 3/3%	70%	66 3/3%	70%	66 3/3%	66 3/3%	66 3/3%

a In Georgia and Indiana, the weekly maximum TTD benefit is adjusted periodically by statute rather than being tied to annual changes in the statewide average weekly wage, as it is in the other study states. The statewide average weekly wage shown for Georgia and Indiana is for comparison purposes and is the average weekly wage in private employment for all industries for calendar year 2014 from the U.S. Bureau of Labor Statistics. Georgia has increased the maximum weekly statutory benefit three times in recent years, by amending the state's workers' compensation statutes. Effective July 1, 2013, the maximum weekly statutory benefit in Georgia was increased to \$555. The maximum was increased to \$550 effective July 1, 2015, and \$575 effective July 1, 2016. The Georgia change effective July 1, 2016, is not reflected here. In Minnesota, effective October 1, 2013, the statutory weekly maximum benefit is adjusted annually to 102 percent of the statewide average weekly wage for the period ending December 31 of the preceding year. Prior to that change, the maximum benefit was adjusted periodically by statute. In Indiana, under House Enrolled Act 1320, the maximum statutory weekly benefit was increased 20 percent overall from 2014 to 2016, from \$650 to \$694 effective July 1, 2014, to \$737 effective July 1, 2015, and to \$780 effective July 1, 2016. The Indiana change effective July 1, 2016, is not reflected in the data shown here.

Key: TTD: temporary total disability.

<sup>&</sup>lt;sup>b</sup> Since October 1, 2006, in Texas, the statewide average weekly wage used to calculate the maximum weekly compensation income benefit has been set at 88 percent of the average weekly wage in covered employment for the preceding year as computed by the Texas Workforce Commission. While the statutory temporary disability rate, generally, in Texas was 70 percent, workers were able to receive 75 percent for the first 26 weeks of benefits if they earned an hourly rate below established thresholds (\$8.50 for injuries before September 1, 2015, and \$10.00 for injuries on or after September 1, 2015).

<sup>&</sup>lt;sup>c</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

Table 6 Total Costs per Claim and Components, 2013/2016 and 2011/2016

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
2013/2016 claims with m	ore than ?	7 days of lo	ost time															
Costs per claim																		
Medical	\$15,259	\$13,517	\$15,546	\$16,271	\$20,800	\$20,354	\$23,176	\$13,193	\$21,921	\$9,612	\$11,226	\$15,917	\$16,672	\$19,681	\$18,422	\$15,163	\$23,143	\$22,704
Indemnity	\$13,272	\$20,261	\$13,865	\$27,372	\$21,861	\$21,275	\$10,914	\$17,456	\$25,480	\$19,083	\$13,747	\$15,210	\$28,279	\$14,208	\$25,523	\$11,553	\$19,858	\$11,405
Benefit delivery expenses	\$4,663	\$10,037	\$6,301	\$7,199	\$5,462	\$7,180	\$4,623	\$5,965	\$9,260	\$4,502	\$4,784	\$5,133	\$6,871	\$7,933	\$7,558	\$5,941	\$5,909	\$4,101
Vocational rehabilitation	\$5	\$148	\$21	\$6	\$44	\$89	\$11	\$17	\$383	\$102	\$80	\$1,340	\$86	\$2	\$50	\$5	\$222	\$41
Total	\$33,200	\$43,963	\$35,734	\$50,848	\$48,166	\$48,898	\$38,725	\$36,631	\$57,044	\$33,298	\$29,837	\$37,601	\$51,908	\$41,824	\$51,553	\$32,662	\$49,133	\$38,250
Component share of total co	osts per cla	im																
Medical	46.0%	30.7%	43.5%	32.0%	43.2%	41.6%	59.8%	36.0%	38.4%	28.9%	37.6%	42.3%	32.1%	47.1%	35.7%	46.4%	47.1%	59.4%
Indemnity	40.0%	46.1%	38.8%	53.8%	45.4%	43.5%	28.2%	47.7%	44.7%	57.3%	46.1%	40.5%	54.5%	34.0%	49.5%	35.4%	40.4%	29.8%
Benefit delivery expenses	14.0%	22.8%	17.6%	14.2%	11.3%	14.7%	11.9%	16.3%	16.2%	13.5%	16.0%	13.7%	13.2%	19.0%	14.7%	18.2%	12.0%	10.7%
Vocational rehabilitation	0.0%	0.3%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.7%	0.3%	0.3%	3.6%	0.2%	0.0%	0.1%	0.0%	0.5%	0.1%
	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	МІ	MN	NC	ИJ	PA	TX	VA	WI
	_																	
2011/2016 claims with m	ore than ?	7 days of lo	ost time															
Costs per claim	ore than ?	7 days of lo	ost time															
	\$15,397	7 days of lo \$18,701	\$16,564	\$17,563	\$20,389	\$22,826	\$21,402	\$13,971	\$24,544	\$9,804	\$10,910	\$16,336	\$18,680	\$19,799	\$17,772	\$14,756	\$23,449	\$22,055
Costs per claim				\$17,563 \$29,560	\$20,389 \$27,441	\$22,826 \$28,708	\$21,402 \$12,042	\$13,971 \$20,821	\$24,544 \$32,438	\$9,804 \$21,412	\$10,910 \$16,342	\$16,336 \$16,976	\$18,680 \$35,514	\$19,799 \$17,365	\$17,772 \$28,149	\$14,756 \$11,299	\$23,449 \$22,122	\$22,055 \$13,748
Costs per claim Medical	\$15,397	\$18,701	\$16,564								. ,	. ,						
Costs per claim  Medical  Indemnity	\$15,397 \$16,214	\$18,701 \$24,672	\$16,564 \$16,365	\$29,560	\$27,441	\$28,708	\$12,042	\$20,821	\$32,438	\$21,412	\$16,342	\$16,976	\$35,514	\$17,365	\$28,149	\$11,299	\$22,122	\$13,748
Costs per claim  Medical Indemnity Benefit delivery expenses	\$15,397 \$16,214 \$5,305	\$18,701 \$24,672 \$12,673	\$16,564 \$16,365 \$6,886	\$29,560 \$7,849	\$27,441 \$5,470	\$28,708 \$7,268	\$12,042 \$4,399	\$20,821 \$6,481	\$32,438 \$10,540	\$21,412 \$4,791	\$16,342 \$4,905	\$16,976 \$5,550	\$35,514 \$7,178	\$17,365 \$7,860	\$28,149 \$7,598	\$11,299 \$5,536	\$22,122 \$5,658	\$13,748 \$4,096
Costs per claim  Medical Indemnity Benefit delivery expenses Vocational rehabilitation	\$15,397 \$16,214 \$5,305 \$20 \$36,937	\$18,701 \$24,672 \$12,673 \$146 \$56,191	\$16,564 \$16,365 \$6,886 \$38	\$29,560 \$7,849 \$7	\$27,441 \$5,470 \$43	\$28,708 \$7,268 \$177	\$12,042 \$4,399 \$11	\$20,821 \$6,481 \$25	\$32,438 \$10,540 \$546	\$21,412 \$4,791 \$166	\$16,342 \$4,905 \$107	\$16,976 \$5,550 \$1,428	\$35,514 \$7,178 \$207	\$17,365 \$7,860 \$3	\$28,149 \$7,598 \$79	\$11,299 \$5,536 \$7	\$22,122 \$5,658 \$350	\$13,748 \$4,096 \$60
Costs per claim  Medical Indemnity  Benefit delivery expenses  Vocational rehabilitation Total	\$15,397 \$16,214 \$5,305 \$20 \$36,937	\$18,701 \$24,672 \$12,673 \$146 \$56,191	\$16,564 \$16,365 \$6,886 \$38	\$29,560 \$7,849 \$7	\$27,441 \$5,470 \$43	\$28,708 \$7,268 \$177	\$12,042 \$4,399 \$11	\$20,821 \$6,481 \$25	\$32,438 \$10,540 \$546	\$21,412 \$4,791 \$166	\$16,342 \$4,905 \$107	\$16,976 \$5,550 \$1,428	\$35,514 \$7,178 \$207	\$17,365 \$7,860 \$3	\$28,149 \$7,598 \$79	\$11,299 \$5,536 \$7	\$22,122 \$5,658 \$350	\$13,748 \$4,096 \$60
Costs per claim  Medical Indemnity Benefit delivery expenses Vocational rehabilitation Total Component share of total component	\$15,397 \$16,214 \$5,305 \$20 \$36,937 osts per cla	\$18,701 \$24,672 \$12,673 \$146 \$56,191	\$16,564 \$16,365 \$6,886 \$38 \$39,853	\$29,560 \$7,849 \$7 \$54,979	\$27,441 \$5,470 \$43 \$53,342	\$28,708 \$7,268 \$177 \$58,978	\$12,042 \$4,399 \$11 \$37,855	\$20,821 \$6,481 \$25 \$41,298	\$32,438 \$10,540 \$546 \$68,067	\$21,412 \$4,791 \$166 \$36,173	\$16,342 \$4,905 \$107 \$32,264	\$16,976 \$5,550 \$1,428 \$40,290	\$35,514 \$7,178 \$207 \$61,578	\$17,365 \$7,860 \$3 \$45,027	\$28,149 \$7,598 \$79 \$53,598	\$11,299 \$5,536 \$7 \$31,598	\$22,122 \$5,658 \$350 \$51,579	\$13,748 \$4,096 \$60 \$39,959
Costs per claim  Medical Indemnity Benefit delivery expenses Vocational rehabilitation Total Component share of total component	\$15,397 \$16,214 \$5,305 \$20 \$36,937 costs per cla	\$18,701 \$24,672 \$12,673 \$146 \$56,191 im 33.3%	\$16,564 \$16,365 \$6,886 \$38 \$39,853	\$29,560 \$7,849 \$7 \$54,979	\$27,441 \$5,470 \$43 \$53,342 38.2%	\$28,708 \$7,268 \$177 \$58,978 38.7%	\$12,042 \$4,399 \$11 \$37,855 56.5%	\$20,821 \$6,481 \$25 \$41,298	\$32,438 \$10,540 \$546 \$68,067	\$21,412 \$4,791 \$166 \$36,173 27.1%	\$16,342 \$4,905 \$107 \$32,264 33.8%	\$16,976 \$5,550 \$1,428 \$40,290 40.5%	\$35,514 \$7,178 \$207 \$61,578	\$17,365 \$7,860 \$3 \$45,027	\$28,149 \$7,598 \$79 \$53,598	\$11,299 \$5,536 \$7 \$31,598 46.7%	\$22,122 \$5,658 \$350 \$51,579 45.5%	\$13,748 \$4,096 \$60 \$39,959 55.2%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. 2011/2016 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2016.

Table 7 Duration of Temporary Disability for Claims with More Than 7 Days of Lost Time, Adjusted for Injury and Industry Mix and Wages

	AR	CA	FL	GAª	IA	IL	IN	кү	LA <sup>b</sup>	MA <sup>b</sup>	MI <sup>b</sup>	MN	NC <sup>a</sup>	ИЛ	PA <sup>b</sup>	TX	VA <sup>b</sup>	WI
2013/2016	13	22	11	21	11	19	12	16	31	23	15	14	20	14	23	16	19	11
2011/2016	14	23	13	23	11	20	12	16	38	25	16	14	25	14	25	15	20	11

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. 2011/2016 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2016.

Key: PPD: permanent partial disability.

<sup>&</sup>lt;sup>a</sup> States with attributes of both wage-loss and PPD systems.

<sup>&</sup>lt;sup>b</sup> Wage-loss states.

Table 8 Comparison of Statutory Maximum Weekly Temporary Total Disability and Permanent Partial Disability Benefit Rates, 2015

_	AR	CA	FLª	GΑ <sup>b</sup>	IA	IL	IN <sup>b</sup>	KY	LA	MA <sup>c</sup>	MI	MN	NC	NJ	PA	ΤΧ <sup>d</sup>	VA	WI
TTD maximum weekly benefit rate	\$629	\$1,103	\$842	\$550	\$1,628	\$1,362	\$737	\$774	\$630	n/a	\$820	\$980	\$920	\$855	\$951	\$861	\$975	\$911
PPD maximum weekly benefit rate	\$472	\$290	\$632	\$550	\$1,498	\$755	\$737	\$580	\$630	n/a	\$820	\$980	\$920	\$855	\$951	\$602	\$975	\$322
% difference PPD maximum to TTD maximum	-25%	-74%	-25%	0%	-8%	-45%	0%	-25%	0%	n/a	0%	0%	0%	0%	0%	-30%	0%	-65%

<sup>&</sup>lt;sup>a</sup> The PPD maximum for Florida is estimated.

Key: n/a: not applicable; PPD: permanent partial disability; TTD: temporary total disability.

<sup>&</sup>lt;sup>b</sup> In Georgia and Indiana, the weekly maximum TTD benefit is adjusted periodically by statute rather than being tied to annual changes in the statewide average weekly wage, as it is in the other study states. The statewide average weekly wage shown for Georgia and Indiana is for comparison purposes and is the average weekly wage in private employment for all industries from the U.S. Bureau of Labor Statistics. In Georgia, effective July 1, 2013, the maximum weekly statutory benefit was increased to \$525. In Minnesota, effective October 1, 2013, the statutory weekly maximum benefit is adjusted annually to 102 percent of the statewide average weekly wage for the period ending December 31 of the preceding year. Prior to that change, the maximum benefit was adjusted periodically by statute. In Indiana, under House Enrolled Act 1320, the maximum statutory weekly benefit was increased 20 percent overall from 2014 to 2016, from \$650 to \$694 effective July 1, 2014, to \$737 effective July 1, 2015, and to \$780 effective July 1, 2016. The Indiana change effective July 1, 2016, is not reflected in the data shown here.

<sup>&</sup>lt;sup>c</sup> Massachusetts is not included in this chart since the statutory maximum amount for scheduled benefits in the state is based on the statewide average weekly wage (SAWW) at the time of injury and, therefore, varies by claim.

<sup>&</sup>lt;sup>d</sup> In Texas, the statewide average weekly wage, used to calculate the maximum weekly compensation income benefits, since October 1, 2006, has been set at 88 percent of the average weekly wage in covered employment for the preceding year as computed by the Texas Workforce Commission.

Table 9 Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015

AR Permanent physical impairment; determined when the worker	CA Permanent disability rating under 100%; determined once	FL Permanent physical impairment; determined once MMI has been	IA Permanent physical disability; determined once MMI has been	IL Permanent physical disability; determined once MMI has been
returns to work or once MMI has been reached (see note).	condition is permanent and stationary (see note).	reached.	reached.	reached.
IN .	КҮ	MN	NJ	тх
Permanent physical impairment; determined once MMI has been reached.	Permanent physical disability, determined once the worker returns to work or once MMI has been reached (see note).	Permanent functional loss of use of the body, determined once MMI has been reached.	Permanent physical impairment; determined once curative treatment has ended.	Permanent physical impairment determined once MMI has been reached.
WI				
Permanent physical impairment, once healing period has ended (see note).				
Benefit rate				
AR	CA	FL	IA	IL
Percentage of disability converted to weeks of payment; weekly payment is 66%% of worker's AWW.	Percentage of disability converted to weeks of payment; weekly payment is 663/4% of worker's AWW.	2–6 weeks of benefits for each percentage of permanent impairment; payable weekly at 75% of worker's weekly TTD benefit rate (see note).	Percentage of disability converted to weeks of payment; weekly payment is 80% of worker's spendable (after-tax) income.	Percentage of disability converted to weeks of payment weekly payment is 60% of worker's AWW.
	KV	MAN	NII	TV
IN Impairment rated according to degrees; values per degree vary.	Percentage of disability converted to weeks of payment; weekly payment is 66%% of worker's AWW multiplied by impairment rating and any applicable adjustment factors (see note).	MN Percentage of disability converted to a specific dollar amount or weeks of payment per schedule; weekly payment is 66%% of worker's AWW.	Percentage of disability converted to weeks of payment per schedule; weekly payment is 70% of worker's AWW (see note).	TX 3 weeks of benefits for each percentage of permanent impairment; weekly payment is 70% of worker's AWW.
WI				
Scheduled number of weeks for total loss or loss of use; impairment percentage of 1,000 weeks applied for nonscheduled injuries; weekly payment is 66% of worker's AWW.	,			
	4F)			
Weekly benefit (as of July 1, 20	15)			
Weekly benefit (as of July 1, 20 Maximum	15)			
	CA \$290.00	<b>FL</b> \$631.50 (see note).	IA \$1,498.00	IL \$755.22(see note).
Maximum AR	CA			
Maximum  AR \$154.00-\$472.00 (see note).	CA \$290.00	\$631.50 (see note).  MN	\$1,498.00 <b>N</b> J	\$755.22(see note).
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).  WI \$322.00	CA \$290.00	\$631.50 (see note).  MN	\$1,498.00 <b>N</b> J	\$755.22(see note).
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).  WI \$3322.00  Minimum	CA \$290.00 KY \$580.21–\$773.61 (see note).	\$631.50 (see note).  MN \$980.22 (TTD maximum).	\$1,498.00 <b>NJ</b> \$855.00 (TTD maximum).	\$755.22(see note). <b>TX</b> \$602.00
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).  WI \$322.00  Minimum  AR	CA \$290.00	\$631.50 (see note).  MN \$980.22 (TTD maximum).	\$1,498.00 <b>N</b> J	\$755.22(see note).  TX \$602.00  IL \$220.00-\$330.00, depending or
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).  WI \$322.00  Minimum  AR \$20.00	CA \$290.00 KY \$580.21-\$773.61 (see note).	\$631.50 (see note).  MN \$980.22 (TTD maximum).  FL \$20.00 or actual wages if worker's AWW is less than \$20.00.	\$1,498.00  NJ \$855.00 (TTD maximum).  IA Lower of benefits based on AWW of \$285 or worker's spendable earnings.	TX \$602.00  IL \$220.00-\$330.00, depending or the number of dependents of the injured worker.
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).	CA \$290.00 KY \$580.21–\$773.61 (see note).	\$631.50 (see note).  MN \$980.22 (TTD maximum).  FL \$20.00 or actual wages if worker's	\$1,498.00  NJ \$855.00 (TTD maximum).  IA Lower of benefits based on AWW of \$285 or worker's spendable	\$755.22(see note).  TX  \$602.00  IL  \$220.00-\$330.00, depending of the number of dependents of the
Maximum  AR \$154.00-\$472.00 (see note).  IN \$736.67 (TTD maximum).  WI \$322.00  Minimum  AR \$20.00	CA \$290.00 KY \$580.21-\$773.61 (see note).	\$631.50 (see note).  MN \$980.22 (TTD maximum).  FL \$20.00 or actual wages if worker's AWW is less than \$20.00.  MN Lower of \$130.00 or worker's	\$1,498.00  NJ \$855.00 (TTD maximum).  IA Lower of benefits based on AWW of \$285 or worker's spendable earnings.	TX \$602.00  IL \$220.00-\$330.00, depending o the number of dependents of thin jured worker.

Table 9 Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015 (continued)

AR	CA	FL	IA	IL
Biweekly until the required number of weeks is reached or until the claim is settled.	First benefit payment due no later than 14 days after last TTD payment and every 2 weeks thereafter or in a lump-sum settlement (see note).	First benefit payment due the day after the worker reaches MMI or the expiration of temporary benefits, whichever occurs earlier and biweekly thereafter (see note).	,	Weekly or as close to predictability schedule as possible.
IN	KY	MN	NJ	TX
Weekly unless otherwise approved by the Workers' Compensation Board.	Weekly.	Weekly or in a lump sum (see note).	Weekly.	Entitlement begins the day after MMI is reached, payable at same interval at which wages were paid.
<b>WI</b> Monthly.				
Maximum duration of benefits				
AR	CA	FL	IA .	IL
Determined by schedule or 450 weeks for body as whole.	Determined by formula.	Determined by formula (see note).	Determined by schedule or 500 weeks for whole body.	Determined by schedule or 500 weeks for whole body (see note
IN	кү	MN	NJ	TX
Total amount divided by weekly benefit (see note).	425 weeks for a permanent disability rating of 50 percent or less; 520 weeks for a rating greater than 50 percent; limited to qualification for normal old age Social Security.	Determined by schedule (see note).	Determined by schedule or 600 weeks for whole body.	Determined by schedule or 401 weeks from date of injury, whichever is first (see note).

### Notes:

AR: If the worker's weekly TTD amount is \$205.35 or greater, the PPD maximum is 75 percent of the weekly TTD amount, rounded to the nearest whole dollar, up to \$472. If the worker's weekly TTD amount is less than \$205.35, PPD is 66% percent of the worker's AWW, up to a \$154 maximum. If the worker has an unscheduled condition and an earnings loss, PPD benefits are based on the degree of impairment and other factors, including the worker's age, education, and work experience. However, if a preexisting condition is a "major cause" of the disability, the PPD benefit is based only on the degree of functional impairment. According to case law, the Arkansas Workers' Compensation Commission is charged with the duty of determining disability based on a consideration of medical evidence and other matters affecting wage loss, such as the claimant's age, education, and work experience.

CA: Senate Bill 863, which became effective January 1, 2013, increased aggregate permanent disability benefits, phased in over two years, and made a number of changes to how those benefits are calculated. A rating in California is a percentage that estimates how much the disability limits the kinds of work an employee can do or the ability to earn a living. Ratings are based on the medical condition, as described in the permanent and stationary report; the date of injury; the worker's age when injured; occupation at the time of injury; the proportion of disability caused by the job versus other factors; and multiplication by an adjustment factor—1.4 for injuries in 2013 or later. For workers injured in 2013 or later, or if the employer has fewer than 50 employees, permanent disability payments are not affected by whether the employer offers a job.

FL: For injuries occurring on or after October 1, 2003, PPD benefits (impairment income benefits in Florida) are paid at the rate of 75 percent of the worker's average weekly temporary total disability benefit, not to exceed the maximum; however, benefits are reduced by 50 percent for each week in which the worker's income is equal to or exceeds his or her average weekly wage. The number of weeks of benefits paid per impairment rating point varies based on the impairment rating, from two weeks for each percentage point of impairment from 1 percent to 10 percent to six weeks for each percentage point of impairment of 21 percent and higher. Also effective for injuries on or after October 1, 2003, entitlement to these benefits begins the day after the worker reaches maximum medical improvement or the expiration of temporary benefits, whichever occurs earlier.

IL: The PPD benefit rate is 60 percent of the AWW. If a worker suffers amputation or enucleation of an eye, the maximum weekly benefit is 133½ percent of the SAWW. Minimum PPD benefits vary according to the number of dependents of the injured worker. Two methods may be used to compensate for unscheduled losses: (1) wage-loss approach (seldom used) and (2) loss of wage-earning capacity approach. In the latter approach, the degree of disability is estimated based on the extent of impairment and other variables, including the worker's age, education, and skills. The disability rating is multiplied by 500 weeks to determine the period of PPD benefits.

IN: If the period of TTD is longer than 125 weeks, any amount paid beyond 125 weeks reduces—dollar for dollar—the value of any permanent partial impairment award. Benefits paid singly or as any combination of TTD, temporary partial disability, permanent partial impairment, and permanent total disability benefits expire after 500 weeks or when the dollar limit on maximum indemnity benefits payable on a claim is reached (\$325,000 as of June 30, 2014). Benefit increases under House Enrolled Act 1320 became effective July 1, 2014, with the maximum for all compensation increased to \$347,000. Dollars per degree of impairment were increased for all degree categories, ranging from 8.4 percent for degrees 1–10 to 5.3 percent for degrees 51–100. The maximum for all compensation increased further to \$368,000 effective July 1, 2015.

KY: Permanent partial disability benefits are paid when an employee has a permanent disability rating but retains the ability to work. The number of payments depends on the disability rating, 425 weeks for a permanent disability rating of 50 percent or less and 520 weeks for a rating greater than 50 percent. The weekly amount of benefit payments depends on the impairment rating, which is then multiplied by a factor (less than 1 for ratings of 20 percent or below and more than 1 for ratings above 20 percent, using a graduated scale ranging from a factor of 0.65 to 1.70). If the employee returns to work at an equal or greater wage, no multiplier is added. If the worker does not retain the physical capacity to return to the type of work performed at the time of injury, the weekly payment is multiplied by 3. Factors for limited formal education and advancing age at the time of injury may also be added if the employee lacks the physical capacity to return to the same type of work.

## Table 9 Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015 (continued)

MN: If requested by the employee, a lump-sum payment of PPD benefits must be made within 30 days and may be discounted to the present value up to a maximum of 5 percent. Benefits are paid according to degree of impairment, mostly set out in PP schedule rules. The PP benefit equals the scheduled dollar amount (\$75,000-\$515,000) times the percentage of whole body disability.

NJ: The PPD compensation rate is set at 70 percent of the employee's average weekly wage, subject to a maximum of either the worker's TTD compensation rate or an amount in the schedule that is framed in terms of a percentage of the SAWW and scheduled number of weeks, whichever is lower. In the case of an amputation, the scheduled award is increased by 30 percent. Different types of disability ratings can be stacked. For example, a worker may obtain a neuropsychiatric rating (a combined estimate of neurological and psychiatric impairment) in addition to an orthopedic rating.

TX: Under certain circumstances, a worker may receive a supplemental income benefit (SIB) when impairment benefits end. Four conditions must be met: (1) the worker's impairment rating is at least 15 percent, (2) the worker has not taken an advance payment of benefits due (commutation), (3) the worker has not returned to work or is unable to earn at least 80 percent of the preinjury AWW, and (4) the worker has made a good-faith effort to find suitable work. The SIB is calculated at 80 percent of the difference between 80 percent of the worker's average weekly wage and the worker's earnings over the reporting period and cannot exceed 70 percent of the SAWW.

WI: Scheduled injuries involve limbs, eyes, and ears. Injuries or conditions listed in the schedule are compensated based on functional impairment ratings only, without regard to loss of earning capacity. The number of weeks listed in the schedule for each body part is paid for total impairment; loss of use is determined as a percentage of the total. Nonscheduled injuries include those to the head, back, or torso that are not specified in the schedule, as well as psychological claims. Compensation for nonscheduled injuries can be based on functional impairment only or on loss of earning capacity. Nonscheduled injuries are rated as a percentage of loss to the body as a whole. Functional impairment benefits for nonscheduled injuries are paid to a worker rehired by the former employer at 85 percent or more of his or her preinjury AWW. Workers who do not return to work, or who are rehired at less than 85 percent of their former wages, can receive earning capacity benefits, which are much larger than functional impairment benefits. Earning capacity benefits are determined by comparing the effect of the impairment on the worker's earning capacity with the worker's permanent and total disability for occupational purposes.

Key: AWW: average weekly wage; MMI: maximum medical improvement; n/a: not applicable; PP: permanent partial; PPD: permanent partial disability; SAWW: statewide average weekly wage; TTD: temporary total disability.

Sources: State statutes; Workers Compensation Research Institute (WCRI) and International Association of Industrial Accident Boards and Commissions (IAIABC), 2014.

Table 10 Determining Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015

Comprenensiveness of perman	ent disability rating guide or sche	edule		
AR	CA	FL	IA	IL
Schedule covers loss or loss of use of extremities, vision, and hearing; unscheduled losses rated in proportion to whole body (450 weeks); determined once MMI has been reached.	Schedule provides disability ratings for most impairments; number of weeks for each 1 percent of disability varies according to permanent disability rating. Determined once condition is permanent and stationary (see note).	Rating guide covers most conditions; weeks of benefits equal impairment rating multiplied by a number from 2	Schedule covers loss or loss of use of extremities, vision, and hearing; unscheduled conditions rated in proportion to whole body (500 weeks); determined once MMI has been reached (see note).	Schedule covers loss or loss of use of extremities, vision, and hearing; unscheduled losses rated in proportion to whole body (500 weeks); determined
IN	кү	MN	NJ	TX
Schedule provides number of degrees for extremities; unscheduled losses rated in proportion to whole body (100	Schedule is not used (see note).	Schedule covers virtually all impairments (see note).	Schedule covers loss or loss of use of extremities, vision, and hearing; unscheduled conditions rated in proportion to whole	benefits are paid for each
degrees); determined once MMI has been reached (see note).			body (600 weeks); determined once curative treatment has ended.	percentage point of impairment
WI				
Schedule covers extremities, vision, and hearing; unscheduled injuries rated in proportion to body as a whole (1,000 weeks; see note).				
Rating components				
AR	CA	FL	IA	IL
Medical impairment (scheduled injuries; see note).	Medical impairment plus nature of injury, worker's age and occupation at the time of injury, and diminished future earning capacity (see note).	Medical impairment.	Medical impairment (scheduled injuries); nature and severity of the injury and functional impairment, worker's age, intelligence, education, training, occupation, potential for rehabilitation, loss of earning capacity, inability to engage in employment for which worker is fitted (body as a whole disabilities).	Medical impairment plus other factors (see note).
IN	кү	MN	NJ	тх
Medical impairment (scheduled injuries).	Medical impairment plus other factors (see note).	Medical impairment.	Medical impairment.	Medical impairment.
<b>WI</b> Medical impairment (scheduled injuries).				
Rating schedule or guide used				
AR	CA	FL	IA	IL
AMA <i>Guides,</i> 4th edition, required (see note).	AMA <i>Guides</i> , 5th edition, required (see note).	Florida Impairment Rating Guide for listed conditions; AMA Guides for unlisted conditions.	AMA <i>Guides</i> not required by statute, but 5th edition is adopted as a guide (see note).	AMA <i>Guides</i> , latest edition, required (see note).
	КҮ	MN	NJ	тх
IN		C+-+- :- - /\	None (see note).	AMA Guides, 4th edition,
IN None (see note).	AMA <i>Guides</i> , 5th edition, required.	State's own guide (see note).	Thore (see note).	required.
		State's own guide (see note).	Hone (see note).	

Table 10 Determining Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015 (continued)

	ngs			
AR	CA	FL	IA	IL
Treating physician.	Treating physician rates impairment; disability ratings are made by the Division of Workers' Compensation's Disability Evaluation Unit, the parties, or private raters (see note).	Treating physician; IME (in disputes; see note).	Treating physician.	Treating physician; IME.
IN	КҮ	MN	NJ	тх
Treating physician.	Treating physician.	Treating physician.	Insurer and employee-selected medical experts called examining physicians (see note).	Treating doctor; insurer-selected doctor; doctor certified by the Texas Department of Insurance, Division of Workers' Compensation to perform impairment rating examinations
<b>WI</b> Treating physician.				
Treating physician's rating gi	ven special weight in claims with m	ultiple ratings		
AR	CA	FL	IA	IL
Yes, by custom and case law.	No (see note).	Yes, by custom (see note).	Yes, by custom and case law.	No.
IN	KY	MN	NJ	TX
No.	No.	No.	No.	No, by statute (see note).
WI Yes, by custom. Use of medical panels/neutra	l doctors in impairment-rating disp	utes		
AR	CA .	FL	IA	IL
Authorized.	Authorized.	Authorized, by judge's order.	Authorized (see note).	Authorized.
IN	ку	MN	NJ	TX
Authorized.	Authorized (see note).	Authorized.	Authorized (see note).	Independent doctor selected from the Texas Department of Insurance, Division of Workers' Compensation's list of designated doctors. Opinion of
				designated doctors. Opinion of designated doctor carries "presumptive weight" in a dispute (see note).
				designated doctor carries "presumptive weight" in a
Authorized.	tlements for PPD benefits			designated doctor carries "presumptive weight" in a
Authorized. Limitations on lump-sum sett AR	CA	FL	IA	designated doctor carries "presumptive weight" in a dispute (see note).
Authorized. Limitations on lump-sum sett AR		FL None (see note).	IA None (see note).	designated doctor carries "presumptive weight" in a dispute (see note).
Authorized. Limitations on lump-sum sett AR None.	CA	None (see note).  MN	None (see note).	designated doctor carries "presumptive weight" in a dispute (see note).
Authorized.  Limitations on lump-sum sett  AR  None.	CA None.	None (see note).  MN No statutory limitations, but	None (see note).	designated doctor carries "presumptive weight" in a dispute (see note).  IL  None.  TX  Future liability for medical benefits cannot be terminated. Lump-sum settlements are prohibited, but lump-sum payments may be made under
WI Authorized.  Limitations on lump-sum sett AR None.  IN None.	CA None.	MN No statutory limitations, but settlements of future medical are	NJ No statutory limitations, but settlements of future medical are	designated doctor carries "presumptive weight" in a dispute (see note).  IL None.  TX Future liability for medical benefits cannot be terminated. Lump-sum settlements are prohibited, but lump-sum

## Table 10 Determining Permanent Partial Disability Benefits in Non-Wage-Loss CompScope™ States, 2015 (continued)

#### Notes

AR: If the worker has an unscheduled condition and an earnings loss, PPD benefits are based on the degree of impairment and other wage-loss disability factors, including the worker's age, education, and work experience. The required use of the AMA *Guides*, 4th edition, is exclusive of any sections which refer to pain and exclusive of straight leg raising tests or range of motion tests.

CA: For workers injured in 2005 or later, the treating physician writes a Permanent and Stationary (P&S) Report when the worker's condition is permanent and stationary—that is, when the medical condition is not improving and not getting worse. The P&S Report must include an impairment rating (using the AMA Guides, 5th edition) and the treating physician's estimate of how much of the disability is caused by the job injury compared with other factors, as well as a description of specific medical problems, work restrictions, future medical care, the ability to return to the preinjury job, and other pertinent information. The Disability Evaluation Unit within the Division of Workers' Compensation may review the report and assign a disability rating, or the rating may be determined by the parties or by private raters. Previously, the treating physician was not required to rate the impairment, and impairment was based on the state's rating guide. Senate Bill 863, passed in August 2012 and effective January 1, 2013, increased permanent disability benefits phased in over two years by adjusting the formula for calculating benefit amounts. For dates of injury on or after January 1, 2013, a single adjustment factor of 1.4 replaces the diminished future earning capacity as a component of permanent disability ratings.

FL: When a worker with a compensable condition sustains a permanent impairment, the worker is rated at the time of maximum medical improvement or within six weeks of the date when the worker is scheduled to reach the 104-week threshold for temporary disability benefits, whichever occurs first. Weeks of benefits are paid based on the impairment rating as follows: two weeks for ratings of 1–10 percent; three weeks for 11–15 percent; four weeks for 16–20 percent; and six weeks for each rating point over 21 percent. Judges of compensation claims can consider only the testimony of the treating physician, an independent medical examiner, and the expert medical advisor. If multiple treating physicians submit impairment ratings, the insurer is required to calculate the impairment rating of the body as a whole. Arrearages for past child support obligations must be deducted from a settlement.

IA: Unscheduled losses are referred to as body as a whole disabilities and are rated according to industrial disability. Factors to be considered focus on the worker's ability to engage in employment for which he or she is suited and include the worker's intelligence, education, qualifications, work experience, physical restrictions, and subsequent employment, as well as his or her earnings potential and ability to benefit from further education or retraining to facilitate employment. No formula or official guidelines exist for weighing the factors for industrial disability; the concept has evolved in case law over time. AMA *Guides* are not required by statute, but are adopted as a guide; other medical opinions, guides, or other material evidence may be presented. A worker may request an independent medical examination by a doctor of his or her choice at the employer's expense if the worker feels that a rating of permanent impairment is too low. A compromise settlement (ending future rights to any benefits) is permitted when there is a dispute over entitlement to benefits. A full commutation ends the worker's future rights to any benefits, including medical benefits. A partial commutation establishes the worker's right to disability benefits, but does not end the worker's future rights.

IL: For injuries occurring on and after September 1, 2011, the Commission bases the determination of disability on five factors: (1) an impairment report prepared by a physician using the most current edition of the AMA *Guides*, (2) the occupation of the injured worker, (3) the age of the employee at time of injury, (4) the employee's future earning capacity, and (5) evidence of the disability corroborated by the treating medical records. One of these factors may not be the sole determinant of disability. The relevance and weight of any factors used, in addition to the level of impairment as reported by the physician, must be explained by the arbitrator in any decision. For injuries occurring before September 1, 2011, the Commission evaluates the physician impairment and the effect of the disability on the injured worker's life. Factors that may be considered include the individual's age, skill, occupation, training, inability to engage in certain kinds of activities, pain, stiffness, or limitation of motion. PPD benefits are calculated on a case-by-case basis. Prior to September 1, 2011, Illinois did not use written standards, relying instead on the experience of adjusters, attorneys, arbitrators, and a summary of commission appeal decisions. Two methods may be used to compensate for unscheduled losses: (1) wage-loss approach (seldom used) and (2) loss of wage-earning capacity approach. In the latter approach, the degree of disability is estimated based on the extent of impairment and other variables, including the worker's age, education, and skills. The disability rating is multiplied by 500 weeks to determine the period of PPD benefits.

IN: Maximum medical improvement is also termed medical quiescence. The state does not require the use of a medical guide in rating of impairment, although AMA Guides are often used.

KY: Permanent partial disability benefits are paid when an employee has a permanent disability rating but retains the ability to work. The number of payments depends on the disability rating, 425 weeks for a permanent disability rating of 50 percent or less and 520 weeks for a rating greater than 50 percent. The weekly amount of benefit payments depends on the impairment rating, which is then multiplied by a factor (less than 1 for ratings of 20 percent or below and more than 1 for ratings above 20 percent, using a graduated scale ranging from a factor of 0.65 to 1.70). If the employee returns to work at an equal or greater wage, no multiplier will be added. If the worker does not retain the physical capacity to return to the type of work performed at the time of injury, the weekly payment is multiplied by 3. Factors for limited formal education and advancing age at the time of injury may also be added if the employee lacks the physical capacity to return to the same type of work. The Division of Workers'

Compensation Commissioner or an administrative law judge may refer workers to the medical schools at the University of Kentucky or the University of Louisville for medical evaluations.

MN: Permanent partial disability must be rated according to the PPD schedule (rules) adopted by the commissioner. Minn. Stat. 176.105 requires the Department of Labor and Industry, in establishing the Minnesota PPD schedule, to "study disability or permanent impairment schedules set up by other states, the American Medical Association and other organizations." Additionally, the rules incorporate the AMA *Guides* to incorporate by reference some terminology. Conditions not on the schedule are rated by analogy. The total percentage rating is multiplied by a specific dollar amount per rating point (for that rating category) to determine the benefits payable.

NJ: Treating providers generally are not involved in determining the degree of permanent impairment, and there are no written standards for such determination. Instead, a small core of doctors and attorneys are involved; therefore, the resolution of PPD disputes is generally predictable. In adjudicating rating disputes, judges rely on their own medical knowledge, the initial rating by medical experts, and their experience.

TX: The insurance carrier requests a designated doctor be assigned to address questions on the maximum medical improvement or impairment rating (MMI/IR) status of an injured worker. The designated doctor's determination is given presumptive weight. Lump-sum payments may be made when (1) payment for past-due benefits can be made in a lump sum, (2) the worker can request an advance payment of future benefits if he or she can demonstrate hardship, or (3) the worker and payor can agree that impairment income benefits will be commuted in cases when the worker has returned to work for at least three months and is earning at least 80 percent of his or her preinjury average weekly wage (a worker who elects a commutation gives up the right to collect further income benefits).

WI: Wisconsin uses a two-part approach to calculate benefits for unscheduled losses. If a worker has returned to work and is earning at least 85 percent of his or her preinjury wage, the rating is based solely on the degree of medical impairment. If the worker has reached MMI and has not returned to work or is earning less than 85 percent of his or her preinjury earnings, the rating is based on the loss of earning capacity—the impairment rating is the starting point, and other factors, including age and education, are considered. Lump-sum settlements are prohibited for PPD benefits; however, if compensation is due for a PPD or death benefit, advanced payment of unaccrued compensation can be directed by the Division of Worker's Compensation on determination that it is in the best interest of the worker or dependents. Lump-sum settlements are made only for the amount of incurred medical expenses plus sums accrued as compensation or death benefits up to the date of the agreement. Unaccrued benefits of \$5,000 can be advanced and paid in a lump sum when the compromise settlement in a claim, other than for death benefits, involves a dispute over the extent of permanent disability.

Key: AMA Guides: American Medical Association's Guides to the Evaluation of Permanent Impairment; IME: independent medical examiner (evaluator); MMI: maximum medical improvement; PPD: permanent partial disability.

Sources: State statutes; Barth and Niss, 1999; Workers Compensation Research Institute (WCRI) and International Association of Industrial Accident Boards and Commissions (IAIARC). 2014.

Table 11a Average Indemnity Benefits per Claim with More Than 7 Days of Lost Time in States with PPD Benefit Systems, Multistate Comparisons, Adjusted for Injury and Industry Mix, 2013/2016

	AR	CA	FL	GAª	IA	IL	IN	KY	MN	NCª	ИЛ	тх	WI	11-State Median <sup>b</sup>	13-State Median <sup>c</sup>
Claims with temporary disability benefits															
Claims with more than 7 days of lost time with TD payments only (percentage)	58%	48%	42%	45%	46%	51%	59%	62%	60%	38%	57%	57%	58%	57%	57%
Average TD payment per claim with TD payments only	\$3,600	\$6,808	\$3,640	\$7,155	\$3,125	\$9,599	\$4,766	\$5,715	\$4,089	\$8,866	\$6,498	\$4,183	\$3,363	\$4,183	\$4,766
Claims with PPD/lump-sum settlements															
Claims with PPD/lump-sum settlements (percentage)	38%	48%	50%	50%	53%	43%	37%	34%	36%	56%	40%	42%	41%	41%	42%
Average PPD/lump-sum settlement per claim with more than 7 days of lost time and a PPD/lump-sum settlement	\$18,567	\$17,743	\$14,110	\$36,038	\$29,937	\$25,927	\$13,168	\$26,608	\$22,061	\$32,069	\$16,522	\$7,757	\$14,645	\$17,743	\$18,567
Claims with lump-sum settlements															
Claims with lump-sum settlements (percentage)	16%	29%	32%	40%	26%	38%	24%	26%	20%	44%	23%	5%	15%	24%	26%
Average lump-sum settlement per claim with more than 7 days of lost time and a lump-sum settlement	\$28,997	\$22,165	\$21,291	\$43,514	\$41,407	\$28,309	\$18,445	\$32,216	\$35,647	\$38,646	\$13,210	\$12,220	\$23,514	\$23,514	\$28,309

Table 11b Average Indemnity Benefits per Claim with More Than 7 Days of Lost Time in States with PPD Benefit Systems, Multistate Comparisons, Adjusted for Injury and Industry Mix, 2011/2016

	AR	CA	FL	GAª	IA	IL	IN	KY	MN	NC <sup>a</sup>	NJ	TX	WI	11-State Median <sup>b</sup>	13-State Median <sup>c</sup>
Claims with temporary disability benefits															
Claims with more than 7 days of lost time with TD payments only (percentage)	56%	42%	42%	45%	43%	41%	56%	60%	57%	36%	47%	58%	55%	55%	47%
Average TD payment per claim with TD payments only	\$3,016	\$4,657	\$3,131	\$5,760	\$2,391	\$7,208	\$3,496	\$4,277	\$3,026	\$8,066	\$4,937	\$4,035	\$2,630	\$3,496	\$4,035
Claims with PPD/lump-sum settlements															
Claims with PPD/lump-sum settlements (percentage)	39%	56%	49%	50%	55%	53%	40%	36%	39%	58%	49%	41%	44%	44%	49%
Average PPD/lump-sum settlement per claim with more than 7 days of lost time and a PPD/lump-sum settlement	\$21,772	\$23,364	\$17,307	\$38,295	\$38,909	\$34,516	\$15,756	\$33,186	\$24,324	\$39,132	\$19,986	\$7,983	\$19,757	\$21,772	\$23,364
Claims with lump-sum settlements															
Claims with lump-sum settlements (percentage)	18%	34%	33%	39%	32%	48%	27%	30%	22%	47%	29%	4%	17%	29%	30%
Average lump-sum settlement per claim with more than 7 days of lost time and a lump-sum settlement	\$32,916	\$27,719	\$26,168	\$46,380	\$49,732	\$36,524	\$22,085	\$37,495	\$38,056	\$47,080	\$14,761	\$13,018	\$33,275	\$32,916	\$33,275

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. 2011/2016 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2016.

Key: PPD: permanent partial disability; TD: temporary disability.

<sup>&</sup>lt;sup>a</sup> States with attributes of both wage-loss and PPD systems.

<sup>&</sup>lt;sup>b</sup> The 11-state median represents the 11 PPD system states in the study, excluding Louisiana, Massachusetts, Michigan, Pennsylvania, and Virginia (wage-loss states) and Georgia and North Carolina (states with attributes of both a PPD and wage-loss benefit system). The 11-state median is the state ranked 6th on a given measure; this state changes depending on the measure being evaluated.

<sup>&</sup>lt;sup>c</sup> The 13-state median, including Georgia and North Carolina, is the state ranked 7th on a given measure; this state changes depending on the measure being evaluated.

Table 12 Claims with More Than 7 Days of Lost Time and Lump-Sum Settlements, Adjusted for Injury and Industry Mix and Wages

2013/2016	AR	CA	FL	GA <sup>b</sup>	IA	IL	IN	КҮ	LA <sup>c</sup>	MA <sup>c</sup>	MI <sup>c</sup>	MN	NCp	NJ	PA <sup>c</sup>	тх	VA <sup>c</sup>	WI
Average lump-sum payment per claim	\$28,997	\$22,165	\$21,291	\$43,514	\$41,407	\$28,309	\$18,445	\$32,216	\$41,954	\$44,746	\$48,404	\$35,647	\$38,646	\$13,210	\$56,334	\$12,220	\$43,927	\$23,514
Lump-sum claims as a percentage of claims with more than 7 days of lost time	16.3%	29.5%	31.7%	39.8%	26.2%	38.2%	24.0%	26.1%	25.8%	17.9%	13.6%	19.9%	43.8%	23.3%	24.0%	4.7%	22.2%	14.6%
2011/2016	AR	CA	FL	GΑ <sup>b</sup>	IA	IL	IN	КҮ	LA <sup>c</sup>	MA <sup>c</sup>	ΜI <sup>c</sup>	MN	NC	ИЛ	PA <sup>c</sup>	тх	VA <sup>c</sup>	WI
Average lump-sum payment per claim	\$32,916	\$27,719	\$26,168	\$46,380	\$49,732	\$36,524	\$22,085	\$37,495	\$53,588	\$48,806	\$52,435	\$38,056	\$47,080	\$14,761	\$62,364	\$13,018	\$47,269	\$33,275
Lump-sum claims as a percentage of claims with more than 7 days of lost time	17.9%	33.7%	33.1%	39.4%	31.5%	48.1%	26.5%	29.7%	27.4%	20.2%	17.3%	22.1%	46.5%	28.8%	24.3%	4.4%	24.1%	17.1%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. 2011/2016 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2016.

Key: PPD: permanent partial disability.

<sup>&</sup>lt;sup>a</sup> We report all lump-sum payments as indemnity benefits. We do this to achieve consistency and comparability in this measure across states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. In most study states (California, Illinois, Indiana, Iowa, New Jersey, North Carolina, Pennsylvania, Texas, and Wisconsin, and Michigan [under some circumstances]), the second injury fund pays benefits directly to the injured worker once the fund's liability is established, rather than reimbursing the employer or insurer (as in Louisiana, Massachusetts, and Virginia). Our results do not include second injury fund payments; thus, certain indemnity cost measures may be somewhat understated. However, because second injury fund payments typically do not occur until later in the claim, after the employer/insurer obligation has been paid, and because the eligibility requirements are quite restrictive in many states (e.g., applicable only to permanent total disability), we estimated that the magnitude of the understatement is not large, ranging from minimal to 4 percent across the states, and did not materially affect the interstate comparisons that we report.

<sup>&</sup>lt;sup>b</sup> States with attributes of both wage-loss and PPD systems.

<sup>&</sup>lt;sup>c</sup> Wage-loss states.

Table 13 Lump-Sum Settlements as a Percentage of Indemnity Benefits for Claims with More Than 7 Days of Lost Time, Adjusted for Injury and Industry Mix and Wages

	AR	CA	FL	$GA^a$	IA	IL	IN	КҮ	LA <sup>b</sup>	MA <sup>b</sup>	MI <sup>b</sup>	MN	NC <sup>a</sup>	ИJ	PA <sup>b</sup>	TX	VA <sup>b</sup>	WI
2013/2016	36%	32%	49%	63%	50%	51%	41%	48%	43%	42%	48%	47%	60%	22%	53%	5%	49%	30%
2011/2016	36%	38%	53%	62%	57%	61%	49%	53%	45%	46%	55%	50%	62%	25%	54%	5%	51%	41%

Notes: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. 2011/2016 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2016.

Lump-sum settlements may include some amount for future medical payments. Lump-sum settlements for future medical payments are not permitted in Massachusetts and Texas (under most circumstances) and are not common in practice in Minnesota and New Jersey. These differences can impact settlements.

<sup>&</sup>lt;sup>a</sup> States with attributes of both wage-loss and PPD systems.

<sup>&</sup>lt;sup>b</sup> Wage-loss states.

Table 14 Lump-Sum Settlements as a Percentage of Claims with More Than 7 Days of Lost Time, Adjusted for Injury and Industry Mix and Wages, Based on 2011 Claims with 72 Months of Maturity, Cumulative

	Maturity	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИЛ	PA	TX	VA	WI
2011/2012	12 months	5%	4%	15%	16%	7%	14%	10%	5%	7%	4%	1%	5%	14%	3%	6%	2%	6%	4%
2011/2013	24 months	7%	11%	10%	15%	12%	17%	9%	13%	10%	9%	6%	9%	19%	10%	10%	2%	9%	6%
2011/2014	36 months	3%	9%	5%	6%	7%	9%	4%	7%	5%	4%	6%	5%	8%	9%	5%	1%	5%	4%
2011/2015	48 months	2%	6%	2%	2%	3%	5%	2%	3%	3%	2%	3%	3%	3%	5%	2%	0%	3%	2%
2011/2016	60 months	1%	4%	1%	1%	1%	3%	1%	1%	2%	1%	1%	1%	2%	2%	1%	0%	1%	1%

Note: 2011/2012 refers to claims arising from October 1, 2010, through September 30, 2011, evaluated as of March 31, 2012. Similar notation is used to describe other injury years and valuations.

Table 15 States Where Determination of PPD Benefits Is Based on Multiple Factors

State	Factors Considered in Calculation of Overall Disability Ratings
Arkansas	If the worker has an unscheduled condition and an earnings loss, PPD benefits are based on the degree of impairment and other factors, including the worker's age, education, and work experience. Arkansas Code §11-9-522.
California	Whole person impairment is converted to disability using modifiers in the Permanent Disability Rating Schedule (PDRS). For injuries on or after January 1, 2013, a universal 1.4 modifier is applied to the whole person impairment. Then the 2005 PDRS is used to adjust for occupation and age to arrive at a permanent disability rating. California Code. §4660.
Illinois	Five factors are considered when determining the degree of disability of the injured worker: (1) physical impairment based on the 6th edition AMA Guides; (2) the occupation of the injured employee; (3) the age of the employee at the time of the injury; (4) the employee's future earning capacity; and (5) evidence of disability corroborated by the treating medical records. While the AMA rating is provided by the statute, there is no provision for automatic admissibility of these ratings. The law indicates that no single factor shall be the sole determinant of the degree of disability. 820 ILCS 305/8.1b.
lowa	If the worker sustained a permanent injury to a body part not listed on the schedule of injuries, the disability is referred to as an unscheduled or industrial disability. PPD benefits are calculated according to many factors such as worker's earnings, medical history, degree of functional impairment, injury severity and length of the healing period, potential for rehabilitation, age, education, and others. None of these factors are considered the most important, and a combination of many factors are considered as a whole when determining the rate of disability. lowa Code §85.34 (2).
Kentucky	The disability rating is based on many factors and multipliers. Factors are based on the percent of impairment (i.e., 0-5%, .65 factor) and multipliers are based on the ability to return to work (maximum multiplier is 3) and education (.4 if less than 8 years of education, .2 if no high school diploma). For example, if there is no return to work at the same or greater wages, the rating is multiplied by 3. Kentucky Code §342.730.
Wisconsin	There is a two-tier structure for nonscheduled injuries depending on whether the injured workers had returned to work at 85 percent or more of his/her wage. Workers who do not return to work, or who are rehired at less than 85 percent of their former wage, are entitled to earning capacity benefits. Wisconsin Code §102.44(6)(a). Loss of earning capacity is based on age, education, training, previous earnings, and other factors. DWD 80.34.

Key: PPD: Permanent partial disability.

Table 16 Average Litigation Expense per Claim with More Than 7 Days of Lost Time and Litigation Expenses, Multistate Comparison, Adjusted for Injury and Industry Mix, 2013/2016

	AR	CA	FL	GA	IA	IL	IN	КҮ	LA	MA	MI	MN	NC	ИЛ	PA	тх	VA	WI	18-State Median <sup>a</sup>
Average litigation																			
expense per claim	\$3,136	\$7,473	\$6,012	\$6,786	\$4,851	\$5,065	\$2,713	\$5,183	\$8,182	\$4,947	\$5,310	\$5,615	\$4,705	\$3,752	\$8,700	\$2,705	\$4,497	\$2,755	\$5,006

Notes: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Litigation expenses include mainly payments for defense attorneys and medical-legal expenses.

<sup>&</sup>lt;sup>a</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

Table 17 Trend in Costs per Claim and Components with More Than 7 Days of Lost Time at 36 Months' Average Maturity, Not Adjusted for Injury and Industry Mix, Annual Average Percentage Change, 2010/2013 to 2013/2016

	AR	CA	FL	GA	IA	IL	IN	KY	LA	МА	МІ	MN	NC	ИЛ	PA	тх	VA	WI	18-State Median <sup>a</sup>
Total costs per claim	2.7%	0.4%	1.0%	2.8%	4.7%	-2.2%	4.6%	1.8%	5.6%	5.3%	0.1%	2.9%	0.2%	2.4%	4.8%	3.9%	2.8%	4.1%	2.8%
Medical payments per claim	1.8%	-3.5%	1.7%	1.2%	5.6%	-5.3%	4.9%	0.1%	5.5%	3.7%	3.3%	2.0%	-1.2%	2.3%	5.8%	4.2%	2.5%	4.0%	2.4%
Indemnity benefits per claim	3.9%	2.0%	0.8%	4.2%	3.4%	-1.6%	2.9%	2.4%	4.9%	6.3%	-2.9%	4.1%	0.1%	1.2%	3.9%	3.0%	2.7%	3.2%	3.0%
Benefit delivery expenses per claim with expenses	2.0%	3.0%	-0.5%	1.8%	6.0%	6.6%	7.0%	3.6%	7.4%	4.3%	1.0%	3.7%	4.2%	4.9%	5.4%	5.0%	5.3%	7.7%	4.6%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. Similar notation is used to describe other injury years and valuations.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

Table 18 Trend in Costs per Claim and Components with More Than 7 Days of Lost Time at 12 Months' Average Maturity, Not Adjusted for Injury and Industry Mix, Annual Average Percentage Change, 2010/2011 to 2015/2016

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	МІ	MN	NC	ИЛ	PA	тх	VA	WI	18-State Median <sup>a</sup>
Total costs per claim	1.6%	1.8%	3.0%	2.3%	4.3%	0.0%	2.1%	2.7%	4.5%	3.4%	2.5%	1.8%	0.8%	2.2%	4.9%	3.3%	3.8%	3.6%	2.6%
Medical payments per claim	0.8%	-1.5%	2.9%	0.9%	4.7%	-2.3%	1.1%	2.1%	4.0%	1.7%	2.2%	1.0%	-2.8%	1.3%	4.6%	2.7%	3.3%	3.9%	1.9%
Indemnity benefits per claim	2.0%	3.7%	3.0%	3.3%	3.0%	1.5%	1.9%	2.7%	4.3%	4.3%	1.5%	2.0%	3.2%	1.5%	5.1%	3.4%	4.2%	1.5%	3.0%
Benefit delivery expenses per claim with expenses	3.8%	3.7%	2.7%	3.2%	6.0%	6.2%	8.0%	4.1%	6.6%	4.4%	5.1%	5.7%	6.3%	5.4%	5.3%	4.8%	5.9%	7.0%	5.3%

Note: 2015/2016 refers to claims arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. Similar notation is used to describe other injury years and valuations.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

Table 19 Trend in Defense Attorney Payments per Claim (payments >\$500) and Medical-Legal Expenses per Claim with More Than 7 Days of Lost Time at 36 Months' Average Maturity, Not Adjusted for Injury and Industry Mix, Annual Average Percentage or Percentage Point Change, 2010/2013 to 2013/2016

	AR	CA	FLª	GA	IA	IL	IN	KY	LA	МА	МІ	MN	NC	ИЛ	PA	тх	VA	WI	18-State Median <sup>b</sup>
Percentage of claims with defense attorney payments (payments >\$500)	0.4	1.2	-0.3	1.3	0.8	0.9	0.7	1.5	1.6	0.6	-1.2	0.7	0.2	1.6	1.3	0.8	1.3	0.4	0.8
Average defense attorney payment per claim (payments>\$500)	-1.9%	0.6%	-0.9%	-0.2%	2.7%	4.6%	0.2%	-1.1%	0.9%	-0.2%	3.5%	0.6%	3.0%	1.8%	3.7%	-0.2%	0.7%	2.8%	0.7%
Percentage of claims with medical-legal expenses	0.5	0.1	n/a	0.4	0.8	0.9	0.3	1.0	-0.8	0.5	-0.9	-0.2	0.5	0.9	0.9	2.3	0.3	0.6	0.5
Average medical-legal expense per claim	1.4%	2.2%	n/a	1.9%	6.5%	6.8%	2.9%	-0.4%	1.3%	5.9%	5.0%	3.5%	-1.2%	3.3%	3.7%	0.2%	4.4%	3.3%	3.3%

Note: 2013/2016 refers to claims arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. Similar notation is used to describe other injury years and valuations.

Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> Florida was excluded from medical-legal measures because underlying data in our sample are not necessarily representative of the state's experience.

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

# LIST OF COMMON ABBREVIATIONS AND SYMBOLS<sup>1</sup>

**7DLT:** 7 days of lost time.

AAPC: Annual average percentage change.

ACOEM: American College of Occupational and Environmental Medicine.

**ADR:** Alternative dispute resolution.

ALAE: Allocated loss adjustment expenses.

AMA: American Medical Association.

APC: Ambulatory payment classification.

ASC: Ambulatory surgical center.

Avg.: Average.

AWP: Average wholesale price.

AWW: Average weekly wage.

BDE: Benefit delivery expenses.

BLS: Bureau of Labor Statistics.

CMS, CMMS: Centers for Medicare and Medicaid Services.

**CPI-M:** Consumer Price Index – Medical.

CPI-U: Consumer Price Index for All Urban Consumers.

**CPT:** Current Procedural Terminology codes, a system of coding used to identify procedures and services performed by physicians.

Cum.: Cumulative.

CY: Calendar year.

**DA:** Defense attorney.

**Diff.:** Difference.

**DOI:** Date of injury.

**DR:** Dispute resolution.

**DRG:** Diagnosis-related group.

**E&M:** Evaluation and management (office visits).

 $<sup>^1</sup>$  The abbreviations and symbols on this list are frequently used in the CompScope<sup>TM</sup> Benchmarks report series.

Eff.: Effective. **Ep.:** Episode. Esp.: Especially. Eval. & Mgmt.: Evaluation and management (office visits). **FEC:** Future earning capacity. **Freq.:** Frequency. **FS:** Fee schedule. **FY:** Fiscal year. Geo zip: Geographical area defined by U.S. Postal Service zip codes. **GH:** Group health. HB: House bill. **HEA:** House enrolled act. **HCPCS:** Healthcare common procedure coding system. Hosp.: Hospital. ICD-9-CM: International Classification of Diseases, Ninth Revision, Clinical Modification. IME: Independent medical examination. IMR: Independent medical review. **Inpat.:** Inpatient. **IRE:** Impairment rating evaluation. k: Thousands. LS: Lump sum. MAR: Maximum allowable reimbursement. Max: Maximum. MCC: Medical cost containment. MD: Medical doctor. The physician category includes surgeons, general practitioners, radiologists, family practice physicians, psychiatrists, and other recognized medical doctors such as doctors of osteopathic medicine. MDRx: Physician-dispensed prescriptions. **MEA:** Morphine equivalent amount. MEI: Medicare economic index. Min: Minimum.

M-L: Medical-legal.

**MMI:** Maximum medical improvement.

MPI, MPI-WC: Medical Price Index for Workers' Compensation (annual WCRI report).

**MPN:** Medical provider network.

**n/a:** Not applicable.

NCCI: National Council on Compensation Insurance, Inc.

**NDC:** National Drug Code.

**ODG:** Official disability guidelines.

**OLOS:** Other Legal Order Section.

**OPPS:** Outpatient prospective payment.

**PAF:** Payment on account factor.

Pain Mgmt. Inj.: Pain management injections.

**PD:** Permanent disability.

**PDRS:** Permanent disability rating scale.

**PDRx:** Pharmacy-dispensed prescriptions.

PM: Physical medicine.

**Pmt.:** Payment.

**PPD:** Permanent partial disability.

**PPD/LS:** Permanent partial disability or lump sum.

**PPO:** Preferred provider organization.

**PPP:** Preferred provider program.

**PPT or ppt:** Percentage point(s).

**PT/OT:** Physical therapist and/or occupational therapist.

**PWP:** Pay without prejudice.

QCEW: Quarterly census of employment and wages, produced by the U.S. Bureau of Labor Statistics.

**QRC:** Qualified rehabilitation consultant.

**RBRVS:** Resource-based relative value scale.

RTW: Return to work.

**RVU:** Relative value unit.

**Rx:** Prescriptions.

**SAWW:** Statewide average weekly wage.

SB: Senate bill.

**SEA:** Senate enrolled act.

SMSA: Standard metropolitan statistical area.

**TD:** Temporary disability.

**TOR:** Treatment/operating/recovery room services.

**TPD:** Temporary partial disability.

**TTD:** Temporary total disability.

**U&C:** Usual and customary.

**UR:** Utilization review.

**VR:** Vocational rehabilitation.

w/: With.

**WC:** Workers' compensation.

wk: Weeks.

**%:** Percent or percentage.

#: Number.

/: Per (as in cost/claim means cost per claim).

>: More than.

≤: Less than or equal to.

## **GLOSSARY**

- access to medical care: The extent to which patients were able to obtain the medical care that they or their health care provider desired. In WCRI and many other surveys, access to medical care is evaluated in terms of the patients reporting that they encountered "no problems," "small problems," or "big problems" in this regard.
- ancillary legal costs: Payments associated with the preparation and/or production of reports and transcripts, filing fees, performance of autopsies, conduct of surveillance and investigation, translator's fees, witnesses' fees, and costs associated with arbitration and alternate dispute resolution. Ancillary legal costs do not include attorney fees.
- average weekly wage (AWW): The worker's average weekly preinjury earnings as determined by a jurisdiction-specific formula. This AWW typically serves to establish the worker's weekly indemnity benefit rate.
- average price paid: Payments for a given medical service divided by the total number of services.
- **balance billing:** A procedure under which providers of medical services can bill the injured worker for some or all of the difference between bills submitted for services on a claim and the amounts paid for those services by the employer or insurer.
- **benefit delivery expenses:** The costs of delivering medical and indemnity benefits to injured workers that are allocated to individual claims: in this study, these include litigation-related expenses, such as defense attorney fees, medical-legal expenses, and ancillary legal expenses, as well as the costs associated with medical management of the claim and any administrative assessments.
- **benefit payments:** Payments to an injured worker for time lost from work (indemnity benefits) as well as payments for the medical treatment of the injured worker.
- bifurcated approach: A method used to determine unscheduled permanent partial disability (PPD) benefits that depends on the worker's employment status at the time of the rating. Under this approach, if a worker has returned to work and is earning at or close to his or her preinjury wage, the PPD benefit is typically based on the degree of medical impairment. If a worker has not returned to work, the PPD benefit is typically based on the loss of wage-earning capacity.
- claim type: Claim types are organized into an escalating hierarchy, starting with medical-only and proceeding up through temporary partial disability, temporary total disability, permanent partial disability, permanent total disability, or death. Claim type is assigned based on the most severe type of benefit paid or incurred in each case.
- claims with more than seven days of lost time: WCRI methodology in multistate benchmarking studies that applies a waiting period of seven days before counting or including indemnity benefits paid, if a state law allows earlier payments. This approach provides a more appropriate multistate comparison, because states that have a waiting period for benefits shorter than seven days will typically have lower average indemnity benefits per claim as a result.
- **compensability:** The issue of whether an injury qualifies as a basis for a claim to benefits under the applicable workers' compensation statute.
- cost-of-living adjustment (COLA): An inflation-based adjustment in benefits corresponding to a change in the cost of living. COLAs may be based on changes in various metrics such as the Consumer Price Index published by the Bureau of Labor Statistics or on changes in the statewide average weekly

- wage, or they may be specifically enacted by state legislatures from time to time.
- **cost-to-charge ratio reimbursement:** A ratio of the cost divided by the charges, generally used with acute inpatient or outpatient hospital services. Base cost-to-charge ratios are often calculated using the hospital's declared revenue and expenses on the Medicare Cost Reports. The base cost-to-charge ratios are multiplied by charges to determine the reimbursement amount.
- **Current Procedural Terminology (CPT) codes:** A system of coding used to identify procedures and services performed by physicians.
- **date of disability:** The date a worker first became disabled from work as the result of a workplace injury or occupational disease.
- **date of employer notice of injury:** The date on which the employer first knew or was advised of an employee's workplace injury or occupational disease.
- **date of first indemnity payment:** The earliest date in the transaction file on which an indemnity payment was made.
- **date of injury:** The date on which a worker's injury occurred or his or her illness became manifest and was known to be associated with work-related causes.
- **date of payor notice of injury:** The date on which the payor (insurer, third party administrator, etc.) first knew or was advised of an employee's workplace injury or occupational disease.
- **defense attorney payments:** The expense to an insurer or employer of having an attorney defend a workers' compensation claim; includes payments for either or both in-house and outside defense counsel.
- **Detailed Benchmark/Evaluation (DBE) database:** Created by WCRI, this is the compilation of data used as the basis for the measures in these reports.
- **development:** The changes in loss payments made and/or reserves established over time as claims proceed from initiation to final resolution.
- **discovery:** The pre-trial procedure requiring disclosure of requested information to the other party.
- **duration of temporary disability:** The imputed length of time for which temporary disability benefits have been paid, estimated from amounts of benefits and average benefit rate.
- **duration of medical treatment:** The number of weeks between the date of the first medical treatment and the date of the last medical treatment.
- evaluation date: The date as of which payments have been summarized and reserves have been established for all claims from a particular injury year. In this study, selected evaluation dates falling 6, 18, 30, 42, and 54 months after the end of each injury year were used. Accordingly, claims with dates of injury in injury years 2009 through 2014 were evaluated as of March 31, 2015, and on March 31 of each previous year (2010 through 2014) as applicable. The evaluation date may also be referred to as the valuation date.
- **fee schedule:** A set of prescribed reimbursement levels for medical procedures provided by a wide range of practitioners, generally within nonhospital and/or hospital settings, to workers' compensation claimants. Fee schedules may also apply to durable medical supplies or pharmaceuticals. Fee schedules may be subject to negotiation or adjustment by agreement of the parties in some systems. Fee schedules can be adjusted according to provisions in statute and rule.
- formal dispute resolution: Typically, an administrative process for resolving workers' compensation disputes in which an adjudicator conducts at least one formal hearing where (1) sworn testimony is taken, (2) cross-examination of witnesses is permitted, (3) a record of the proceeding is kept, and (4) a written decision is issued if voluntary agreement is not reached beforehand. Formal dispute resolution may also occur in state courts, after completion of any administrative processes.

- **hospital inpatient payments:** Payments made to the hospital for services rendered during an inpatient stay. **hospital outpatient payments:** Payments made to the hospital for services that are delivered outside an inpatient stay.
- impairment approach to unscheduled PPD benefits: Under this approach, the worker's PPD benefit is directly and entirely related to his or her degree of medical impairment. Medical impairment is the measure of physical loss of a body part or system or impairment of use thereof, as measured by a physician. Various formulas are applied to derive the impairment ratings and determine the benefits. In some jurisdictions, a supplemental benefit is also available under certain circumstances when the worker has exhausted the PPD benefits awarded.
- **impairment rating:** A percentage that estimates how much a worker has lost the normal use of injured parts of the body. Typically, impairment ratings are determined using the American Medical Association *Guides*.
- incurred benefits: The sum of benefits paid plus the amount of reserve estimated for future benefit payments on a claim. Incurred benefits, as presented in this report, are not adjusted by WCRI for inflation and do not include any actuarial factors or other adjustments to anticipate future development on paid or reserved amounts. For closed claims, incurred benefits are the benefits that have been paid.
- **indemnity benefits:** Payments to a worker for time lost from work or other adverse effects of an occupational injury or illness. Indemnity benefits can include payments for loss of earning capacity or wages or permanent impairment or disability. Some states use the term *income benefits* to describe the full range of payments to the worker.
- **indemnity claim:** A claim in which indemnity payments—payments for temporary disability, permanent disability, or death—have been made. Note that much of the report analysis focuses on claims with more than seven days of lost time and applies a waiting period of seven days before counting or including indemnity benefits paid, if a state law allows earlier payments.
- **indemnity payments:** The amount of indemnity benefits paid to a worker.
- **independent medical evaluation:** A physical examination by a medical doctor chosen by the injured worker and/or insurer for the purpose of providing a medical-legal report to help resolve a dispute.
- informal dispute resolution: Informal administrative processes such as mediation and arbitration (either binding or nonbinding) used to resolve workers' compensation disputes. Informal dispute resolution is distinguished from *formal* dispute resolution by the following features of the former: (1) few or no procedural rules, (2) no rules governing admissibility of evidence, (3) no sworn testimony or cross-examination of witnesses, and (4) no transcript or other form of record of proceedings.
- injury year: The 12-month period in which an injury occurred, also called accident year. We define an injury year to include the 12 months beginning October 1 of the previous calendar year through September 30 of the calendar year used to designate the injury year. For example, injury year 2014 includes claims with injuries arising from October 1, 2013, through September 30, 2014. Thus, the injury years used in this study do not align with specific calendar years.
- **litigation and claims-adjusting expenses:** Defense attorney payments, ancillary legal costs, medical-legal costs, and other expenses related to adjusting a claim and allocated to individual claims.
- **loss-of-wage-earning-capacity approach to unscheduled PPD benefits:** A system in which PPD benefits for unscheduled injuries are based on the impact that permanent impairment is expected to have on a worker's ability to earn or to compete in the labor market. The estimated earnings impact is based on a number of factors that may include the worker's age, education, and training and skills, as well

- as the extent of the worker's physical impairment and existing labor market conditions.
- **lump-sum settlement:** An agreement that typically closes out a workers' compensation claim and results in a single final payment to the worker. In some states, rights to future medical benefits or vocational rehabilitation benefits cannot be resolved by lump-sum settlements. Lump-sum settlements are also variously known as compromise-and-release agreements and commutations.
- managed care: An approach to health care cost containment that enables the payor to influence the delivery of health services before the services are provided. As used in this report, *managed care* refers to the use of designated entities, referred to as managed-care organizations, to deliver health care to injured workers. Techniques common to managed-care organizations include case management, physician gatekeepers, provider networks, and components of utilization review (such as admission review, admission precertification, continued-stay review, discharge planning, mandatory second opinion programs, and quality assurance mechanisms).
- **mapping:** One of the key methods we use to ensure the comparability of the benchmark measures across states. It involves categorizing different data source codes into a common structure based on the definitions of those codes.
- **maturity:** The time between the date of injury and the evaluation date. In this study, we analyze claims with average maturities of 12, 24, 36, 48, and 60 months.
- **maximum medical improvement (MMI):** The point at which the injured worker's medical condition has stabilized or is not expected to improve even with additional medical treatment.
- median study state: The state that ranks in the middle of the group of states included for a particular measure when the states are sorted from high to low values. For example, the median of 18 study states is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being analyzed. In WCRI studies, we consider values within 10 percent of the median value or within 3 percentage points of the median percentage measure to be *typical*, that is, similar to the median state.
- medical cost containment expenses: All payments related to medical cost containment, including fees for bill review, utilization review, case management, and preferred-provider networks. Note that medical cost containment expenses are not included in the average medical payments per claim that we report.
- **medical-legal expenses:** Payments for medical-legal examinations and reports initiated by either party or an adjudicator, and testimony and depositions from medical providers and medical experts.
- **medical-only claim:** An open or closed claim for which medical payments have been made but no indemnity payments have been made or no indemnity reserves have been established.
- medical payments: Payments to medical providers for the medical treatment of workers' injuries. These include payments to physicians, chiropractors, and physical therapists, and for hospital, pharmacy, nursing home, and medical rehabilitation services. The average medical payment per claim is the sum of medical payments made to all types of providers and for all types of services, divided by the total number of claims receiving any such services.
- **medical service:** A single medical treatment or procedure billed by a medical provider. Multiple medical services may be delivered at one visit.
- **network care:** Health care rendered within a network of preferred medical providers who provide care under an agreement with the payor; such agreements may establish discounted reimbursement rates for services and require compliance with certain protocols for care.
- **nonhospital services:** Services provided outside of a hospital setting. Providers of nonhospital services include physicians, chiropractors, and physical/occupational therapists. Other nonhospital providers

- include nurses, clinical social workers, and other ancillary practitioners.
- **nonimpairment state:** A state that does not base benefits for permanent partial disability solely on the worker's impairment. Such states typically apply an approach that bases PPD benefits on loss of earnings or wage-earning capacity or a dual (bifurcated) approach based on the worker's employment and earnings status at the time permanency benefits are determined.
- **non-wage-loss state (also termed a PPD state):** A state that does not base payments for permanent partial disability solely on actual or imputed loss of wages.
- paid benefits: The sum of medical and indemnity payments made.
- **paid claims:** Medical-only and indemnity claims. Paid claims do not include incident reports and/or expense-only claims.
- pay without prejudice: When the insurer pays a claim, it may do so without accepting liability for a fixed time period. This period establishes a window where the insurer may refuse a claim and stop payments at will.
- **payor:** The entity responsible for administering and making payments on a workers' compensation claim. Payors may be insurers, third-party administrators, or self-insured, self-administered employers.
- **permanent disability claim:** A claim for either permanent partial disability or permanent total disability benefits.
- permanent partial disability (PPD) payments: Payments and escalations (where applicable) for scheduled and unscheduled PPD benefits; the latter include disfigurement benefits, PPD life pensions and annuities, impairment compensation, economic recovery compensation, supplemental income compensation, loss of earning power or capacity, and all payments identified as lump-sum settlements, compromise-and-release agreements, settlements, and commutations, regardless of the type(s) of benefits for which the lump sum was paid. In most jurisdictions, PPD benefits may be paid weekly or at other set intervals, or they may be paid in a lump sum.
- **permanent total disability (PTD) payments:** Payments and escalations (where applicable) for an injury that results in a permanent condition of total incapacity to work.
- **premium** (above Medicare): Refers to the dollar amount or percentage by which a state workers' compensation fee schedule rate exceeds the corresponding Medicare reimbursement rate for that state. In very few circumstances, the workers' compensation fee schedule rate may be lower than the Medicare rate, in which case the premium is negative.
- **price index:** The ratio of the price per service in an individual state to the median state, where price per service is constructed using a marketbasket approach to hold utilization of services constant.
- **provider type:** One of six categories of medical providers (physician, chiropractor, physical/occupational therapist, hospital, other, unclassified) created in the DBE database. Provider type is one of the dimensions that form the detailed medical benchmark measures. Provider type is defined regardless of the type of service being provided.
- **PT/OT:** Physical therapist and/or occupational therapist.
- **relative value unit (RVU):** A measure of the relative costs required to provide different medical services, with more complex, time-consuming services, like a shoulder arthroscopy, having higher unit values than less complex, less time-consuming services, such as an office visit.
- salary continuation program: An employer program under which the employer continues to pay an injured worker's salary after a workplace injury or illness occurs until compensability under workers' compensation is determined or for some prescribed period of time under a collective bargaining agreement.

- satisfaction with medical care: Patients' perceptions of the quality, effectiveness, and efficiency of their medical care. Satisfaction with medical care is measured in WCRI and many surveys using questions that ask patients to rate their satisfaction as "very satisfied," "somewhat satisfied," "somewhat dissatisfied," or "very dissatisfied."
- scheduled injuries, payments: Payments made according to a schedule or list that defines PPD awards (usually in terms of number of weeks of benefits or total dollar amounts) for specific losses of function or use of different body parts (injuries).
- **service group:** One of 20 categories of medical services. Service group is one of the dimensions that form the detailed medical benchmark measures. Service group applies to categories of services regardless of the provider type(s) delivering the services.
- **statewide average weekly wage (SAWW):** The average weekly wage in a given state. The SAWW or some multiple thereof is often used to determine the maximum weekly indemnity compensation rates.
- substantial return to work: An event in which an injured worker returned to work and remained at work for at least one month. Substantial return to work is used in WCRI studies to distinguish between returns to work that are relatively enduring from ones where the worker returns to work for only a very brief period of time and then is absent from work again due to the injury.
- **temporary disability claim:** A claim on which either temporary partial disability or temporary total disability benefits have been paid.
- **temporary partial disability (TPD) benefits:** TPD benefits are paid for those periods during which a worker has returned to work on a part-time basis or at reduced wages.
- **temporary total disability (TTD) benefits:** TTD benefits are paid when a worker is temporarily unable to earn any wages.
- **temporary total disability (TTD) rate:** The weekly amount payable for temporary total disability benefits. **total cost per claim:** The sum of medical and indemnity payments, benefit delivery expense payments, and payments for vocational rehabilitation service/provider expenses made, divided by the number of claims on which such payments were rendered.
- **treatment guidelines:** Specifications for ranges and/or levels of service and the methods of treatment (protocols) that should be considered accepted medical practice for certain diagnoses or patient conditions.
- **trend:** Rate and direction of change over time.
- **unilateral termination:** The ability of employers and insurers to terminate or suspend benefits without prior approval through a workers' compensation administrative or hearing process.
- unscheduled injuries, payments: Payments made for injuries not included in the state's schedule that defines PPD awards for specific losses of function or use of different body parts. Compensation may be predicated on additional factors such as wage loss and/or wage-earning capacity.
- **utilization, utilization index:** The ratio of the average number of services per claim in an individual state to those of the median state. The average number of services per claim was weighted by the relative value unit (RVU) to hold the intensity of resource use constant in these comparisons.
- **utilization review:** The assessment of a patient's medical care to ensure that it is medically necessary and reasonable. This assessment typically considers the appropriateness of the place of care; the level of care; and the duration, frequency, and/or quantity of services provided based on the accepted condition(s).
- **visit:** An event in which a patient receives a service, or services, from a particular medical provider on a specific date.

- **vocational rehabilitation maintenance payments:** Indemnity benefits paid while a worker is receiving vocational rehabilitation services.
- **vocational rehabilitation service/provider expenses:** Payments for vocational rehabilitation services provided by outside vendors, including vocational evaluation, testing, training, education, books, and supplies.
- wage differential benefits: Payments when a worker obtains a new job that pays less than the preinjury job(s).
- wage-loss state: A state that bases compensation for permanent partial disability on the workers' earnings histories. Under this approach, compensation—a portion of the wages lost because of the work-related injury—is paid until the worker returns to work at or near his or her preinjury wage. Under a pure wage-loss system, a worker who has returned to work and is earning at the preinjury level, regardless of the extent of his or her injury, would not receive PPD benefits.

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## Workers' Compensation Statutes<sup>1</sup>

Illinois Workers' Compensation Act, 820 ILCS 305.

<sup>&</sup>lt;sup>1</sup> The citations provided are the basic workers' compensation statutes. Amendments are not listed, and other state statutes may relate to workers' compensation requirements and processes.

# COMPSCOPE<sup>TM</sup> BENCHMARKS: TECHNICAL APPENDIX, 17TH EDITION

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April 2017

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# **TECHNICAL APPENDIX**

In this *Technical Appendix*, the data and methods used to construct the benchmarking measures reported in the 17th edition CompScope<sup>™</sup> individual state reports for California, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, Virginia, and Wisconsin and *The DataBook* (<a href="http://www.wcrinet.org/images/uploads/files/cs17">http://www.wcrinet.org/images/uploads/files/cs17</a> databook.pdf) are described in detail. Each of the reports contains a summary description of the data and methods used, but a detailed explanation, along with the conceptual framework for the CompScope<sup>™</sup> approach, is also provided here.

#### **ORGANIZATION OF THE TECHNICAL APPENDIX**

The *Technical Appendix* includes seven sections. The first section provides a brief description of the analysis data and unit of analysis, as well as claims and claim maturity. The second section discusses the key performance measures and the conceptual framework used in the CompScope™ benchmarking reports. The third section describes the data sets constructed for the multistate analysis and reporting, the claim volume, the representativeness, and the validity of the Workers Compensation Research Institute (WCRI) sample data. The fourth section addresses the methods used to ensure the comparability, consistency, and accuracy of the data, such as analyzing the subset of claims with more than seven days of lost time; the case-mix adjustments for interstate differences in injury, industry, and wages; and the data capping. The fifth section discusses the methodology underlying the trend analyses for each state. The sixth section covers a few technical and methodological issues that are state specific. The last section provides a detailed explanation of the WCRI Detailed Benchmark/Evaluation (DBE) database, which is the foundation of the CompScope™ multistate benchmarking study, as well as of other WCRI studies.

## THE ANALYSIS DATA

The analysis in the 17th edition of the CompScope™ Benchmarks reports used data from 24 data sources, including national and regional insurers, claims administration organizations, state funds, and self-insured employers. The sample data were collected in the DBE database and included about 7.5 million claims that were reasonably representative of the entire system in each of the 18 study states, including all market segments: self-insurance, residual market, voluntary insurance, and state funds. The entire DBE database included 43.5 million claims from 27 data sources across 36 states. The last section in this *Technical Appendix* discusses the details of the data collection, data preparation, and quality assurance as they pertain to the DBE database.

#### **UNIT OF ANALYSIS**

The unit of analysis in every CompScope™ benchmarking report is the individual workers' compensation claim. Because the reports focus on state workers' compensation systems, analysis of employers' liability claims and claims that fall under federal regulations (e.g., the Longshore and Harbor Workers' Compensation

Act, the Black Lung Act, and the Jones Act) are excluded.<sup>1</sup>

#### **CLAIMS AND CLAIM MATURITY**

Since workers' compensation claims typically develop over several years, researchers face a critical trade-off between seeking timely information and complete information. For instance, if only 2015 claims were examined in 2016 (relatively current claims), researchers would miss considerable information about long-term claims, which significantly affect total system costs. However, if researchers waited until complete data on all claims were available, system evaluation would be postponed for several years and results would omit information about recent claims.

To balance considerations of timeliness and completeness of information, the focus in this report is on claims with injuries arising from October 1, 2009, through September 30, 2015, evaluated as of March 31 of each year from 2011 to 2016 (<u>Table TA.2</u>).<sup>2</sup> For instance, the 2015/2016 claims refer to injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. The maturity of these claims ranges from 6 months to 18 months (an average of 12 months of experience).

## **KEY PERFORMANCE MEASURES AND CONCEPTUAL FRAMEWORK**

#### **COMPSCOPE™ KEY PERFORMANCE MEASURES**

The series of reports that comprise the 17th edition of the CompScope™ benchmarking study contains the results of a set of key performance measures developed since the inception of this annual study. Performance measures are presented in several areas:

- Time from date of injury to date of employer notice of injury, date of injury to payor notice of injury, and date of injury to first payment of indemnity benefits
- Average total cost per claim, average payment per claim for medical benefits, and average payment per claim for indemnity benefits and components of indemnity benefits
- Vocational rehabilitation use and costs
- Benefit delivery expenses and defense attorney involvement
- Duration of disability and indemnity payments

<u>Table TA.1</u> provides detailed definitions for each performance measure.

The results for the key performance measures presented are for all claims, for claims with more than seven days of lost time, and for claims with different types of benefits (i.e., temporary disability or permanent partial disability). Claims are classified according to the structure of paid benefits shown in Figure TA.1. The claim classification, from the least to the most severe, is as follows: medical-only, temporary partial disability (TPD), temporary total disability (TTD), permanent partial disability (PPD), permanent total disability (PTD), and death. A claim's overall classification reflects the benefits paid as of the evaluation date for the most severe claim type. This study focuses primarily on temporary disability claims (comprised of both TPD)

<sup>&</sup>lt;sup>1</sup> Claims from nonfederal public employees (municipal, county, city, etc.) were included in the study. However, state employees were not included in the analyses because of comparability issues.

<sup>&</sup>lt;sup>2</sup> The letters *TA* in each figure and table title stand for *Technical Appendix*.

and TTD claims) and on PPD claims.3

#### COMPSCOPE<sup>™</sup> CONCEPTUAL FRAMEWORK

A basic question underlying a comparison of state workers' compensation systems is, How do the systems perform for similar workers for similar injuries? To answer this question, we first identified a sample of claims from each state that represented the state workers' compensation market. We then adjusted the claims so that the observed differences in the comparison would more likely be due to the differences in system features, not the differences in definition, injury severity, injured workers' characteristics, economic conditions, or other external factors.

Figure TA.2 shows the concept underlying our data comparability methodology. The data were standardized using uniform definitions across data sources and states. A subset of claims with more than seven days of lost time was analyzed. We controlled for injury and industry mix and wage levels (see subsequent sections for a detailed discussion of these methods). After these adjustments, the differences in performance measures across states should primarily reflect differences in system features, including, but not limited to, regulations governing notice and payment, pay-without-prejudice options, benefit rates, minimum and maximum benefit levels, safety programs, managed care and other medical cost containment tools, return-to-work programs, and dispute resolution procedures, as well as the history and culture relating to workers' compensation. Another factor influencing any potential difference in outcomes is the behavior of system participants.

The trend results (difference between current and previous time points) for individual states in the CompScope™ benchmarking reports were not adjusted for injury and industry mix or wage levels. We do this in order to provide trend information that is more consistent with the experience of system stakeholders in each state.

### METHODS TO ENSURE REPRESENTATIVENESS AND VALIDITY OF THE ANALYSIS DATA

In this section, the methods used to ensure the representativeness and validity of the WCRI sample data are explained.

#### **CLAIM EXCLUSIONS FOR MULTISTATE ANALYSIS**

Certain data were excluded from the analysis as a result of the data quality protocol. The purpose of claim exclusion is to ensure the consistency and comparability of the analysis data, retaining as much of the data collected in the DBE database as possible while maintaining the representativeness of the data for individual states.

The CompScope™ performance measures were categorized into four groups: (1) paid and incurred benefit measures, (2) benefit delivery expense measures, (3) vocational rehabilitation provider measures, and (4) measures of time to reporting and first payment. Using the data quality reports, some data sources were identified where data for a particular group of measures were fundamentally different from the data from all

<sup>3</sup> Limitations of the data prevent reporting TTD and TPD claims statistics separately as well as reporting PTD and fatality claims statistics separately.

the other data sources across most injury years. These identified data were excluded from the analysis data for that group of measures. For the benefit delivery expense and its component measures, only data where medical cost containment strategies were used and relevant expenses were allocated to the claim were included. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies to individual claims, that data source was excluded from the benefit delivery expense measures in this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to individual claims, that data source was excluded from the benefit delivery expense measures in this report as well.

About 400 indemnity claims in all injury years across all states were identified as *unlikely fatalities* or large-value claims that had inconsistencies in claim characteristics. They were excluded from the analysis. Also, 953,486 duplicate claims in all injury years across all states (11.3 percent of the total available data) were removed. These duplicate claims were the same claims with multiple occurrences recorded in different data systems of an insurance carrier and their third-party administrators, as well as claims with multiple occurrences within a single-source data system.

#### REPRESENTATIVENESS OF THE WCRI SAMPLE

The sample data included nearly 1.2 million claims across the study states for injury year 2015. These claims covered 51 percent of the claims in the population in all study states for that year. The percentage of the population of claims represented by the WCRI sample varied by state, ranging from 40 percent in Wisconsin to 74 percent in Texas (<u>Table TA.3</u>).

Samples of claims were collected from 24 data sources across the 18 states that included all segments of the insurance market: private voluntary, private residual, state fund, and self-insurance markets. The proportion of claims in each market segment in the sample for a state may not necessarily reflect the proportion of claims in each market segment in the population of that state. To ensure that the sample claims from each state were representative of the full insurance market in the state, the sample claims were weighted to reflect the population proportions of the insurance market segment of the claims in each state. The market segment weights for each state were calculated as a ratio of the market segment proportion in the claims population to that in the claims sample. Since the claim volume changes over time, market segment weights were calculated by injury year for each state. Table TA.4 shows the distribution of claims by market segment in the population for injury years 2010 through 2015 in each of the 18 states.

# **VALIDITY OF THE WCRI SAMPLE**

To ensure the representativeness of the sample data, a few key measures were validated against external data. The data were also validated internally by comparing the key measures between the 17th and 16th editions of the CompScope<sup>TM</sup> reports.

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<sup>&</sup>lt;sup>4</sup> Population data for the private insured market reflect incurred claims based on data provided by the National Council on Compensation Insurance, Inc. (NCCI) and independent rating bureaus. The percentage of the self-insured market segment was based on data in *Workers' Compensation: Benefits, Coverage, and Costs, 2014*, published by the National Academy of Social Insurance (NASI) in 2016. Data for the state fund market segment were based on data from the state funds. Since population data in the residual market were not readily available, the claim counts were estimated based on premium and claim frequency data using NCCI's *Residual Market Management Summary, 2015* (NCCI, 2016), residual market premium information by independent rating bureaus, and NCCI's *Workers Compensation Claim Frequency*—2014 *Update* (Davis and Stern, 2014).

#### **VALIDATING THE DATA WITH EXTERNAL SOURCES**

To assess whether the sample was sufficiently representative of the state as a whole, a number of measures from the sample data were compared with published data from external sources, including the state workers' compensation agency, the rating bureau, and other sources. Specifically, two types of validation were performed: (1) the average incurred benefits for indemnity claims in each state from the external data were compared with the average incurred benefits (including incurred medical and incurred indemnity benefits) per indemnity claim based on the sample; (2) data on injury and industry composition and workers' age, gender, and marital status from the sample were compared to the data on the same characteristics from external sources. These comparisons led to the conclusion that the data used for the CompScope™ reports are sufficiently representative of each state. Thus, the results of the comparisons reported can be generalized to the claim population of each state.

COMPARING THE PROPORTION OF INDEMNITY CLAIMS AND THE AVERAGE INCURRED BENEFITS PER INDEMNITY CLAIM. The comparisons of the proportion of indemnity claims and the average incurred benefits per indemnity claim for each state focused on three questions: (1) Are the measures from the sample similar in magnitude to the other published measures? (2) Are the trends of the measures similar? (3) Are the development patterns similar? To answer these questions, the most recent statistical plan data available from rating bureaus were gathered and compared with a comparable subset of the WCRI data using the insured market segment only (excluding self-insured data) for the appropriate evaluation years.

Comparison results in Table TA.5 show that WCRI measures are fairly consistent with those from external sources. For most study states, the WCRI data were compared with the external data for 2013 claims with an average of 12 months of maturity and for 2012 claims with an average of 24 months of maturity. For one state (Massachusetts), the comparison was based on 2014 and 2013 claims with an average of 12 and 24 months of maturity, respectively, as more recent external data were available at the time of comparison. Rating bureaus use policy years to report their data, whereas WCRI uses injury years (October 1 through September 30). Therefore, additional adjustments were necessary to ensure valid comparisons of measures from WCRI and external data. The notes for Table TA.5 define the policy year for each state. To allow for the most direct comparisons with the data from rating bureaus and state agencies, the WCRI data used for external validation were not adjusted for differences in injury, industry, or wages or for differences in the waiting period among study states. Based on the information shown in the table, the differences between the WCRI data and the data from rating bureaus were within a 15 percent margin for all three incurred measures in almost all study states.<sup>5</sup>

Most discrepancies resulted from differences in definitions, reporting periods (calendar year, injury year, fiscal year, policy year), maturities and/or evaluation dates, and the application of development factors (actuarial estimates of how claims grow over time). One such definitional difference is that the rating bureau data categorize some types of costs as medical or indemnity benefits, whereas the WCRI data categorize those costs as expenses for purposes of consistent comparisons across states. For example, rating bureaus require that medical-legal examinations be reported as a medical cost in some states, whereas WCRI records

<sup>&</sup>lt;sup>5</sup> The only exception was Louisiana, where the difference between the WCRI data and the rating bureau data for the average incurred indemnity payment per indemnity claim for 2012 claims at 24 months of maturity was 20.5 percent. Note that this measure for 2013 claims at 12 months of maturity matched well between the WCRI data and the rating bureau data—the difference was 2.2 percent.

payments for medical-legal examinations as expenses.

COMPARING WORKER CHARACTERISTICS. Research has shown that a worker's age, gender, and marital status can have an impact on the duration and severity of disability, timeliness and success of return to work, and attachment to the labor force, and as a result, on the average cost per claim (Fenn, 1981; Johnson, Butler, and Baldwin, 1994; Galizzi and Boden, 1996). <u>Table TA.6</u> compares the age and gender of injured workers in the WCRI sample with the data published by the Bureau of Labor Statistics (BLS) by state for injury year 2015. The table also compares injury and industry classifications of the WCRI data sample to the external data published by the BLS.<sup>6,7</sup>

There was very little discrepancy in the age and gender of injured workers between the WCRI sample data and the external data. The typical worker in the WCRI sample was a 44-year-old male who was working in the services industry when he suffered a sprain, strain, or other nonspecific pain. This typical injured worker was similar to the typical injured worker other organizations describe. These comparisons led to the conclusion that the characteristics of injured workers in the WCRI sample were similar to the characteristics of injured workers in the population.

# VALIDATING THE DATA INTERNALLY BY COMPARING THE KEY MEASURES BETWEEN THE 17TH AND 16TH EDITION OF COMPSCOPE<sup>TM</sup>

The sample data were also internally validated by comparing the results of the 17th edition with the results of the 16th edition of the annual CompScope™ study. <u>Table TA.7</u> shows the comparisons for the key cost measures and percentage of claims with more than seven days of lost time between these reports. The differences between the two editions were within 3 percent for these key cost measures across all study states for 2014/2015 and 2012/2015 claims. The differences in the average benefit delivery expenses per claim with more than seven days of lost time and benefit delivery expenses were within 6 percent for 2014/2015 and 2012/2015 claims. The differences in the percentages of claims with more than seven days of lost time were within 1 percentage point across all states in both years. These relatively small differences between the data of

<sup>&</sup>lt;sup>6</sup> The BLS industry data for 2015 that were used for external validation were classified based on the North American Industry Classification System. The BLS data were regrouped to better match the WCRI classifications. In areas where it was not possible to separate subcategories in the BLS data, the data in the WCRI sample were regrouped. For example, the BLS data show the services sector as including trade, transportation, and utilities; information; financial activities; education and health; and leisure and hospitality. These subcategories were categorized into one of the following three industry groups in the WCRI data: high-risk services, low-risk services, and trade. To match the external data, these three industry groups were included in the services industry group. See Table TA.6.

<sup>&</sup>lt;sup>7</sup> The BLS injury data for 2015 that were used for external validation were provided by the Injuries, Illnesses, and Fatalities program. The methodology used by WCRI to generate injury groups, which is discussed later in the "Mapping Injury Groups" section of this appendix, is fundamentally different from the one underlying the BLS injury grouping. Thus, to make a better match between the WCRI data and BLS data, both the 12 WCRI injury classifications and the BLS injury subgroups were regrouped into five broader injury categories. These five injury categories, for the purpose of external validation, are sprains, strains, and nonspecific pain; fractures; inflammations, lacerations, and contusions; carpal tunnel; and other injuries. Footnotes in Table TA.6 describe the regrouping into these five categories in detail.

<sup>&</sup>lt;sup>8</sup> The sample characteristics were also compared to available information from state workers' compensation agencies and rating bureaus. Over time, the age of a typical worker has increased, and the percentage of injured workers who are male has declined. These trends are consistent with the general demographic increase in workers' age and the greater percentage of females in the workforce.

<sup>&</sup>lt;sup>9</sup> Note that external data were unavailable for comparisons of average weekly wages of injured workers. It was not possible to compare size of employers since complete payroll data were not consistently available in the sample. It was possible to infer, however, that if any particular type of employer was underrepresented, it was likely to be the small-business employer. Research has shown that firm size can affect return to work. Holding all else constant, the duration of payments to workers with small-business employers tends to be longer (Galizzi and Boden, 1996).

the two editions resulted from several factors, such as the different mix of data sources, the different claims submitted from the same data sources for the same injury years, and the revisions for the same claims submitted by the same data sources (even though these replacement claims were largely similar in most cases). The data also reflect shifts in insurance business portfolios from year to year, particularly for third-party administrators of self-insured employers. Therefore, in some cases, the data may reflect the addition and/or deletion of claims resulting from transferred business.

# METHODS TO ENSURE COMPARABILITY, CONSISTENCY, AND ACCURACY OF THE PERFORMANCE MEASURES ACROSS STATES

This section discusses the adjustments implemented to make the data meaningful for interstate comparisons. The methods include standardizing the data by using common classification terms, analyzing a subset of claims with more than seven days of lost time, and controlling for injury and industry mix and wages. The effects of these adjustments are also summarized in this section.

#### **CONSTRUCTING COMMON VARIABLES**

To ensure valid comparisons across states and over time, variables were constructed to reflect definitions common to the data sources and across states as much as possible. To do so, definitions from data sources or states were mapped to the WCRI standard definitions for payment transactions, injury groups, and industry categories. Lump-sum settlement cases were also identified, and the amount of lump-sum settlements was calculated using the WCRI definition.

### MAPPING PAYMENT TRANSACTIONS

Each data source uses its own set of payment-level transaction codes to designate benefit or expense payments of particular types, such as payments for TTD benefits, claimant or defense attorney fees, medical-legal exams, or bill review. Payments under the codes of individual data sources were assigned to the standard benefit and expense variables that are defined uniformly across companies and across states.

Generally, the variables were defined based on the following broad categories of benefit and expense payments:

- Indemnity benefits: Payments to a worker for time lost from work because of an occupational injury or illness. These can include payments for the loss of earning capacity or wages or for permanent impairment or disability. Some states use the term *income benefits* to describe the full range of payments to the worker.
- Medical payments: Payments to medical providers for the medical treatment of a worker's occupational injury or illness.
- Benefit delivery expenses: Payments for litigation, adjusting, and other administrative expenses associated with claims handling allocated to an individual claim. This category also includes expenses for medical cost containment and all other payments not defined here as medical or indemnity benefits or vocational rehabilitation provider expenses.
- Vocational rehabilitation costs: Vocational rehabilitation maintenance payments (indemnity benefits
  paid while a worker is receiving vocational rehabilitation services) and vocational rehabilitation service

provider expenses (payments for vocational rehabilitation services provided by outside vendors).

The DBE database allows the breakdown of indemnity benefits and benefit delivery expenses into more detailed categories, as illustrated in <u>Figure TA.1</u> and <u>Table TA.8</u>.

#### **IDENTIFYING LUMP-SUM SETTLEMENT PAYMENTS**

In most states, workers' compensation claims can be settled through an agreement between the payor and the worker. <sup>10</sup> The lump-sum settlement payment to the worker generally terminates the payor's responsibility for pending or future medical and/or indemnity benefits and vocational rehabilitation expenses. There is some variation in how data sources treat lump-sum settlement payments in their transaction systems. A data source may use specific codes to identify a payment as a lump-sum settlement or compromise-and-release payment, or it can simply follow the reporting conventions of rating bureaus to code lump-sum payments as PPD benefits or some other type of indemnity benefit, such as TTD payments. To ensure the accuracy and comparability of the frequency and average costs of lump-sum settlements and other types of indemnity benefits in the CompScope™ Benchmarking reports, and also to report the data in a way that is consistent with the insurance industry's standard of counting lump-sum settlements with PPD benefits, lump-sum settlement payments were identified in the study that were not explicitly coded as such.

According to the WCRI definition, benefit payments in a lump sum are different from lump-sum settlement payments. For example, a payor may pay a lump-sum amount as it starts benefit payments to catch up with payments due from the waiting period or from some other delay. That payment might show up in the transaction data as an initial TTD benefit payment, which is considerably larger than subsequent TTD benefit payments. A lump-sum payment of a past obligation, where the obligation for payment is not in dispute, does not constitute a lump-sum settlement payment according to the WCRI definition. Also excluded from this definition of lump-sum settlements is a death benefit paid to dependents in a lump sum.

To identify lump-sum settlement payments, a lump-sum algorithm was applied that examined the payment data by

- identifying any indemnity payment that the data source coded as a lump-sum settlement in the transaction data and
- identifying the last indemnity payment for each of the individual claims through the transaction data. For the last payment that was on or before the March 31 evaluation date in each year, the algorithm identified any indemnity payments that occurred in the 14 days before the last payment. The algorithm then identified any of those indemnity payments with an amount paid equal to or greater than 4.34 times the worker's TTD rate and equal to or greater than \$5,000.

Although theoretically there can only be one lump-sum settlement for a single claim, it is recognized that

<sup>&</sup>lt;sup>10</sup> Statutes generally spell out the conditions under which lump-sum settlements can be made. In many jurisdictions, the workers' compensation agency or a designated fact finder must approve the actual settlement.

<sup>&</sup>lt;sup>11</sup> This window of indemnity payments was used to capture the full settlement amount. It is common for a payor to issue more than one check to make up the balance of the settlement.

<sup>&</sup>lt;sup>12</sup> The \$5,000 threshold is applied because, quite often, the smaller amounts actually reflect some catch-up payments for other periodic benefits rather than lump-sum settlements for future benefits. The 4.34 multiplier of the weekly rate is to approximate a monthly payment, as it is observed that smaller amounts are often catch-up payments of a weekly TTD benefit.

an accounting system might process the payment differently, and the algorithm described above does account for this possibility. Also, the indemnity payments to the worker and the payments to the worker's attorney that were made within 14 days of the lump-sum payment were combined to get a more accurate total lump-sum settlement.

#### TREATMENT OF MEDICAL LUMP-SUM SETTLEMENTS

Lump-sum payments to close out future obligations are rarely separated into medical or indemnity components. To achieve consistency in the classification of lump-sum payments among the data sources and to develop measures that were more comparable among the states, the lump-sum medical payments were grouped with other lump-sum payments and reported as parts of indemnity benefits. Therefore, medical payments per claim reported in the CompScope™ benchmarking reports do not include payments for medical lump-sum settlements. For 2013/2016 claims with more than seven days of lost time, for example, this different treatment of medical lump sums had a large impact in Florida, where medical payments per claim were 12 percent lower and indemnity benefits per claim were 25 percent higher when medical lump sums were regrouped into indemnity benefits. The impact of regrouping medical lump sums was also noticeable in California, where medical payments per claim were 16 percent lower and indemnity benefits were 16 percent higher. In addition, the evolving requirements of Medicare Set-Aside Arrangements may result in payors' improved ability to separate the medical component of settlements. Changes in data reporting that may affect the way the lump-sum settlements measure is constructed will be continually monitored.

To assess the potential impact of medical lump-sum settlements on medical payments per claim, we conducted a simulation including four scenarios for the medical lump-sum settlements that cannot be identified separately from settlements for indemnity benefits in the data. This simulation includes 14 of the 18 study states. Lump-sum settlements for future medical payments are not permitted in Texas and Massachusetts (under most circumstances) and are not common in practice in Minnesota and New Jersey. These four states are excluded from this simulation. Table TA.9 shows the simulation results for 2013/2016 claims with more than seven days of lost time based on the four scenarios—

- 1. namely, that the frequency of unidentified medical lump-sum settlements is similar to the frequency of identified medical lump-sum settlements in the 14-state median (4 percent);
- 2. similar to the average frequency (6 percent);
- 3. similar to the lowest frequency (1 percent); and
- 4. similar to the highest frequency (22 percent) of identified medical lump-sum settlements of the 14 states.

In each scenario, we assumed that the state average medical lump-sum payment was the same for identified and unidentified lump-sum settlements, and we applied the same frequency of unidentified medical lump-sum settlements to all 14 states. We combined the payments for identified medical lump-sum settlements and the simulated payments for unidentified medical lump-sum settlements to estimate the total payments for medical lump-sum settlements.

We then computed the simulated medical payments per claim as the sum of medical payments per claim, as reported in *CompScope™ Benchmarks*, 17th Edition, and the estimated total payments for medical lumpsum settlements. In all four scenarios, the simulated medical payments per claim with medical lump-sum payments included were higher than the reported medical payments per claim in this study across the 14

states, but there were no material changes to the interstate ranking of the states.

Figure TA.3 shows the comparison of medical payments per claim and the simulated medical payments per claim with medical lump-sum settlements included based on one of the four scenarios—the frequency of unidentified medical lump-sum settlements is similar to the frequency of identified medical lump-sum settlements in the 14-state median. Some states had small changes in their ranking, but the groups of states with higher, lower, and fairly typical medical payments per claim remained the same. For example, Louisiana changed from being the fourth highest on the reported measure to being the second highest on the simulated measure, but it remained in the group with medical payments per claim among the highest of the 14 states on both measures. Note that the interstate rankings of the 14 states are the same in all four scenarios because the same frequency of unidentified medical lump-sum settlements was applied to all states within each scenario.

#### MAPPING INJURY GROUPS

The nature of injury has an impact on how a claim is handled, the type and intensity of medical treatment provided, and the return-to-work outcome. To enhance comparability across states, claims data from different data sources and states were categorized into 12 common injury classifications: (1) spine (back and neck) sprains, strains, and non-specific pain; (2) other sprains and strains; (3) carpal tunnel; (4) fractures, lower extremity; (5) fractures, upper extremity; (6) inflammations; (7) lacerations and contusions; (8) hand laceration; (9) knee derangement; (10) neurological spine pain; (11) skin; and (12) other injuries.

The 12 injury categories are based on two sources: primary International Classification of Diseases (ICD-9 or ICD-10) codes from medical bills and a combination of nature of injury/part of body reported by the insurance claims adjuster.<sup>13</sup> The ICD-9 codes provided the primary source of information in injury mapping.<sup>14</sup> In the event that ICD-9 or ICD-10 codes were not populated or ambiguous about the medical condition or part of body, the nature of injury and part of body were used instead.<sup>15</sup>

#### MAPPING INDUSTRY GROUPS

Frequency and severity of injuries in a state are related to its mix of industries. To make the mix of industries as homogeneous as possible in terms of risk, while maintaining large enough cell sizes for reliable measures, claims were categorized into seven industry groups based on four-digit, industry-standard worker and

<sup>&</sup>lt;sup>13</sup> ICD-9 codes are published in Medicode's *International Classification of Diseases* (1998). The codes, which identify a patient's specific medical condition, are used for reimbursement purposes, so accuracy is critical. The primary ICD-9 code is defined as the one that receives the most payments. Often a single ICD-9 code adequately identifies the need for care. When necessary, codes are listed in the order of importance.

<sup>&</sup>lt;sup>14</sup> Note that beginning on October 1, 2015, many medical providers began using ICD-10 codes in lieu of ICD-9 codes. In this 17th edition of CompScope™ Benchmarks, our data capture claim transactions and medical services rendered through March 31, 2016, and thus our injury classification is based on both ICD-9 and ICD-10 codes from medical bills (depending largely on the timing of the service provided and the billing practice of the provider) as well as the nature of injury/part of body reported by the insurance claims adjuster.

<sup>&</sup>lt;sup>15</sup> This method was not as precise as ICD-9/ICD-10 classifications, as WCRI research has shown that defining injury groups solely on the basis of part-of-body and nature-of-injury codes listed on first reports of injury underestimates the actual proportion of sprains, strains, and certain types of other injuries (Johnson, Baldwin, and Marcus, 1999). However, when ICD-9/ICD-10 codes are not available, this method is the best alternative to determine the injury category.

governing-class codes and standard industrial classification (SIC) codes. 16 For certain industries, incidence rates, published by the BLS, were also used to further classify occupations that are in the same industry but bear very different risk factors.

Table TA.10 shows the major components of each of the seven industry groups—clerical and professional, construction, manufacturing, trade, high-risk services, low-risk services, and other industries. Note that the clerical and professional category includes only clerical and instructional professionals, while health professionals are split into either high-risk or low-risk services. For instance, physicians and dentists were grouped in the low-risk services category, while other health workers, such as nurses and home health care aides, fell into the high-risk services group, based on the injury incidence rates associated with the codes. The other industries category includes agriculture, mining, quarrying, and miscellaneous occupations.

#### **OTHER COMPUTATION METHODS**

#### **EXTREME-VALUE CLAIMS**

A small proportion of claims in the data had unusually large dollar values. While these were legitimate claims, the extreme values contributed disproportionately to the means because of the skewed distribution. To make the data more consistent and comparable over time, a data-capping algorithm was developed to prevent a few outlier observations present only in some years from affecting the overall results of the trend analysis. Data capping was applied to the medical and indemnity variables (both paid and incurred), as well as to the benefit delivery expense variable and its components for both trend analysis and interstate comparisons.

The data cap was established based on claims with more than seven days of lost time, by state and by injury/evaluation years. For medical and indemnity costs, the upper bound for a variable was set as the median of the dollar amounts at the 99th percentile of the variable across claims with the same maturity multiplied by a factor of five. For the benefit delivery expense and its components, the upper bound for a variable was set as the median of the dollar amounts at the 95th percentile of the variable across claims with the same maturity multiplied by a factor of five. Instead of excluding the claims that have values beyond the thresholds, the dollar amount was capped at the threshold if the original value was greater than the threshold.

Table TA.11 shows the percentage of claims that were subject to data capping and how sensitive the average cost measures were to the data caps for 2015/2016 and 2013/2016 claims. The data caps were applied to no more than 1 percent of claims in the 2015 injury year and to up to 2.7 percent of claims in the 2013 injury year across all states. The effects of capping on the key measures were 15 percent or less across most states in both years. Note that, rather than capping total costs directly, the total cost for each claim was recalculated after capping was applied to the underlying variables.

# COMPUTING TOTAL COSTS

In the report, the average total cost per claim was calculated as the sum of the average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation expense per claim.

<sup>&</sup>lt;sup>16</sup> A workers' compensation claim is assigned a classification code based on the injured worker's occupation and the payroll exposure reports of the employer. Classification codes in most states are defined using a common set of basic classifications published by NCCI subject to individual state exceptions, although some states use independently established sets of basic classifications. In Pennsylvania, for example, classification codes are set out in the Pennsylvania Compensation Rating Bureau's Pennsylvania Workers Compensation Manual. To convert the Pennsylvania codes to industry-standard codes, a classification comparison provided to us by the rating bureau was used.

This approach was chosen rather than a direct computation of total costs per claim because data quality screening was applied to each of the four key components. If a component failed the data quality checks for claims from a data source, the data source was excluded from the analysis of that component. It is quite possible for claims from a data source to pass the data quality checks for benefit payments but fail the data quality checks for benefit delivery expenses and/or vocational rehabilitation expenses. If this happens, the measures in each component can be generated from a somewhat different mix of data sources. Because the sample means are the best estimates of the population means for each of the four key components, the best estimate of the average total cost per claim should be the sum of the best estimates of average medical payments, indemnity benefits, benefit delivery expenses, and vocational rehabilitation service provider expenses per claim.

#### **RESERVES AND INCURRED VARIABLES**

CompScope™ benchmarking measures of claim costs are based on both paid and incurred benefits. Incurred benefits are the sum of all benefits paid to date plus outstanding reserves (estimated amounts set by the data source to cover benefits that are expected to be paid in the future on open claims). Periodically, claims adjusters review each claim and adjust the reserves based on an evaluation of the claim's progress. These reviews are tracked and annotated in the reserve history files. Because incurred benefits include an estimated component, the actual cost of a closed claim will be different in almost all cases from the reserve established initially on the claim. The incurred benefit variables were derived from the reserve history file. The variables in the DBE database do not include reserves that are incurred but not reported or other bulk reserves. Both the reserve and the incurred amounts were established as of each evaluation date. If a claim was closed as of the specific evaluation date, the outstanding reserve variables were set equal to zero and the amount of incurred benefits would equal the amount paid. When analyzing performance measures on an incurred basis, it is important to note that individual claim reserves reflect the experience of each claims adjuster. Adjusters need to consider several factors when setting claim reserves, including the anticipated cost of medical care, the severity and duration of the disability, and the services the worker may need to recover and return to work. The aggregated incurred values per claim were not developed to their ultimate value.

# ESTIMATING THE WORKER'S WEEKLY TTD RATE

The worker's weekly benefit rate was used in the benchmarking analyses to derive estimates of claim duration and to determine whether a lump-sum settlement had been made. To ensure the accuracy of the worker's weekly benefit rate, data on the worker's average weekly wage and the state's formula for calculating the TTD rate were used to derive the WCRI worker's weekly benefit rate. When the completeness and validity of the wage data were questionable, the worker's weekly benefit rate, as reported by the data source, was used to supplement it if the result of the quality assurance process indicated that the data were adequate. <u>Table TA.12</u> shows the benefit rates in effect in each state in 2010 through 2016.

#### **ESTIMATING THE DURATION OF BENEFITS**

Ideally, the duration of a claim is calculated as the number of days from the first date of the disability to the date the worker returns to work (given that the claim was closed). Unfortunately, those data were not consistently available. To mitigate the limitations of the data, two duration variables were created: the paid and the incurred/expected duration of temporary disability. The paid temporary disability duration was

calculated as total TTD payments plus TPD payments for a claim divided by the WCRI-derived weekly TTD rate for the claim. The incurred/expected indemnity duration was calculated as total incurred indemnity benefits (less death benefit) for a claim divided by the WCRI-derived weekly TTD benefit rate for the claim. Adjustments for the statutory waiting and retroactive period were made. These adjustments added the number of days under each state's statutory waiting period to the duration of temporary disability when temporary disability benefits were ended before the state's statutory retroactive period. 18

#### **DEFENSE ATTORNEY PAYMENTS**

Defense attorneys may routinely be retained for minor tasks and assignments, such as drafting lump-sum settlement agreements. Therefore, a \$500 threshold was applied to the definition of defense attorney involvement to enable a focus on substantial defense attorney involvement. The \$500 threshold was adjusted annually by the annual change in the Consumer Price Index, using 2008 as the base year.<sup>19</sup>

#### ANALYZING A SUBSET OF CLAIMS WITH MORE THAN SEVEN DAYS OF LOST TIME

The waiting period is three days in California, Illinois, Iowa, Minnesota, and Wisconsin; five days in Massachusetts; and seven days in Arkansas, Florida, Georgia, Indiana, Kentucky, Louisiana, Michigan, New Jersey, North Carolina, Pennsylvania, Texas, and Virginia. The different waiting periods for indemnity benefits across states directly affect the ratio of medical-only to indemnity claims, measures of claim frequency, and average indemnity payments per claim, thus affecting the comparability of the measures. To increase the validity of interstate comparisons, the analysis was focused on the subset of indemnity claims with more than seven days of lost time.

Table TA.13 contrasts the percentage of indemnity claims based on each state's statutory waiting period with the percentage of claims with more than seven days of lost time, with the latter percentage being lower than the former for states where the waiting period is less than seven days. Table TA.14 further shows the impact of selecting a subset of claims with more than seven days of lost time on several key measures in the six states where the waiting period is less than seven days. In California, Illinois, Iowa, Minnesota, and Wisconsin (states with three-day waiting periods), the selection of claims with more than seven days of lost time resulted in the exclusion of 7–17 percent of indemnity claims that had four to seven days of lost time. This exclusion increased the average duration of temporary disability (by 8–18 percent), the average medical payment per claim (by 7–17 percent), and the average indemnity payment per claim (by 8–20 percent). In Massachusetts (a state with a five-day waiting period), 7 percent of indemnity claims (those with six to seven days of lost time) were excluded, which resulted in the average duration of temporary disability increasing by 7 percent, the average medical payment per claim increasing by 6 percent, and the average indemnity payment per claim increasing by 7 percent. The selection of this subset of claims has no effect on measures in states with a seven-day waiting period. In the 17th edition reports, the phrase, "claims with more than seven

<sup>&</sup>lt;sup>17</sup> Note that this approach compresses the duration of claims by assuming that all indemnity benefits are paid at precisely 100 percent of the claimant's weekly TTD rate. Also, note that the duration is expanded for claims with indemnity payments in excess of the weekly TTD rate (for example, claims with simultaneous specific-loss benefit payments and TTD payments).

<sup>&</sup>lt;sup>18</sup> If the estimated duration exceeded the retroactive period, there was no need to add the waiting period because the numerator in the calculation included the retroactive payments associated with the waiting period.

<sup>&</sup>lt;sup>19</sup> The Consumer Price Index for all U.S. urban consumers and for all items published by the Bureau of Labor Statistics was used.

days of lost time," is used wherever performance measures based on this subset of claims are compared.

#### **CASE-MIX ADJUSTMENTS: INDUSTRY, INJURY, AND WAGES**

The comparability of the performance measures was enhanced for interstate comparisons by controlling for differences in injury and industry mix and wage levels across the states.

#### ADJUSTING FOR INJURY AND INDUSTRY CASE MIX

Injury and industry case-mix adjustment is a critical step in ensuring data comparability. Workers in different industries have different risks of injury and different severities of injury when accidents occur. To the extent that two states have very different mixes of injuries and industries, all else being equal, one would also expect the frequency, costs, and duration of workers' compensation claims to be different. The goal of the injury and industry mix adjustment is to adjust the sample claims in each state given the injury and industry mix and thus minimize the differences across states due to different injury/industry mixes.

To ensure equal representation of states in the WCRI sample (i.e., that no state is over- or underrepresented in the sample due to its size), we weighted each state to have an equal share in the pooled
sample.<sup>20</sup> The next step determined the distribution of claims by injury type and industry category for the
pooled sample of 18 states and for the claims sample of each individual state for all claims with more than
seven days of lost time. Then, a unique set of injury and industry weights for each state was calculated as the
ratio of two proportions: the proportion of claims in each injury/industry category for the pooled sample of
claims for all 18 states in the numerator and the proportion of claims in each injury/industry category for the
sample of claims in each state in the denominator. Finally, in calculating the performance measures, the
injury/industry weights were used to adjust the sample of claims in each state. After the adjustment, the
measures were based on an injury and industry mix that is constant across the states. Table TA.15 shows the
distribution of claims with more than seven days of lost time across injury and industry categories for the 18
pooled states.

It is important to note that the industry groups cover a broad spectrum of risk. This is especially true of manufacturing. The risk of injury inherent in a company that builds computer chips, for example, is substantially smaller than that risk in a steel manufacturing plant. A further disaggregation within each industry group could potentially increase the accuracy of the case-mix adjustment. However, despite the large number of claims in the DBE database, adjusting for industry at a finer level of detail than the current 84 injury/industry categories would make the cell sizes too small to allow for reliable analysis.

#### **ADJUSTING FOR WAGES**

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Wages are related to both worker and employer characteristics and can affect the cost and duration of claims. Higher-wage workers tend to be older, more experienced, better educated, and more skilled. Furthermore, higher-wage workers tend to work for larger employers engaged in capital-intensive production in hazardous industries and are more likely to be unionized. Wage-level adjustments can be used to control, at least in part, for differences in the characteristics of workers, employers, and the industry sub-groups within the industry

<sup>&</sup>lt;sup>20</sup> The distribution of claims across states in our sample was also weighted using sampling weights (see the prior section on the DBE database for details) and market segment weights (discussed earlier) to make the sample distribution representative of the state market.

categories (e.g., textiles versus vehicles sub-groups in the manufacturing industry category).

Adjustments for interstate differences in wages were made using a methodology similar to that underlying the injury and industry case-mix adjustment. First, the average weekly wage for claims in each injury/industry category in the pooled sample and in each state was calculated. Then, the ratio of the average weekly wage between the pooled sample and a state was calculated. The wage-adjustment factors are conditional on the state and the injury/industry category of the claims. For example, the pooled-state wage for workers with spine sprains and strains in manufacturing was \$643 per week for 2015/2016 claims with more than seven days of lost time (Table TA.16). For a similar set of claims in Georgia, the average wage was \$601 per week, so the wage-adjustment factor for manufacturing workers with spine sprains and strains in Georgia was set to 1.07 (\$643 divided by \$601). In Michigan, the average wage of manufacturing workers with spine sprains and strains was \$707 per week, and thus, the wage-adjustment factor for that group of claims in Michigan was 0.91 (\$643 divided by \$707). Adjustments were made for wage differences in the indemnity benefit and total cost per claim measures in this report. Table TA.17 lists the measures that are wage adjusted for the purposes of interstate comparisons.

#### **ESTIMATING THE EFFECTS OF THE ADJUSTMENTS**

Table TA.18 illustrates the cumulative effects of selecting a subset of claims with more than seven days of lost time and applying the injury/industry case-mix adjustment and the wage adjustment to the average indemnity benefit per claim. Selection of a subset of claims with more than seven days of lost time had an effect on the average payment per claim in the states with waiting periods of less than seven days—California, Illinois, Iowa, Massachusetts, Minnesota, and Wisconsin—raising the average indemnity payment per claim by 7–20 percent and the average medical payment per claim by 6–17 percent for 2015/2016 claims. Similar effects were seen for claims with 36 months of maturity (2013 injury year). Claim subset selection had no impact on the average benefit per claim in states with seven-day waiting periods.

The effect of the injury/industry case-mix adjustment on both average indemnity benefit and the average medical benefit was 8 percent or less for all reported states regardless of claim maturity. The effect of the wage adjustment on the average indemnity benefit per claim was 15 percent or less across all states for claims with either maturity. Note that the wage adjustment had a relatively larger upward effect in states with lower average weekly wages. For example, in Florida, the indemnity benefit for workers injured in 2015, at an average maturity of 12 months, was \$7,001. The adjustment for injury/industry group increased the estimate by 2 percent to \$7,118, and the wage adjustment raised it by 13 percent to \$8,011. This reflects that the Florida distribution of injuries by industry was fairly typical, but the wages were lower than typical. Similar adjustment results were observed in Georgia, Indiana, and North Carolina. The average weekly wages of injured workers in these states were relatively lower among the 18 states. On the other hand, the wage adjustment had a relatively larger downward effect in states with higher average weekly wages, such as Massachusetts and New Jersey.

# **REPORTING TRENDS OF PERFORMANCE MEASURES**

The trends reported in the CompScope™ studies were based on the data weighted to represent the full workers' compensation insurance market in each state. Adjustments for the interstate differences in injury and industry mix and wages were not made, since the unadjusted performance measures provide the most

relevant information on how the system performed in each state over time. Similarly, the trends in cost measures reported in this study were not adjusted for inflation because unadjusted numbers are more comparable to the experience of the system stakeholders in each state. For readers interested in general inflation nationwide, several measures are provided in <u>Tables TA.19</u> and <u>TA.20</u>.

Table TA.19 shows four national measures of inflation published by the U.S. Department of Labor's Bureau of Labor Statistics. The Consumer Price Index (CPI) measures changes in the price to consumers of a fixed basket of goods and services, and the Producer Price Index (PPI) measures prices paid by businesses for a fixed basket of materials and utilities required to produce consumer goods and services. Specifically, the CPI-U covers prices paid by urban consumers for a comprehensive list of goods and services, and the CPI-M covers prices paid for medical care services. The PPI-AMUM covers the prices for all industries, and PPI-ASHC covers the prices paid by selected health care industries (such as offices of physicians, hospitals, offices of dentists, medical and diagnostic laboratories) nationwide. For readers interested in inflation of medical costs, Table TA.20 shows trends based on another WCRI study, Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC), which monitors changes in actual prices paid for medical professional services for treating injured workers in 31 states. The WCRI MPI-WC focuses on medical services that are commonly provided to injured workers—largely related to diagnosis and treatment of trauma and orthopedic conditions. Other price indices (for example, the ones shown on Table TA.19) cover all medical services provided to the U.S. population. Many types of services have little or no relevance for tracking medical prices for the care provided to injured workers.

Furthermore, two-tailed t-tests for differences in the means of key performance measures between two samples of select injury/evaluation years were conducted to test if the changes over time were statistically significant. The null hypothesis was that there is no difference between the two means. The hypothesis was tested at the 80 percent confidence level. Similar tests were performed on changes in the proportions of claims. In Table 3 in each state report, changes in the values between two years appear in italics if no statistically significant change occurred. Note that for some numbers, the percentage change was large but not statistically significant, usually because of the large variance and/or small sample size associated with the means.

#### OTHER TECHNICAL AND METHODOLOGICAL ISSUES

#### **PAID-TO-INCURRED RATIO**

In this study, claims from each state were examined as of the common evaluation date of March 31 of each study year. It is possible that two states could have exactly the same number of claims with more than seven days of lost time, but one might have a higher average total cost per claim because it made larger amounts of payments on those claims within the evaluation period. <u>Table TA.21</u> shows the paid-to-incurred ratio for medical and indemnity benefits for each of the 18 study states. The interstate differences may have resulted from several factors, including the benefit structure, the process for paying and determining PPD benefits, litigation rates, the dispute resolution process, and different payor practices.

#### **NONSUBSCRIBERS IN TEXAS**

Texas is the only state included in this report where workers' compensation coverage is elective. Employers in Texas can choose not to subscribe to workers' compensation insurance, assuming responsibility for providing

medical and indemnity benefits to injured workers through other mechanisms. According to the most recently available estimates published by the Texas Department of Insurance (TDI), about 22 percent of employers in the state, employing 18 percent of the state's workforce, do not carry workers' compensation coverage. A survey conducted by the TDI shows that 23 percent of nonsubscribers pay occupational benefits to injured workers.

Do the CompScope™ results represent the whole market in Texas, including all subscribers and nonsubscribers? Because no reliable data are available to compare the average benefit paid to injured workers by subscribers and nonsubscribers, the average benefits per claim were simulated, under certain assumptions, as were the data for both subscribers and nonsubscribers. Table TA.22 shows the results of the simulation for the 2015/2016 and 2013/2016 claims. The comparison was based on one of four assumptions made for simulating the nonsubscribers' data—namely, that the results of the Texas nonsubscribers were similar to the average result of the 18 states, similar to the results in the lowest-cost state, similar to the results in the median study state, and fairly similar to the median results of Texas subscribers. As the table shows, for 2015/2016 claims, if the average paid benefit per claim for the nonsubscribers is similar to that in the lowest-cost state or the median of the Texas subscribers, the overall state average paid benefit per claim, based on Texas subscribers only, will be higher than that based on the data for both subscribers is similar to the average or median of all 18 states, the overall state average paid benefit per claim, based on Texas subscribers only, will be lower than that based on the data for both subscribers by 3 or 4 percent.

# THE DETAILED BENCHMARK/EVALUATION DATABASE: DATA COLLECTION, PREPARATION, AND QUALITY ASSURANCE

The CompScope™ benchmarking study uses data from the DBE database. To help readers understand the underlying data for the benchmarking reports, this section discusses in detail the processes used to collect the data from data sources, the methods used to make the data suitable for research and analysis purposes, and the actions taken to ensure the quality of the data.

#### **SCOPE OF THE DATA COLLECTION**

To benchmark the performance of workers' compensation systems, WCRI collected data that give a reasonably timely and accurate basis for measuring the costs, the duration of payments, percentage of claims with different types of payments and/or expenses, and timeliness of indemnity payments, among other measures. Also collected was the information needed to adjust the data for variations in injury and industry mix across data sources and states. Data were gathered from a wide array of sources, including national and regional insurers, third-party administrators, and state funds. This diversity ensures that the analysis measures were substantially representative of the entire workers' compensation system in each state.

Data for claims with injuries between October 1, 1995, and September 30, 2015, evaluated as of March 31 of each year from 1996 to 2016, were collected. The DBE database included 43.5 million open and closed claims from 27 data sources and 36 states. The data represented 40–74 percent of the total claims in each reported state for each injury year during the study period, making the database a very powerful tool for answering a variety of research questions.

Although each data source has a unique system for collecting information on workers' compensation

claims, WCRI collected the following information from each source:

- Basic claim data: information about the status of the claim, worker and injury characteristics, and the
  dates on which certain events occur over the life of the claim (the date of injury, the date of disability, the
  date of insurer notice of injury)
- Policy (or employer) data: information about the policyholder (payroll, standard industrial code, governing-class code, and other exposure details)
- Detailed payment transactions: the record of the benefit payments, allocated loss adjusting expenses, and credits made on the claim
- Detailed reserve history: information about the various reserves that have been set on the claim
- Medical bills: information on each medical bill for each claim, including the details on medical services provided

WCRI used all of this information to create the variables needed for the benchmarking analyses.

## PRIVACY AND CONFIDENTIALITY

The DBE is devoid of individual identifiers to ensure the confidentiality of personal records. WCRI also takes all required steps to protect the privacy of injured workers and employers in this database.

#### **CONSTRUCTING THE WCRI ANALYTIC DATA SETS**

Each data source gave WCRI raw data from its automated files. WCRI converted each company's raw data files to a SAS-readable format and segmented the files into state-specific files. <sup>21</sup> These files contain all the data elements necessary to create the analytic data sets. Using company-specific programs, these elements were converted into analytic data sets by state and by injury year and evaluation date combination.

#### **DATA QUALITY CHECKS**

WCRI designed a multistage process for reviewing the quality of the data underlying the variables used in the CompScope™ reports. The data quality was routinely validated by identifying missing observations and errors in claims submitted by data sources that might have affected the key benchmarking measures. The method for validating the data quality involved running automated checks for logical inconsistencies, verifying replacement values, and producing exception reports that identified outliers falling outside the statistically determined tolerance range. Then WCRI researchers reviewed the exception reports and investigated data anomalies. Depending on the results of the investigation, error codes were generated in the database to identify and exclude a variable for a specific data source in the calculation of an affected measure for a specific injury/evaluation year and state.

The data submitted to WCRI underwent the following quality checks:

- Automated quality and logic checks: to identify inconsistencies in the key data fields
- Replacement checks: to compare the data submitted in the current data collection round with the data

<sup>&</sup>lt;sup>21</sup> SAS is the statistical analysis software package WCRI uses to analyze data.

previously submitted and identify and investigate any major differences in the volume of claims, the value of payments, and other claim characteristics

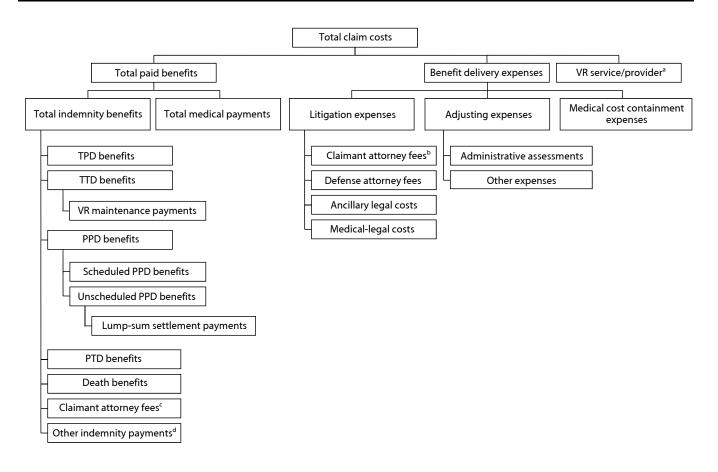
- Exception reports
  - Fatal and large-value claims validation: to identify unlikely fatal and large-value claims in a state by injury year and data provider
  - Missing and bias tests: the missing test examines variables for missing observations from a data provider in each state. The bias test evaluates the material impact of including or excluding claims from a data provider with partially missing observations for a variable on the mean benefit payment in a market segment
  - Intercompany comparisons: to identify variables from a data source where the mean values are statistically inconsistent with the mean values for the same variable from other data sources
- Company data profiles: to give each data source an opportunity to review their own data for each state
  and point out any general inconsistencies found between WCRI's measures and the data source's own
  measures
- External validity checks<sup>22</sup>
- Duplicate claims<sup>23</sup>

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<sup>&</sup>lt;sup>22</sup> See the "Validating the Data with External Sources" section for a more detailed discussion.

<sup>&</sup>lt;sup>23</sup> See the "Claim Exclusions for Multistate Analysis" section for a more detailed discussion.

Figure TA.1 WCRI Benefit and Expense Variables



<sup>&</sup>lt;sup>a</sup> We treat vocational rehabilitation provider expenses as a separate category; some readers might regard them as benefits, others as expenses.

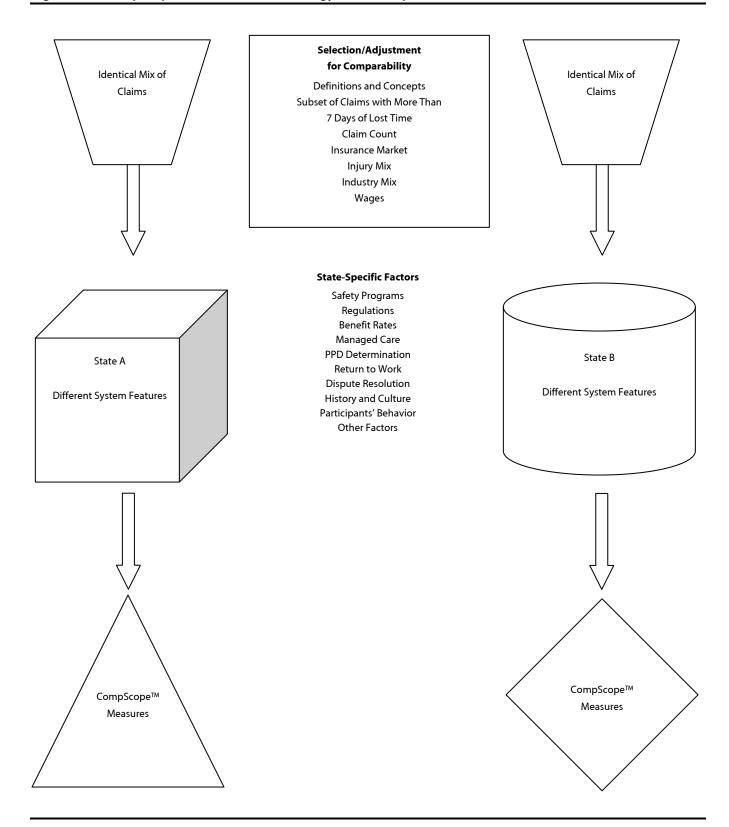
Key: PPD: permanent partial disability; PTD: permanent total disability; TPD: temporary partial disability; TTD: temporary total disability; VR: vocational rehabilitation.

<sup>&</sup>lt;sup>b</sup> Claimant attorney fees that are the worker's responsibility.

<sup>&</sup>lt;sup>c</sup>Claimant attorney fees that are the payor's responsibility.

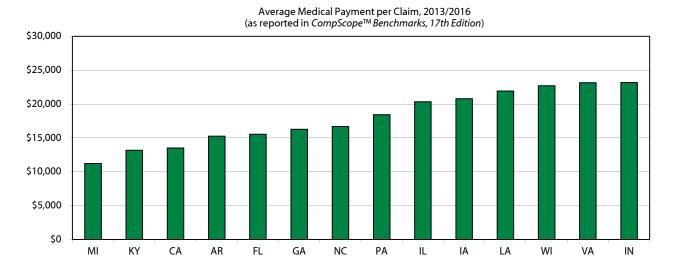
<sup>&</sup>lt;sup>d</sup> Indemnity payments that are not elsewhere classified, including penalties and awards.

Figure TA.2 CompScope™ Multistate Methodology: The Concept

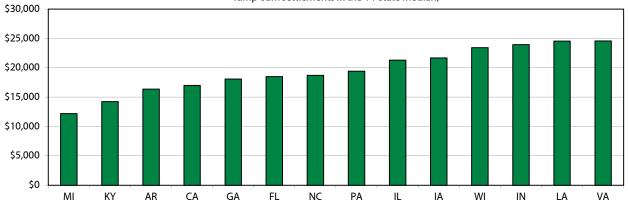


Key: PPD: permanent partial disability.

Figure TA.3 Comparison of Medical Payments per Claim<sup>a</sup> and Simulated Medical Payments per Claim with Medical Lump-Sum Settlements Included <sup>b</sup> in 14 States,<sup>c</sup> Claims with More Than 7 Days of Lost Time, 2013/2016



Simulated Average Medical Payment per Claim Including Medical Lump-Sum Settlements, 2013/2016 (frequency of unidentified medical lump-sum settlements is assumed to be similar to the frequency of identified medical lump-sum settlements in the 14-state median)



Note: 2013/2016 refers to claims with injuries arising from October 1, 2012, to September 30, 2013, evaluated as of March 31, 2016. Results shown in these figures are based on claims with more than seven days of lost time, and they reflect adjustment for injury and industry mix.

<sup>&</sup>lt;sup>a</sup> In the CompScope™ benchmarking studies, all lump-sum payments are reported as indemnity payments to achieve consistency and comparability in this measure across all states because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. Therefore, medical payments per claim reported in *CompScope™ Benchmarks*, 17th Edition do not include payments for medical lump-sum settlements.

<sup>&</sup>lt;sup>b</sup> Simulated medical payments per claim include medical payments per claim as reported in CompScope<sup>™</sup> Benchmarks, 17th Edition and the estimated payments for medical lump-sum settlements, which include both medical lump-sum payments that can be identified in the data and the simulated payments for medical lump-sum settlements that cannot be separately identified. The results shown in the bottom figure are based on a simulation that assumes the frequency of unidentified medical lump-sum settlements is similar to the frequency of identified medical lump-sum settlements in the 14-state median.

<sup>&</sup>lt;sup>c</sup> Only 14 study states are included in these figures. Lump-sum settlements for future medical payments are not permitted in Texas and Massachusetts (under most circumstances) and are not common in practice in Minnesota and New Jersey. These fours states are excluded from this simulation.

**Table TA.1 Defining the Performance Measures** 

Performance Measure	Definition							
Time to notice of injury and first indemnity payment								
Date of injury to payor notice of injury	Cumulative percentage of lost-time claims by period based on the number of days from the date of injury to the date of payor notification of injury.							
Date of employer notice to payor notice of injury	Cumulative percentage of lost-time claims by period based on the number of days from the date of employer notification to the date of payor notification of injury.							
Date of injury to first indemnity payment	Cumulative percentage of lost-time claims by period based on the number of days from the date of the first indemnity payment.							
Date of payor notice of injury to first indemnity payment	Cumulative percentage of lost-time claims by period based on the number of days from the date of payor notification of injury to the date of the first indemnity payment.							
Average benefit payments and claim costs								
All paid claims								
Total cost per claim	The sum of the average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for all paid claims.							
Benefit payment per claim	The sum of medical payments and indemnity benefits for all paid claims, divided by the total number of all paid claims.							
Medical payment per claim	The sum of medical payments for all paid claims, divided by the total number of all paid claims.							
Indemnity benefit per claim <sup>a</sup>	The sum of indemnity benefits for all paid claims, divided by the total number of all paid claims.							
Benefit delivery expense per claim <sup>b</sup>	The sum of benefit delivery expenses for all paid claims, divided by the total number of all paid claims.							
Total incurred cost per claim	The sum of paid and reserved average medical benefit, average indemnity benefit and average expense per claim for all claims.							
Incurred medical benefit per claim	The sum of paid and reserved medical benefits for all claims, divided by the total number of all claims.							
Incurred indemnity benefit per claim	The sum of paid and reserved indemnity benefits for all claims, divided by the total number of all claims.							
Percentage of claims with more than 7 days of lost time	The number of claims with more than 7 days of lost time, divided by the total number of a paid claims.							
Claims with more than 7 days of lost time								
Total cost per claim	The sum of the average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for lost-time claims.							
Benefit payment per claim	The sum of medical payments and indemnity benefits for lost-time claims, divided by the total number of lost-time claims.							
Medical payment per claim	The sum of medical payments for lost-time claims, divided by the total number of lost-time claims.							
Indemnity benefit per claim	The sum of indemnity benefits for lost-time claims, divided by the total number of lost-time claims.							
Benefit delivery expense per claim <sup>b</sup>	The sum of benefit delivery expenses for lost-time claims, divided by the total number of lost-time claims.							
Total incurred cost per claim	The sum of paid and reserved average medical benefit, average indemnity benefit and average expense per claim for lost-time claims.							
Incurred medical benefit per claim	The sum of paid and reserved medical benefits for lost-time claims, divided by the total number of lost-time claims.							
Incurred indemnity benefit per claim	The sum of paid and reserved indemnity benefits for lost-time claims, divided by the total number of lost-time claims.							

Table TA.1 Defining the Performance Measures (continued)

Performance Measure	Definition
Average benefit payments and claim costs	
Temporary disability claims <sup>c</sup>	
Temporary disability claims as a percentage of all lost-time claims	The number of temporary disability claims, divided by the total number of lost-time claims.
Total cost per claim	The sum of average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for claims classified as temporary disability claims.
Benefit payment per claim	The sum of medical payments and indemnity benefits for claims classified as temporary disability claims, divided by the total number of temporary disability claims.
Medical payment per claim	The sum of medical payments for claims classified as temporary disability claims, divided by the total number of temporary disability claims.
Indemnity benefit per claim	The sum of indemnity benefits for claims classified as temporary disability claims, divided by the total number of temporary disability claims.
Temporary disability payment per temporary disability claim	The sum of temporary disability payments, divided by the total number of lost-time claims classified as temporary disability claims.
Permanent partial disability (PPD) claims	
PPD claims as a percentage of all lost-time claims	The number of PPD claims, divided by the total number of lost-time claims.
Total cost per claim	The sum of average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for claims classified as PPD claims.
Benefit payment per claim	The sum of medical payments and indemnity benefits for claims classified as PPD claims, divided by the total number of PPD claims.
Medical payment per claim	The sum of medical payments for claims classified as PPD claims, divided by the total number of PPD claims.
Indemnity benefit per claim	The sum of indemnity benefits for claims classified as PPD claims, divided by the total number of PPD claims.
PPD payment per PPD claim	The sum of PPD payments, divided by the total number of lost-time claims classified as PPD claims.
Temporary disability payment per PPD claim	The sum of temporary total disability and temporary partial disability payments for lost-time claims classified as PPD claims, divided by the total number of PPD claims.
Claims with lump-sum settlements as a percentage of lost-time claims	The number of claims with lump-sum settlements, divided by the total number of lost-time claims (see Table TA.8 for how lump-sum settlements are defined).
Lump-sum settlement payment per claim with lump-sum settlements	The sum of lump-sum settlement payments, divided by the total number of claims with lump-sum settlements.
Three categories of PPD/lump-sum claims	
Claims with lump-sum settlements but no periodic PPD payments as a percentage of lost-time claims	The number of claims with lump-sum settlements but no periodic PPD payments, divided by the total number of lost-time claims (see Table TA.8 for how lump-sum settlements are defined).
Lump-sum settlement payment per claim with lump-sum settlement but no periodic PPD payments	The sum of lump-sum settlement payments for claims with lump-sum settlements but no PPD payments, divided by the total number of claims with lump-sum settlements but no periodic PPD payments.
Claims with periodic PPD payments as a percentage of lost-time claims	The number of claims with periodic PPD payments, divided by the total number of lost-time claims.
PPD payment per claim with periodic PPD payments	The sum of PPD payments for claims with periodic PPD payments (only), divided by the total number of claims with periodic PPD payments (only).
Claims with both lump-sum settlements and periodic PPD payments as a percentage of lost-time claims	The number of claims with both lump-sum settlements and periodic PPD payments, divided by the total number of lost-time claims.
PPD and lump-sum payment per claim with both lump-sum settlement and periodic PPD payments	The sum of lump-sum settlements and PPD payments for claims with both lump-sum settlements and periodic PPD payments, divided by the total number of claims with both lump-sum settlements and periodic PPD payments.

Table TA.1 Defining the Performance Measures (continued)

Performance Measure	Definition
Average benefit payments and claim costs	
Permanent total disability claims <sup>d</sup>	
Permanent total disability claims as a percentage of all lost-time claims	The number of permanent total disability claims, divided by the total number of lost-time claims.
Total cost per claim	The sum of average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for claims classified as permanent total disability claims.
Benefit payment per claim	The sum of medical payments and indemnity benefits for claims classified as permanent total disability claims, divided by the total number of permanent total disability claims.
Medical payment per claim	The sum of medical payments for claims classified as permanent total disability claims, divided by the total number of permanent total disability claims.
Indemnity benefit per claim	The sum of indemnity benefits for claims classified as permanent total disability claims, divided by the total number of permanent total disability claims.
Permanent total disability payment per permanent total disability claim	The sum of permanent total disability payments for lost-time claims classified as permanent total disability claims, divided by the total number of permanent total disability claims.
Fatality claims <sup>d</sup>	
Fatality claims as a percentage of all lost-time claims	The number of fatality claims, divided by the total number of lost-time claims.
Total cost per claim	The sum of average medical benefit, average indemnity benefit, average benefit delivery expense, and average vocational rehabilitation provider expense per claim for claims classified as fatality claims.
Benefit payment per claim	The sum of medical payments and indemnity benefits for claims classified as fatality claims, divided by the total number of fatality claims.
Medical payment per claim	The sum of medical payments for claims classified as fatality claims, divided by the total number of fatality claims.
Indemnity benefit per claim	The sum of indemnity benefits for claims classified as fatality claims, divided by the total number of fatality claims.
Fatality payment per fatality claim	The sum of fatality payments, divided by the total number of lost-time claims classified as fatality claims.
Vocational rehabilitation provider costs and frequency <sup>e</sup>	
Percentage of lost-time claims with vocational rehabilitation provider expenses	The number of lost-time claims with vocational rehabilitation provider expenses, divided by the total number of lost-time claims.
Average vocational rehabilitation provider expense per lost-time claim with vocational rehabilitation provider expenses	The sum of payments for vocational rehabilitation provider expenses, divided by the total number of lost-time claims with vocational rehabilitation provider expenses.
Attorney involvement and benefit delivery expenses <sup>b</sup>	
Percentage of lost-time claims with defense attorney payments	The number of lost-time claims with defense attorney payments greater than \$500, divided by the total number of lost-time claims.
Average defense attorney payment per lost-time claim with defense attorney payments	The sum of payments to defense attorneys of more than \$500, divided by the total number of lost-time claims with defense attorney payments greater than \$500.
Percentage of lost-time claims with medical cost containment expenses	The number of lost-time claims with medical cost containment expenses, divided by the total number of lost-time claims.
Average medical cost containment expense per lost-time claim with medical cost containment expenses	The sum of payments for medical cost containment expenses, divided by the total number of lost-time claims with medical cost containment expenses.
Percentage of lost-time claims with medical-legal expenses	The number of lost-time claims with medical-legal expenses, divided by the total number of lost-time claims.
Average medical-legal expense per lost-time claim with medical-legal expenses	The sum of payments for medical-legal expenses, divided by the total number of lost-time claims with medical-legal expenses.
Duration of temporary disability	
Duration of temporary disability (weeks)	The sum of temporary disability payments (temporary total disability plus temporary partial disability), divided by the weekly benefit rate of the injured worker.
Percentage of lost-time claims by duration	The cumulative percentage of lost-time claims with equivalent weeks of temporary disability payments (temporary total disability plus temporary partial disability) within each specified period.

#### Table TA.1 Defining the Performance Measures (continued)

<sup>a</sup>This table shows the conceptual logic of measures from the CompScope™ report. The report includes measures of (paid and incurred) total costs per all paid claims and total benefits per all paid claims, and both of those measures include indemnity benefits. Indemnity benefits per all paid claims is included in this table to show the logic, even though the measure is not included separately in the report. As explained in this technical appendix, indemnity benefits are only reported for claims with more than seven days of lost time. This measure is more meaningful than for all paid claims, because the vast majority of those claims have no indemnity component.

Key: PPD: permanent partial disability.

<sup>&</sup>lt;sup>b</sup> For benefit delivery expense and its component measures, we included data where the medical cost containment strategies were used and the relevant expenses were allocated to the claim. In other words, if a data source did not allocate some or all of the expenses related to its medical cost containment strategies, we excluded it from this report. Similarly, if a data source did not allocate some or all of the litigation-related expenses to the claim, we excluded it from this report as well.

<sup>&</sup>lt;sup>c</sup> Limitations of the data prevent us from reporting statistics for temporary total disability and temporary partial disability claims separately.

<sup>&</sup>lt;sup>d</sup> Limitations of the data prevent us from reporting statistics for permanent total disability claims and fatality claims.

e Vocational rehabilitation maintenance benefits paid to injured workers are captured as part of indemnity benefits in this report.

Table TA.2 Average Claim Maturities of CompScope™ Performance Measures

	Valuation Date											
Injury Date	12-Month Maturity	24-Month Maturity	36-Month Maturity	48-Month Maturity	60-Month Maturity	72-Month Maturity						
October 1, 2009–September 30, 2010	March 31, 2011	March 31, 2012	March 31, 2013	March 31, 2014	March 31, 2015	March 31, 2016						
October 1, 2010 – September 30, 2011	March 31, 2012	March 31, 2013	March 31, 2014	March 31, 2015	March 31, 2016							
October 1, 2011–September 30, 2012	March 31, 2013	March 31, 2014	March 31, 2015	March 31, 2016								
October 1, 2012–September 30, 2013	March 31, 2014	March 31, 2015	March 31, 2016									
October 1, 2013–September 30, 2014	March 31, 2015	March 31, 2016										
October 1, 2014–September 30, 2015	March 31, 2016											

Table TA.3 Claim Volume by State, Total Population Versus WCRI Sample, 2015/2016

	Number of Paid and	Population Represented					
State	Total Population <sup>a</sup>	WCRI Sample <sup>b</sup>	- by WCRI Sample (percentage)				
Arkansas	24,868	10,414	42%				
California	496,212	242,696	49%				
Florida	236,893	111,421	47%				
Georgia	94,702	46,319	49%				
Illinois	146,193	76,326	52%				
Indiana	92,403	47,742	52%				
Iowa	57,422	23,884	42%				
Kentucky	63,058	31,012	49%				
Louisiana	38,129	18,639	49%				
Massachusetts	72,776	40,132	55%				
Michigan	120,539	58,029	48%				
Minnesota	89,863	43,913	49%				
New Jersey	104,516	64,240	61%				
North Carolina	97,134	50,995	52%				
Pennsylvania	197,985	91,790	46%				
Texas	190,487	140,048	74%				
Virginia	72,409	44,000	61%				
Wisconsin	108,095	42,804	40%				
Total	2,303,685	1,184,404	51%				

*Note*: 2015/2016 refers to the claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> Data on the total population of claims in each state are generally based on the number of insured claims, weighted to account for self-insured claims or estimated as noted in Table TA.4.

<sup>&</sup>lt;sup>b</sup> Data on the total population of paid claims were not available in all states. For the purpose of comparing the volume of claims in the sample to the volume of claims in the population, we defined the number of claims in the WCRI sample as claims with payments or reserves greater than zero. That allowed for more consistent comparison with the population data.

Table TA.4 Estimated Distribution of Claims in the Population by Insurance Market Segment, 2010/2011 to 2015/2016

a. First 9 of 18 study	states																	
	AR		CA		FL		GA		IA		IL		IN		кү		LA	
Market Segment	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
2010/2011 claims																		
Private voluntary	21,465	70	292,371	61	169,737	74	74,867	74	45,649	78	113,462	74	85,919	88	40,302	63	25,714	60
Private residual	353	1	0	0	74	0	453	0	886	2	1,162	1	1,619	2	0	0	0	0
State fund	0	0	43,541	9	0	0	0	0	0	0	0	0	0	0	4,239	7	3,240	8
Self-insured	8,639	28	140,776	30	61,073	26	26,125	26	11,838	20	37,694	25	10,127	10	19,579	31	14,082	33
Total	30,457	100	476,688	100	230,884	100	101,445	100	58,373	100	152,318	100	97,665	100	64,120	100	43,036	100
2011/2012 claims																		
Private voluntary	21,071	69	298,761	61	171,731	72	74,147	73	46,080	77	109,639	73	83,106	86	39,166	61	25,425	60
Private residual	366	1	0	0	76	0	263	0	685	1	1,018	1	1,835	2	0	0	0	0
State fund	0	0	36,973	8	0	0	0	0	0	0	0	0	0	0	4,892	8	3,154	7
Self-insured	9,246	30	153,379	31	65,560	28	27,289	27	13,054	22	38,658	26	12,116	12	20,037	31	14,140	33
Total	30,683	100	489,113	100	237,367	100	101,699	100	59,819	100	149,315	100	97,057	100	64,095	100	42,719	100
2012/2013 claims																		
Private voluntary	19,471	75	309,902	64	171,858	69	73,583	73	45,190	77	106,734	74	80,931	88	36,426	59	24,888	60
Private residual	399	2	0	0	174	0	317	0	771	1	1,298	1	2,393	3	0	0	0	0
State fund	0	0	33,669	7	0	0	0	0	0	0	0	0	0	0	5,933	10	2,979	7
Self-insured	6,080	23	142,100	29	77,767	31	26,605	26	12,712	22	36,421	25	9,088	10	19,296	31	13,522	33
Total	25,950	100	485,671	100	249,799	100	100,505	100	58,673	100	144,453	100	92,412	100	61,655	100	41,389	100
2013/2014 claims																		
Private voluntary	18,689	73	321,405	65	174,988	72	76,476	73	45,340	77	111,590	75	81,982	87	37,760	59	25,578	65
Private residual	466	2	0	0	394	0	414	0	953	2	1,629	1	2,729	3	0	0	0	0
State fund	0	0	32,354	7	0	0	0	0	0	0	0	0	0	0	6,694	10	2,708	7
Self-insured	6,289	25	138,393	28	68,748	28	27,682	26	12,767	22	36,250	24	9,382	10	19,756	31	11,079	28
Total	25,444	100	492,152	100	244,130	100	104,572	100	59,060	100	149,469	100	94,093	100	64,210	100	39,365	100
2014/2015 claims																		
Private voluntary	18,480	73	311,137	63	176,756	72	70,728	75	44,608	76	109,866	74	80,860	86	36,749	57	25,121	64
Private residual	464	2	0	0	411	0	443	0	1,063	2	1,613	1	2,373	3	0	0	0	0
State fund	0	0	37,165	7	0	0	0	0	0	0	0	0	0	0	7,767	12	2,894	7
Self-insured	6,247	25	147,823	30	69,281	28	23,611	25	12,963	22	36,984	25	10,360	11	19,425	30	11,154	28
Total	25,191	100	496,125	100	246,448	100	94,782	100	58,634	100	148,463	100	93,593	100	63,941	100	39,169	100
2015/2016 claims																		
Private voluntary	18,275	73	310,633	63	169,886	72	70,690	75	43,751	76	108,339	74	79,975	87	36,825	58	24,475	64
Private residual	426	2	0	0	412	0	420	0	977	2	1,435	1	2,015	2	0	0	0	0
State fund	0	0	37,730	8	0	0	0	0	0	0	0	0	0	0	7,076	11	2,796	7
Self-insured	6,167	25	147,849	30	66,595	28	23,591	25	12,695	22	36,418	25	10,413	11	19,157	30	10,858	28
											•							100

Table TA.4 Estimated Distribution of Claims in the Population by Insurance Market Segment, 2010/2011 to 2015/2016 (continued)

b. Remaining 9 stud	y states																	
	ı	MA		MI	N	ΛN	l	NC	I	רא		PA		TX	1	VA	1	WI
Market Segment	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
2010/2011 claims																		
Private voluntary	54,018	69	81,076	66	65,829	73	77,486	75	84,672	75	175,457	76	116,143	65	56,805	77	97,375	85
Private residual	4,602	6	1,596	1	1,143	1	814	1	3,132	3	0	0	0	0	922	1	1,956	2
State fund	0	0	0	0	0	0	0	0	0	0	6,776	3	28,946	16	0	0	0	0
Self-insured	19,318	25	39,898	33	23,776	26	24,540	24	24,652	22	47,811	21	34,926	19	15,840	22	15,133	13
Total	77,938	100	122,570	100	90,748	100	102,840	100	112,456	100	230,044	100	180,015	100	73,567	100	114,464	100
2011/2012 claims														_				
Private voluntary	52,927	74	78,829	60	66,707	73	77,018	74	82,001	76	174,290	77	118,514	63	57,146	76	95,931	85
Private residual	4,520	6	1,917	1	1,108	1	636	1	2,767	3	0	0	0	0	874	1	2,401	2
State fund	0	0	0	0	0	0	0	0	0	0	5,305	2	32,964	17	0	0	0	0
Self-insured	14,141	20	51,543	39	23,090	25	25,776	25	23,091	21	48,019	21	37,539	20	16,841	22	14,907	13
Total	71,588	100	132,289	100	90,905	100	103,430	100	107,859	100	227,614	100	189,017	100	74,861	100	113,239	100
2012/2013 claims																		
Private voluntary	49,976	72	79,371	60	65,562	73	73,829	75	80,437	76	166,111	76	113,816	61	54,537	76	95,870	85
Private residual	6,135	9	2,270	2	1,622	2	624	1	3,114	3	0	0	0	0	1,099	2	2,403	2
State fund	0	0	0	0	0	0	0	0	0	0	5,149	2	36,114	19	0	0	0	0
Self-insured	13,368	19	49,822	38	22,634	25	23,900	24	22,357	21	48,154	22	37,216	20	15,678	22	14,890	13
Total	69,479	100	131,463	100	89,818	100	98,353	100	105,908	100	219,414	100	187,146	100	71,314	100	113,163	100
2013/2014 claims																		
Private voluntary	49,043	67	79,397	61	65,996	72	73,175	75	80,707	75	164,490	75	114,929	61	56,478	76	93,402	84
Private residual	7,378	10	2,474	2	1,987	2	751	1	4,082	4	0	0	0	0	1,320	2	2,776	3
State fund	0	0	0	0	0	0	0	0	0	0	5,975	3	37,236	20	0	0	0	0
Self-insured	17,134	23	47,355	37	23,638	26	23,621	24	22,944	21	48,196	22	37,264	20	16,402	22	14,572	13
Total	73,555	100	129,226	100	91,621	100	97,547	100	107,733	100	218,661	100	189,429	100	74,200	100	110,750	100
2014/2015 claims																		
Private voluntary	49,539	67	72,754	59	65,444	72	73,264	75	78,720	74	158,135	75	115,214	60	55,575	76	92,749	84
Private residual	6,955	9	2,950	2	2,053	2	726	1	4,328	4	0	0	0	0	1,458	2	2,784	3
State fund	0	0	0	0	0	0	0	0	0	0	6,033	3	37,816	20	0	0	0	0
Self-insured	17,030	23	48,628	39	23,592	26	23,632	24	23,359	22	45,409	22	38,626	20	16,066	22	14,474	13
Total	73,524	100	124,332	100	91,089	100	97,622	100	106,407	100	209,577	100	191,656	100	73,099	100	110,007	100
2015/2016 claims																		
Private voluntary	52,122	72	70,626	59	64,563	72	72,852	75	77,595	74	150,026	76	115,352	61	55,042	76	91,277	84
Private residual	6,216	9	2,769	2	2,025	2	768	1	3,977	4	0	0	0	0	1,453	2	2,596	2
State fund	0	0	0	0	0	0	0	0	0	0	5,062	3	36,745	19	0	0	0	0
Self-insured	14,438	20	47,145	39	23,274	26	23,514	24	22,944	22	42,897	22	38,390	20	15,914	22	14,223	13
Total	72,776	100	120,540	100	89,862	100	97,134	100	104,516	100	197,985	100	190,487	100	72,409	100	108,096	100

#### Table TA.4 Estimated Distribution of Claims in the Population by Insurance Market Segment, 2010/2011 to 2015/2016 (continued)

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. Column totals in tables may not add to 100 due to rounding.

AR: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the residual and self-insured segments were based on data in Arkansas Workers' Compensation Commission in 2010, 2012, and 2014, and also on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

CA: Data for the voluntary and state fund segments in California reflect incurred claims based on data provided by the Workers' Compensation Inspection and Rating Bureau (WCIRB) and the State Compensation Insurance Fund (SCIF). The WCIRB claim counts include both voluntary and state fund claims. The number of state fund claims was provided by the SCIF and was subtracted from the WCIRB data to arrive at the number of claims in the voluntary market. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

FL: Data for the voluntary and residual segments reflect the incurred claims based on data provided by NCCI. The number of residual market claims is also based on information provided by the Joint Underwriting Association. The number of self-insured claims is based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016, as well as information provided by the Division of Workers' Compensation.

GA: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014. published by NASI in 2016.

IA: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

IL: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

IN: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016, and other sources.

KY: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016, and other sources.

LA: Data for the voluntary and state fund segments reflect incurred claims based on data provided by NCCI. The number of state fund claims was provided by the Louisiana Workers' Compensation Corporation. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

MA: Data for the voluntary and residual segments reflect incurred claims based on data provided by the Workers' Compensation Rating and Inspection Bureau of Massachusetts. The percentage of the self-insured segment was based on data in Fiscal Year 2014 Annual Report: The State of the Massachusetts Workers' Compensation System, published by the Massachusetts Workers' Compensation Advisory Council in 2015.

MI: Data for the voluntary and residual segments reflect incurred claims based on data provided by the Compensation Advisory Organization of Michigan. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

MN: Data for the voluntary and residual segments reflect incurred claims based on data provided by the Minnesota Workers' Compensation Insurers Association. The percentages of the self-insured, voluntary, and residual segments were based on data in Minnesota Ratemaking Report, published each year by the Minnesota Workers' Compensation Insurers Association, Inc. (MWCIA), as well as data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

NC: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

NJ: Data for the voluntary and residual segments reflect incurred claims based on data provided by the New Jersey Compensation Rating and Inspection Bureau. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

PA: Data for the voluntary and state-fund segments reflect incurred claims based on data provided by the Pennsylvania Compensation Rating Bureau (PCRB) and the State Workers' Insurance Fund (SWIF). The PCRB claim counts include both voluntary and state-fund claims. The number of state-fund claims was provided by the SWIF and was subtracted from the PCRB data to arrive at the number of claims in the voluntary market. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage and Costs, 2014, published by NASI in 2016.

TX: Data for the voluntary and state fund segments reflect incurred claims based on data provided by NCCI and Texas Mutual Insurance Company. The number of state-fund claims from Texas Mutual was subtracted from the NCCI data to arrive at the number of claims in the voluntary market. The percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

VA: Data for the voluntary and residual segments reflect incurred claims based on data provided by NCCI; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

WI: Data for the voluntary and residual segments reflect incurred claims based on data provided by the Wisconsin Compensation Rating Bureau; the percentage of the self-insured segment was based on data in Workers' Compensation: Benefits, Coverage, and Costs, 2014, published by NASI in 2016.

Key: NASI: National Academy of Social Insurance; NCCI: National Council on Compensation Insurance, Inc.

Source: Workers' Compensation: Benefits, Coverage, and Costs, 2014 (NASI, 2016).

Table TA.5 External Validity Checks for Selected CompScope™ Measures (WCRI data versus rating bureau data for insured market only), Indemnity Claims

Aukameae		3 Claims hths' Maturity		2 Claims nths' Maturity
Arkansas	WCRI	Rating Bureau	WCRI	Rating Bureau
ndemnity claims as a percentage of all paid/reserved claims	17.8%	19.1%	18.3%	18.7%
verage incurred benefit per indemnity claim	\$30,163	\$32,671	\$31,057	\$32,006
rerage incurred medical payment per indemnity claim	\$20,101	\$21,534	\$19,531	\$20,014
verage incurred indemnity payment per indemnity claim	\$10,062	\$11,138	\$11,526	\$11,992
		3 Claims		2 Claims
llifornia	at 12 Mor WCRI	nths' Maturity Rating Bureau	at 24 Mor WCRI	nths' Maturity Rating Bureau
demnity claims as a percentage of all paid/reserved claims	32.2%	36.2%	32.9%	36.3%
erage incurred benefit per indemnity claim	\$30,450	\$28,724	\$39,500	\$36,496
erage incurred medical payment per indemnity claim	\$17,637	\$16,569	\$22,231	\$20,468
erage incurred indemnity payment per indemnity claim	\$12,813	\$12,155	\$17,269	\$16,029
		3 Claims		2 Claims
rida		nths' Maturity		nths' Maturity
omnity claims as a persontage of all paid/received claims	WCRI 22.9%	Rating Bureau 23.6%	<b>WCRI</b> 23.7%	Rating Bureau 24.0%
emnity claims as a percentage of all paid/reserved claims	\$25,124	\$27,771	\$27,113	\$29,387
erage incurred benefit per indemnity claim erage incurred medical payment per indemnity claim	\$17,340	\$19,185	\$17,645	\$19,328
erage incurred indemnity payment per indemnity claim	\$7,784	\$8,585	\$9,468	\$10,059
	201:	3 Claims	201:	2 Claims
orgia		nths' Maturity		nths' Maturity
	WCRI	Rating Bureau	WCRI	Rating Bureau
emnity claims as a percentage of all paid/reserved claims	22.6%	23.5%	22.7%	23.6%
erage incurred benefit per indemnity claim	\$35,048 \$18,611	\$39,412 \$21,387	\$43,348 \$19,570	\$44,645 \$21,130
erage incurred medical payment per indemnity claim erage incurred indemnity payment per indemnity claim	\$16,437	\$18,025	\$23,778	\$21,130
rage incurred indentifity payment per indentifity claim		3 Claims		2 Claims
nois	at 12 Mor	nths' Maturity	at 24 Mor	nths' Maturity
	WCRI	Rating Bureau	WCRI	Rating Bureau
emnity claims as a percentage of all paid/reserved claims	31.9%	32.2%	32.9%	32.3%
erage incurred benefit per indemnity claim	\$41,147	\$40,641	\$47,221	\$46,750
erage incurred medical payment per indemnity claim erage incurred indemnity payment per indemnity claim	\$21,646 \$19,501	\$21,878 \$18,763	\$22,447 \$24,774	\$22,923 \$23,827
erage incurred indemnity payment per indemnity claim		3 Claims		323,827 2 Claims
diana	at 12 Mor	nths' Maturity	at 24 Mor	nths' Maturity
	WCRI	Rating Bureau	WCRI	Rating Bureau
lemnity claims as a percentage of all paid/reserved claims	16.1%	16.5%	16.5%	16.1%
erage incurred benefit per indemnity claim	\$32,495	\$34,956	\$33,632	\$37,518
erage incurred medical payment per indemnity claim	\$23,666	\$25,485	\$24,061	\$27,052
erage incurred indemnity payment per indemnity claim	\$8,829 <b>201</b> :	\$9,471 3 Claims	\$9,572 <b>201</b> :	\$10,466 <b>2 Claims</b>
va		nths' Maturity		nths' Maturity
	WCRI	Rating Bureau	WCRI	Rating Bureau
emnity claims as a percentage of all paid/reserved claims	23.3%	23.7%	23.8%	23.4%
erage incurred benefit per indemnity claim	\$37,519	\$37,772	\$40,630	\$39,732
erage incurred medical payment per indemnity claim	\$22,029	\$22,250	\$21,293	\$21,406
erage incurred indemnity payment per indemnity claim	\$15,490	\$15,522 3 Claims	\$19,337	\$18,325 <b>2 Claims</b>
ntucky		nths' Maturity		ths' Maturity
	WCRI	Rating Bureau	WCRI	Rating Bureau
emnity claims as a percentage of all paid/reserved claims	18.3%	19.0%	18.6%	19.5%
erage incurred benefit per indemnity claim	\$30,451	\$30,925	\$33,465	\$34,282
erage incurred medical payment per indemnity claim	\$17,933	\$17,832	\$16,965	\$17,340
erage incurred indemnity payment per indemnity claim	\$12,519	\$13,094 3 Claims	\$16,500	\$16,942 <b>2 Claims</b>
uisiana		s Claims hths' Maturity		2 Claims nths' Maturity
<del>-</del>	WCRI	Rating Bureau	WCRI	Rating Bureau
emnity claims as a percentage of all paid/reserved claims	25.0%	26.8%	25.7%	26.6%
erage incurred benefit per indemnity claim	\$44,097	\$43,580	\$61,163	\$54,361
erage incurred medical payment per indemnity claim	\$26,542	\$25,637	\$31,064	\$29,384
	447.555	¢17.042	\$30,099	£24.077
rerage incurred indemnity payment per indemnity claim	\$17,555	\$17,943	330,099	\$24,977

Table TA.5 External Validity Checks for Selected CompScope™ Measures (WCRI data versus rating bureau data for insured market only), Indemnity Claims (continued)

Indemnity Claims (continued)	201	4 Claims	2013 Claims			
Massachusetts		ths' Maturity	at 24 Months' Maturity			
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	33.3%	33.2%	33.3%	32.4%		
Average incurred benefit per indemnity claim	\$25,958	\$27,421	\$32,597	\$30,605		
verage incurred medical payment per indemnity claim	\$10,664	\$11,844	\$11,258	\$11,073		
Average incurred indemnity payment per indemnity claim	\$15,294	\$15,577 <b>3 Claims</b>	\$21,339	\$19,532 <b>2 Claims</b>		
Aichigan		nths' Maturity		nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	18.0%	19.2%	18.5%	19.3%		
verage incurred benefit per indemnity claim	\$23,640	\$25,432	\$28,702	\$29,229		
verage incurred medical payment per indemnity claim	\$13,832	\$15,113	\$13,945	\$15,062		
Average incurred indemnity payment per indemnity claim	\$9,808 <b>201</b>	\$10,319 3 Claims	\$14,757 <b>201</b>	\$14,167 <b>2 Claims</b>		
Ainnesota		nths' Maturity		nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	22.8%	23.1%	23.5%	22.8%		
Average incurred benefit per indemnity claim	\$24,240	\$27,815	\$29,268	\$31,327		
Average incurred medical payment per indemnity claim	\$15,470	\$17,517	\$16,479	\$18,089		
verage incurred indemnity payment per indemnity claim	\$8,770	\$10,298 3 Claims	\$12,790	\$13,238 2 Claims		
New Jersey		3 Claims nths' Maturity		2 Claims nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	30.9%	32.9%	31.0%	32.8%		
verage incurred benefit per indemnity claim	\$37,458	\$38,370	\$42,373	\$40,344		
verage incurred medical payment per indemnity claim	\$19,242	\$20,347	\$21,045	\$20,083		
verage incurred indemnity payment per indemnity claim	\$18,216	\$18,023	\$21,328	\$20,261		
		3 Claims		2 Claims		
North Carolina	WCRI	nths' Maturity	WCRI	nths' Maturity		
ndemnity claims as a percentage of all paid/reserved claims	22.1%	Rating Bureau 23.1%	23.0%	Rating Bureau 23.2%		
verage incurred benefit per indemnity claim	\$36,636	\$39,624	\$44,736	\$46,760		
Average incurred medical payment per indemnity claim	\$18,966	\$20,836	\$19,842	\$22,102		
Average incurred indemnity payment per indemnity claim	\$17,670	\$18,788	\$24,894	\$24,657		
··g- ···, բ, ··		3 Claims	201	2 Claims		
Pennsylvania		nths' Maturity		nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	19.9%	19.6%	20.1%	19.6%		
Average incurred benefit per indemnity claim	\$38,327	\$38,470	\$48,293	\$45,286		
Average incurred medical payment per indemnity claim	\$18,728	\$20,080 \$18.390	\$20,364 \$27,929	\$20,560 \$24,727		
verage incurred indemnity payment per indemnity claim	\$19,599 <b>201</b>	ې دره ۱ ډ ع		\$24,727 2 Claims		
Texas	at 12 Mor	nths' Maturity	at 24 Moi	nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	24.6%	25.1%	24.9%	25.3%		
Average incurred benefit per indemnity claim	\$26,793	\$29,571	\$28,187	\$29,927		
Average incurred medical payment per indemnity claim	\$15,882	\$17,834	\$16,425	\$17,476		
Average incurred indemnity payment per indemnity claim	\$10,911 <b>201</b>	\$11,737 <b>3 Claims</b>	\$11,762 <b>201</b>	\$12,451 <b>2 Claims</b>		
/irginia		nths' Maturity		nths' Maturity		
	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	18.2%	18.8%	18.7%	18.4%		
verage incurred benefit per indemnity claim	\$37,973	\$39,429	\$46,271	\$47,738		
werage incurred medical payment per indemnity claim	\$24,018	\$25,059	\$26,243	\$28,109		
verage incurred indemnity payment per indemnity claim	\$13,955	\$14,370	\$20,028	\$19,629		
Visconsin		3 Claims nths' Maturity		2 Claims nths' Maturity		
<del>-</del>	WCRI	Rating Bureau	WCRI	Rating Bureau		
ndemnity claims as a percentage of all paid/reserved claims	24.1%	22.5%	24.0%	22.6%		
Average incurred benefit per indemnity claim	\$29,433	\$32,309	\$31,511	\$33,458		
Average incurred medical payment per indemnity claim	\$21,007	\$22,587	\$21,040	\$22,314		
Average incurred indemnity payment per indemnity claim	\$8,427	\$9,721	\$10,471	\$11,144		
<del>-</del>						

# Table TA.5 External Validity Checks for Selected CompScope™ Measures (WCRI data versus rating bureau data for insured market only), Indemnity Claims (continued)

Notes: Rating bureau data are used to make approximate comparisons with WCRI data. However, there are a number of differences that limit the precision of the comparisons. For example, rating bureau data are based on a policy year, whereas WCRI data are based on an injury year from October 1 to September 30, so the maturity of the data may be somewhat different. Also, WCRI data reflect our payment mappings to enhance meaningful interstate comparisons, whereas rating bureau data are based on reported payment types. This may mean that payments reported to the rating bureau as medical benefits, for example, may be captured in WCRI data as expenses and, therefore, not included in the WCRI number that is being compared. Per claim values for incurred measures for WCRI data are not developed to ultimate values. Instead, incurred values reflect what claim handlers believed the cost of a claim would be based on information they had as of the evaluation date (e.g., March 31, 2013). The data are shown for indemnity claims, as defined by the waiting period for income benefits in each of the states.

AR: Rating bureau data were provided by NCCI. The policy year runs from February 1 through January 31.

CA: Rating bureau data were provided by the Workers' Compensation Insurance Rating Bureau. The policy year runs from January 1 through December 31.

FL: Rating bureau data were provided by NCCI. The policy year ran from October 1 through September 30 until 2001, when it was changed to January 1 through December 31.

GA: Rating bureau data were provided by NCCI. The policy year runs from July 1 through June 30.

IA: Rating bureau data were provided by NCCI. The policy year runs from March 1 through February 28 (or 29).

IL: Rating bureau data were provided by NCCI. The policy year runs from April 1 through March 31.

IN: Rating bureau data were provided by NCCI. The policy year ran from January 1 through December 31 until 1999, when it was changed to July 1 through June 30.

KY: Rating bureau data were provided by NCCI. The policy year runs from May 1 through April 30.

LA: Rating bureau data were provided by NCCI. The policy year ran from April 1 through March 31 until 2000, when it was changed to September 1 through August 31.

MA: Rating bureau data were provided by the Workers' Compensation Rating and Inspection Bureau of Massachusetts. The policy year runs from January 1 through December 31.

MI: Rating bureau data were provided by the Compensation Advisory Organization of Michigan. The policy year runs from April 1 through March 31.

MN: Rating bureau data were provided by the Minnesota Workers' Compensation Insurers Association. The policy year runs from January 1 through December 31.

NC: Rating bureau data were provided by the North Carolina Rate Bureau through NCCI. The policy year runs from January 1 through December 31.

NJ: Rating bureau data were provided by the New Jersey Compensation Rating and Inspection Bureau. The policy year runs from January 1 through December 31.

PA: Rating bureau data were provided by the Pennsylvania Compensation Rating Bureau. The policy year runs from January 1 through December 31.

TX: Rating bureau data were provided by NCCI. The policy year runs from January 1 through December 31.

VA: Rating bureau data were provided by NCCI. The policy year runs from February 1 through January 31.

WI: Rating bureau data were provided by the Wisconsin Compensation Rating Bureau. The policy year runs from January 1 through December 31.

Key: NCCI: National Council on Compensation Insurance, Inc.

Table TA.6 Characteristics of Claims with More Than 7 Days of Lost Time, WCRI Data Versus External Data, 2015/2016

Comparison	AR	CA	FLª	GA	IA	IL	IN	KY	LA	МА	МІ	MN	NC	ИJ	PA	тх	VA	wı	18-State Median <sup>b</sup>
Workers' characte	ristics																		
Average age (years)																			
WCRI data	44	43	45	42	45	44	44	44	43	44	44	44	44	44	45	43	44	44	44
External data	41	41	43	41	42	43	43	42	40	43	42	41	42	44	42	42	42	42	42
Gender (percentage	male)																		
WCRI data	73	62	60	60	66	65	65	64	64	68	60	61	62	67	66	71	62	64	64
External data	64	61	61	58	71	61	64	60	52	58	62	61	62	63	65	67	59	66	62
Industry classifica	tion (pe	rcentage	)																
Clerical and professi	ional																		
WCRI data	4	9	6	6	9	5	4	4	13	8	5	7	5	7	7	6	7	5	6
External data	11	9	9	8	7	9	4	4	6	8	8	6	11	9	9	7	10	5	8
Construction																			
WCRI data	9	10	6	6	8	6	5	5	13	12	5	6	8	9	7	15	10	6	7
External data	8	8	11	7	12	6	6	6	7	7	8	8	9	6	9	8	10	8	8
Services <sup>c</sup>																			
WCRI data	55	55	64	59	46	54	52	53	53	57	57	57	54	60	54	48	59	45	55
External data	61	67	69	71	55	70	64	63	73	73	58	66	60	74	65	70	66	54	66
Manufacturing						,,,										,,,			
WCRI data	25	12	7	17	28	18	33	25	10	14	24	22	19	12	22	16	13	38	19
External data	18	10	8	12	23	14	24	23	12	12	24	18	19	10	16	14	13	30	15
Other industries																			
WCRI data	5	10	12	6	6	13	3	9	8	5	4	5	11	8	8	10	9	4	8
External data	2	6	3	1	3	1	2	5	2	0	2	2	1	0	2	0	1	3	2
Unknown																			
WCRI data	2	3	4	6	3	2	2	4	2	3	5	3	4	6	2	5	2	2	3
External data	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Injury classificatio			-																
Sprains, strains, and			d																
WCRI data	36	44	42	42	39	42	37	43	38	42	42	42	42	38	42	40	40	40	42
External data	36	34	53	38	27	40	34	41	31	41	38	31	32	35	39	37	36	38	37
Fractures e	- 50			30		-10					- 50		- 32						
WCRI data	15	7	10	9	11	9	12	12	11	10	12	10	12	11	10	13	13	10	11
External data	10	6	11	10	11	11	15	10	8	6	9	10	11	10	9	11	10	8	10
Inflammations, lace				10			1,5	10				10		10					
WCRI data	18	21	20	20	17	19	19	17	17	20	18	16	18	22	18	20	18	18	18
External data	19	19	22	19	18	18	19	17	19	21	20	16	21	18	19	22	21	15	19
Carpal tunnel <sup>9</sup>								.,											
WCRI data	1	2	1	2	3	2	2	1	1	1	3	3	1	1	2	0	0	3	2
External data	0	1	1	0	2	1	1	1	0	0	1	1	0	0	1	0	0	1	1
Other injuries h			<u>'</u>																•
			27	27	20	20									20	26			
WCRI data	30	26	27	27	30	28	29	27	33	27	26	30	27	29	28	26	28	29	28

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. WCRI claims have been adjusted for insurance market segment. External data for age, gender, industry, and injury were reported by the Bureau of Labor Statistics (BLS) State Occupational Injuries, Illnesses, and Fatalities program for 2015. The BLS defines a lost-time workday as any day away from work with or without restricted work activity.

Key: n/a: not available.

Sources: U.S. Department of Labor, Bureau of Labor Statistics (BLS), 2015; Florida Department of Financial Services, Division of Workers' Compensation, 2015 Results and Accomplishments report; and Florida Department of Financial Services, Division of Workers' Compensation, Workers' Compensation Claims Statistics database (2015).

a External data shown for FL for age and gender are from the 2010 BLS tables for Florida, because Florida ceased participation in the BLS Survey of Occupational Injuries and Illnesses starting in 2011. Since the changes in the characteristics of claims in the WCRI data between 2010 and 2015 were very small, we used the 2010 external data as a reasonable proxy for comparisons in Florida in this 17th edition of the CompScop™ report. Industry data shown for FL are 2014 numbers from the Florida Department of Financial Services, Division of Workers' Compensation, 2015 Results and Accomplishments report. Injury data shown for Florida are from the Florida Department of Financial Services, Division of Workers' Compensation Claims Statistics database (2015).

<sup>&</sup>lt;sup>b</sup> The 18-state median is the average of the states ranked 9th and 10th on a given measure; these states change depending on the measure being evaluated.

<sup>&</sup>lt;sup>c</sup> The WCRI data for the services industry are based on data for the high-risk services, low-risk services, and trade industry categories. The BLS data for the services industry include transportation and public utilities; finance, insurance, and real estate; wholesale; retail; and other services.

<sup>&</sup>lt;sup>d</sup>The WCRI data for the sprains, strains, and non-specific pain injury classification are based on data for the spine (back and neck) sprains, strains, and non-specific pain, and other sprains and strains injury categories. The BLS data for this injury classification include strains and sprains.

eThe WCRI data for the fractures injury classification are based on data for the fractures (at lower extremity) and fractures (at upper extremity) injury categories. The BLS data for this injury classification include fractures.

<sup>&</sup>lt;sup>f</sup> The WCRI data for the inflammations, lacerations, and contusions injury classification are based on data for the inflammation, lacerations, and contusions, and hand laceration injury categories. The BLS data for this injury classification include cuts, lacerations, and punctures; bruises and contusions; and tendonitis.

<sup>&</sup>lt;sup>9</sup> The WCRI data for the carpal tunnel injury classification are based on data for the carpal tunnel injury category. The BLS data for this injury classification include carpal tunnel syndrome.

h The WCRI data for the other injuries classification are based on data for the knee derangement, neurological spine pain, skin, and other injury categories. The BLS data for this injury classification include heat burns, chemical burns, soreness, multiple injuries, amputation, and all other injuries.

Table TA.7 Comparison of Key Performance Measures Reported in CompScope™ 16 and CompScope™ 17, 2012/2015 and 2014/2015

a. Claims from inj	ury year 20	12, at 36 ı	nonths' a	verage m	aturity													
Performance Measure	AR	CA	FL	GA	IA	IL	IN	KY	LA	МА	MI	MN	NC	ИJ	PA	TX	VA	wı
Average total cos	t per claim	with more	than 7 d	ays of los	t time													
CompScope™ 16	\$32,597	\$43,963	\$35,495	\$47,822	\$48,366	\$47,842	\$36,810	\$38,299	\$53,804	\$31,590	\$27,895	\$35,646	\$51,937	\$40,247	\$48,817	\$30,313	\$48,122	\$38,221
CompScope™ 17	\$31,935	\$44,040	\$35,684	\$48,200	\$48,222	\$47,895	\$36,784	\$38,078	\$54,574	\$31,436	\$27,770	\$35,737	\$51,998	\$40,160	\$49,249	\$30,518	\$48,348	\$38,382
Average medical	payment pe	er claim w	ith more	than 7 da	ys of lost	ime												
CompScope™ 16	\$14,717	\$14,741	\$15,351	\$15,755	\$19,407	\$19,794	\$22,164	\$14,050	\$20,501	\$9,353	\$10,816	\$15,434	\$16,778	\$19,405	\$17,527	\$14,108	\$23,240	\$22,551
CompScope™ 17	\$14,498	\$14,675	\$15,459	\$15,808	\$19,343	\$19,762	\$22,230	\$13,953	\$21,173	\$9,312	\$10,745	\$15,460	\$16,927	\$19,343	\$17,610	\$14,181	\$23,419	\$22,572
Average indemni	ty benefit p	er claim v	vith more	than 7 da	ys of lost	time												
CompScope™ 16		\$19,734			\$23,576		\$10,438	\$18,332	\$24,167	\$17,707	\$12,648	\$14,054	\$28,319	\$13,563	\$24,404	\$10,792	\$18,960	\$11,792
CompScope™ 17	\$12,903	\$19,554	\$13,861	\$25,282	\$23,554	\$21,182	\$10,296	\$18,162	\$24,105	\$17,647	\$12,546	\$14,109	\$28,335	\$13,627	\$24,502	\$10,867	\$18,940	\$11,915
Average benefit d	elivery ext	ense ner	claim wit	h more th	an 7 days	of lost tir	ne and ex	nenses										
CompScope™ 16	\$4,611	\$9,439	\$6,482	\$6,879	\$5,396	\$6,833	\$4,227	\$5,943	\$8,851	\$4,502	\$4,526	\$4,872	\$6,769	\$7,331	\$6,864	\$5,479	\$5,728	\$3,864
CompScope™ 17	\$4,548	\$9,759	\$6,506	\$7,130	\$5,340	\$6,928	\$4,282	\$6,000	\$9,019	\$4,451	\$4,563	\$4,894	\$6,654	\$7,258	\$7,128	\$5,536	\$5,788	\$3,882
Claims with more	than 7 day	s of lost ti	me (perce	entage)														
CompScope™ 16	16.9%	29.1%	23.8%	21.7%	19.9%	30.6%	15.6%	17.6%	22.2%	30.1%	17.7%	19.8%	22.7%	29.5%	19.0%	25.1%	17.0%	18.1%
CompScope™ 17	16.7%	29.0%	23.7%	21.5%	19.6%	29.8%	15.2%	17.1%	23.2%	30.0%	17.6%	19.3%	22.3%	29.4%	18.7%	24.7%	16.7%	17.7%
b. Claims from inj	ury year 20	14, at 12	months' a	verage m	aturity													
Performance Measure	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	ИJ	PA	TX	VA	WI
Average total cos	t per claim	with more	than 7 d	ays of los	t time													
CompScope™ 16	\$21,707	\$20,666	\$24,227	\$28,189	\$26,900	\$28,250	\$28,277	\$22,003	\$29,863	\$17,118	\$18,122	\$21,334	\$27,621	\$27,592	\$28,039	\$21,891	\$29,460	\$27,991
CompScope™ 17	\$21,360	\$20,640	\$24,275	\$28,625	\$26,976	\$28,399	\$28,520	\$22,066	\$30,114	\$17,168	\$18,109	\$21,519	\$27,747	\$27,568	\$28,218	\$22,229	\$29,428	\$28,468
Average medical	payment pe	er claim w	ith more	than 7 da	ys of lost	ime												
CompScope™ 16	\$11,902	\$7,328	\$12,514	\$11,890	\$15,942	\$14,828	\$18,803	\$10,655	\$14,993	\$6,566	\$9,237	\$11,463	\$11,590	\$15,378	\$13,201	\$10,407	\$17,271	\$19,503
CompScope™ 17	\$11,619	\$7,287	\$12,608	\$11,971	\$15,963	\$14,923	\$19,034	\$10,614	\$14,990	\$6,547	\$9,237	\$11,555	\$11,751	\$15,337	\$13,219	\$10,571	\$17,148	\$19,930
Average indemni	ty benefit p	er claim v	vith more	than 7 da	ys of lost	time												
CompScope™ 16	\$6,807	\$9,341	\$7,705	\$12,057	\$8,225	\$9,287	\$6,151	\$7,874	\$10,299	\$7,814	\$6,101	\$6,632	\$11,994	\$6,687	\$10,804	\$7,717	\$8,567	\$5,896
CompScope™ 17	\$6,779	\$9,274	\$7,663	\$12,162	\$8,268	\$9,278	\$6,133	\$7,938	\$10,344	\$7,885	\$6,090	\$6,684	\$11,916	\$6,695	\$10,871	\$7,786	\$8,609	\$5,926
	elivery exp	ense per	claim wit	h more th	an 7 davs	of lost tir	ne and ex	penses										
Average benefit d					•			-	64.504	\$2,779	\$2,835	\$2,617	\$4,046	\$5,572	\$4,051	£2.000	\$3,635	\$2,611
Average benefit d CompScope™ 16	\$3,026	\$3,995	\$4,114	\$4,261	\$2,759	\$4,168	\$3,337	\$3,487	\$4,584	⊋Z,//9					3 <del>4</del> ,031	\$3,809	75,055	
	\$3,026 \$2,989	\$3,995 \$4,075	\$4,114	\$4,261	\$2,759 \$2,772	\$4,168 \$4,235	\$3,337 \$3,373	\$3,487 \$3,532	\$4,584	\$2,777	\$2,829	\$2,656	\$4,088	\$5,583	\$4,051	\$3,809	\$3,684	\$2,633
CompScope™ 16 CompScope™ 17	\$2,989	\$4,075	\$4,115	\$4,511														\$2,633
CompScope™ 16	\$2,989	\$4,075	\$4,115	\$4,511														\$2,633

Notes: 2012/2015 refers to claims with injuries arising from October 1, 2011, through September 30, 2012, evaluated as of March 31, 2015. 2014/2015 refers to claims with injuries arising from October 1, 2013, through September 30, 2014, evaluated as of March 31, 2015. CompScope™ 16 refers to the 16th edition of the CompScope™ benchmarking reports, while CompScope™ 17 refers to the current 17th edition of the CompScope™ benchmarking reports.

**Table TA.8 WCRI Benefit and Expense Variables** 

WCRI Variable	Definition
Adjusting expenses	The sum of administrative assessments and other allocated loss adjusting expenses.
Administrative assessments	All payments to a second injury fund or for other administrative assessments.
Ancillary legal costs	Payments for all other legal services, including copies, transcripts, testimony, filing fees, translators' fees, autopsies, surveillance, investigation, witnesses' fees, arbitration, and alternative dispute resolution fees that are allocated to claims.
Benefit delivery expenses	The sum of litigation expenses, adjusting expenses, and medical cost containment expenses; often called allocated loss adjusted expenses.
Claimant attorney payments (insurer's or self-insurer's responsibility)	Payments to the worker's attorney that are made by the defense.
Claimant attorney payments (worker's responsibility)	Payments to a worker's attorney as part of the indemnity benefits paid to the worker.
Death payments	Death benefits; payments and escalations (where applicable) to dependents, fatality dowries and remarriage payments, trusteeships established for dependents, and funeral/burial expenses.
Defense attorney payments	Payments to defense attorneys for their services.
Litigation expenses	The sum of claimant attorney payments (insurer's or self-insurer's responsibility), defense attorney payments, and payments for medical-legal and ancillary legal services that are allocated to the individual claims.
Lump-sum settlement payments	Derived from a WCRI algorithm; the last indemnity payment that is equal to or greater than 4.34 times the worker's weekly TTD rate. According to our definition, there can be only one lump-sum settlement per claim. However, we recognize that there could be separate payments to attorneys so we check the indemnity payments within the 14 days prior to the last payment against the same criteria. The data source coded lump-sum settlements were also identified, if applicable. Starting with the 8th edition, we further refined our algorithm to identify lump-sum settlements of \$5,000 and greater, recognizing that quite often the smaller amounts reflect some catch-up payments for other periodic benefits rather than lump-sum settlements for future benefits.
Medical cost containment expenses	All payments related to medical cost containment. Includes fees for bill review, utilization review, and case management, and for preferred provider networks.
Medical-legal expenses	All payments for medical-legal examinations, medical reports, and depositions regardless of the source of the request for those examinations, medical reports, and depositions.
Other adjusting expenses	All other adjusting expenses not categorized elsewhere but allocated to individual claims.
Other indemnity payments	Other indemnity payments that cannot be captured by a specific benefit or payment type. Can include penalties paid directly to the worker, findings and awards, and court awards.
PPD payments	PPD benefits; the sum of scheduled and unscheduled PPD payments.
PTD payments	PTD benefits; payments for PTD and escalations (where applicable).
Scheduled PPD payments	Payments for scheduled permanent partial disabilities or specific losses, and escalations (where applicable).
Total claim costs	The sum of total paid benefits, benefit delivery expenses, and vocational rehabilitation service/provider expenses.
Total indemnity benefits	The sum of TPD, TTD, PPD, PTD, and death benefits; claimant attorney fees (worker's responsibility); and other indemnity benefits. (Note: the total includes lump-sum settlements, which are part of PPD.)
Total medical payments	All payments for the medical treatment of the injured worker. Includes payments to physicians, chiropractors, and physical therapists; to hospitals, pharmacies, and nursing homes; and for medica rehabilitation services.
Total paid benefits	The sum of total indemnity benefits and total medical payments.
TPD payments	TPD benefits; indemnity benefits and escalations (where applicable) paid to a worker who has returned to part-time work or has returned to work at reduced wages.
TTD payments	TTD benefits; indemnity benefits and escalations (where applicable) paid to a worker who is unable to return to work; includes vocational rehabilitation maintenance payments.

### Table TA.8 WCRI Benefit and Expense Variables (continued)

WCRI Variable	Definition
Unscheduled PPD payments	Payments for all unscheduled permanent partial disabilities, disfigurement, and escalations (where applicable). Includes all benefits identified as PPD life pension, impairment compensation, economic recovery compensation, supplemental-income compensation, and loss of earning power or capacity; and all benefits identified as lump-sum settlements, compromise-and-release agreements, settlements, and commutations, regardless of the type of benefit for which the lump sum was paid.
VR maintenance payments	VR maintenance benefits; indemnity benefits paid to a worker who is participating in a VR program. Includes all VR maintenance payments regardless of whether the data source classifies them as medical payments, indemnity payments, or expenses.
VR service/provider expenses	All payments for VR services provided by outside vendors, including vocational evaluation, testing, training, education, occupational training, and books and supplies.

Key: PPD: permanent partial disability; PTD: permanent total disability; TPD: temporary partial disability; TTD: temporary total disability; VR: vocational rehabilitation.

	MI	KY	CA	AR	FL	GA	NC	PA	IL	IA	LA	WI	VA	IN
Medical payments per claim <sup>b</sup> (reported in <i>CompScope™ Benchmarks,</i> 17th Edition)	\$11,226	\$13,193	\$13,517	\$15,259	\$15,546	\$16,271	\$16,672	\$18,422	\$20,354	\$20,800	\$21,921	\$22,704	\$23,143	\$23,176
,					\$15,540	\$10,271	\$10,072	\$10,422	\$20,334	\$20,800	321,921	\$22,704	\$23,143	\$23,170
Simulated medical payments per claim inclu	uding med	ical lump-s	um settlen	nents <sup>c</sup>										
	MI	KY	AR	CA	GA	FL	NC	PA	IL	IA	WI	IN	LA	VA
The frequency of unidentified medical lump- sum settlements is similar to the frequency of identified medical lump-sum settlements in the 14-state median	\$12,213	\$14,252	\$16,366	\$17,011	\$18,076	\$18,487	\$18,717	\$19,437	\$21,298	\$21,693	\$23,436	\$23,936	\$24,541	\$24,579
the 14-state median									. ,					
	MI	KY	AR	CA	GA	FL	NC	PA	IL	IA	WI	IN	LA	VA
The frequency of unidentified medical lump- sum settlements is similar to the average frequency of identified medical lump-sum settlements of the 14 states	\$12,486	\$14,582	\$16,665	\$17,391	\$18,543	\$18,744	\$19,163	\$19,740	\$21,604	\$22,039	\$23,746	\$24,240	\$24,967	\$25,042

Notes: 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. Results shown in this table are based on claims with more than seven days of lost time and reflect adjustment for injury and industry mix.

\$17,550

FL

\$20,039 \$20,533 \$21,795

\$18,198

GΑ

\$18,214

PA

\$19,096

NC

\$20,953

IL

IΑ

\$21,848 \$22,272 \$23,737 \$24,453 \$25,912 \$26,363

\$23,085

WI

\$23,593

IN

\$24,057

LA

\$27,932 \$28,270

\$24,062

VA

frequency of identified medical lump-sum settlements among the 14 states

The frequency of unidentified medical lumpsum settlements is similar to the highest frequency of identified medical lump-sum settlements among the 14 states \$11,905

ΜI

\$13,881

KY

\$14,392 \$16,878 \$18,745

\$16,030

AR

\$16,583

CA

<sup>&</sup>lt;sup>a</sup> Only 14 study states are included in this table. Lump-sum settlements for future medical payments are not permitted in Texas and Massachusetts (under most circumstances) and are not common in practice in Minnesota and New Jersey. These fours states are excluded from this simulation.

b In the CompScope™ benchmarking studies, all lump-sum payments are reported as indemnity payments to achieve consistency and comparability in this measure across all states, because lump-sum payments to close out future obligations are rarely separated into medical and indemnity components in the data. Therefore, medical payments per claim reported in the CompScope™ Benchmarks reports do not include payments for medical lump-sum settlements.

<sup>&</sup>lt;sup>c</sup> Simulated medical payments per claim include medical payments per claim as reported in *CompScope™ Benchmarks*, 17th Edition and the estimated payments for medical lump-sum settlements, which include both medical lump-sum payments that can be identified in the data and the simulated payments for medical lump-sum settlements that cannot be separately identified. This table shows the simulated results based on four different assumptions about the frequency of unidentified medical lump-sum settlements.

### **Table TA.10 Industry Categories**

Quarrying: stone, sand, clay Miscellaneous occupations

### Clerical and professional Clerical Instructional professions Construction Erection Shipbuilding Miscellaneous construction Manufacturing Food and tobacco Textiles Cloth products Leather Rubber/bone products Paper/pulp products, printing Wood Metallurgy Metal forming Machine shops/fine machines Vehicles Stone products Clay products Glass products Chemicals Miscellaneous manufacturing Trade Retail trade Wholesale trade **High-risk services** Laundering, cleaning, and dyeing Stevedoring and freight handling; explosives or ammunition shipping; refrigerator car loading or unloading Railroad operations Package delivery; hauling (long-distance or local) Electric light or power; steam light or power; waterworks operation; sewage disposal plant operation; recycling and garbage collection Automobile hauling; automobile sales and services Warehousing and storage Health care facility-related services, nursing home, home care (excluding physician and dentist services) Building maintenance; janitorial services; elevator services; sign installation; window cleaning Hotels, restaurants, clubs Low-risk services Telephone, telegraph, Internet access providers; computer data processing; radio and television broadcasting; cable television; motion picture productions; recording studios Automobile parking and garage Physicians and dentists Insurance; real estate; travel agencies; addressing; mailing; mail packaging; advertising Schools, museums, day care centers Commercial service and repair; architect or engineer consulting Property management; leasing services Dinner theater; theater operations Amusement park or exhibition operations; dog shows; horse shows; racetrack operations Personal service, such as beauty salons and hair styling Other industries Agriculture Mining; oil and gas production

Table TA.11 Effect of Data Caps, Claims with More Than 7 Days of Lost Time, 2015/2016 and 2013/2016

Tuble TA:TT Effect of Date	AR	CA	FL	GA	IA	IL	IN	кү	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
				UA	IA	IL.	IIN	N1	LA	IVIA	IVII	IVIIV	NC	CN	PA	11	VA	
Claims with more than 7 days			15/2016															
Percentage of claims with data of																		
Total costs	0.54	0.47	0.42	0.54	0.39	0.27	0.52	0.11	0.48	0.37	0.19	0.46	0.36	0.57	1.02	0.71	0.33	0.27
Benefit payments	0.11	0.14	0.14	0.14	0.08	0.05	0.09	0.11	0.15	0.05	0.10	0.06	0.11	0.06	0.15	0.11	0.07	0.08
Medical payments	0.11	0.12	0.12	0.14	0.08	0.03	0.06	0.09	0.15	0.05	0.08	0.05	0.09	0.06	0.15	0.10	0.07	0.05
Indemnity benefits	0.00	0.02	0.03	0.00	0.00	0.02	0.03	0.02	0.00	0.00	0.02	0.01	0.02	0.01	0.00	0.01	0.00	0.03
Benefit delivery expenses <sup>a</sup>	0.43	0.34	0.31	0.45	0.35	0.22	0.45	0.05	0.34	0.34	0.13	0.40	0.30	0.55	0.91	0.64	0.32	0.21
Total incurred costs	0.11	0.13	0.14	0.13	0.13	0.07	0.15	0.14	0.21	0.15	0.13	0.13	0.13	0.13	0.20	0.43	0.07	0.12
Incurred benefits	0.11	0.13	0.13	0.13	0.13	0.07	0.15	0.14	0.18	0.15	0.13	0.13	0.13	0.13	0.14	0.42	0.07	0.12
Incurred medical benefits	0.11	0.10	0.11	0.13	0.09	0.06	0.12	0.09	0.18	0.09	0.13	0.10	0.12	0.07	0.11	0.10	0.07	0.12
Incurred indemnity benefits	0.00	0.06	0.03	0.02	0.04	0.02	0.04	0.09	0.00	0.07	0.01	0.05	0.01	0.05	0.03	0.34	0.00	0.01
Percentage difference before an	d after dat	a caps ap	plied															
Total costs	-1.4	-2.8	-3.1	-2.0	-1.7	-0.3	-1.7	-1.3	-3.0	-1.2	-2.0	-1.1	-2.4	-1.4	-3.5	-2.6	-1.4	-0.8
Benefit payments	-1.6	-3.1	-3.1	-2.1	-1.8	-0.3	-1.8	-1.3	-3.3	-0.6	-1.8	-1.0	-2.6	-1.1	-3.6	-2.8	-0.8	-0.8
Medical payments	-2.4	-6.9	-4.0	-3.9	-2.6	-0.4	-2.3	-1.9	-5.5	-1.6	-3.0	-1.6	-4.4	-1.6	-6.3	-4.9	-1.2	-1.0
Indemnity benefits	0.0	-0.4	-1.5	0.0	0.0	-0.1	-0.3	-0.3	0.0	0.0	0.0	-0.1	-0.8	-0.1	-0.2	-0.1	0.0	-0.3
Benefit delivery expenses	-0.3	-0.7	-2.3	-0.7	-1.2	-0.7	-1.0	-1.8	-0.3	-4.2	-2.4	-0.4	-0.7	-2.9	-2.5	-1.3	-0.8	-0.5
Total incurred costs	-1.6	-6.2	-4.0	-3.4	-1.6	-1.1	-7.4	-2.2	-5.0	-4.5	-8.5	-2.3	-3.3	-4.3	-2.7	-8.8	-1.0	-3.2
Incurred benefits	-1.8	-7.1	-4.5	-3.8	-1.6	-1.2	-8.3	-2.4	-5.6	-4.7	-9.1	-2.6	-3.7	-4.9	-2.7	-9.9	-0.8	-3.4
Incurred medical benefits	-2.8	-10.9	-5.7	-7.1	-2.7	-1.9	-11.0	-1.6	-9.4	-8.7	-14.0	-3.5	-7.3	-8.2	-5.0	-6.0	-1.2	-4.5
Incurred indemnity benefits	0.0	-2.7	-2.1	-0.1	-0.2	-0.3	-1.1	-3.5	0.0	-1.9	-0.6	-1.2	-0.2	-0.7	-0.3	-14.1	0.0	-0.4
Claims with more than 7 days	s of lost ti	me in 20	13/2016															
Percentage of claims with data of	aps applie	ed .																
Total costs	0.91	1.31	0.51	0.57	0.47	0.49	0.44	0.21	0.58	0.53	0.35	1.15	0.81	2.72	1.74	0.97	0.45	0.64
Benefit payments	0.09	0.06	0.07	0.08	0.16	0.04	0.04	0.07	0.05	0.06	0.07	0.03	0.07	0.03	0.11	0.13	0.02	0.06
Medical payments	0.09	0.06	0.06	0.08	0.16	0.03	0.02	0.05	0.05	0.06	0.07	0.03	0.07	0.02	0.11	0.10	0.02	0.06
Indemnity benefits	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.00	0.00
Benefit delivery expenses <sup>a</sup>	0.84	1.27	0.46	0.50	0.38	0.49	0.43	0.16	0.53	0.49	0.30	1.16	0.80	2.71	1.66	0.91	0.44	0.61
Total incurred costs	0.19	0.08	0.09	0.11	0.19	0.04	0.04	0.07	0.05	0.10	0.11	0.09	0.08	0.07	0.21	0.39	0.07	0.06
Incurred benefits	0.19	0.08	0.09	0.11	0.17	0.04	0.04	0.07	0.05	0.10	0.11	0.09	0.08	0.05	0.12	0.38	0.07	0.05
Incurred medical benefits	0.19	0.07	0.08	0.11	0.15	0.04	0.03	0.06	0.05	0.10	0.11	0.06	0.07	0.04	0.12	0.14	0.06	0.05
Incurred indemnity benefits	0.00	0.04	0.02	0.01	0.02	0.00	0.01	0.02	0.00	0.01	0.00	0.04	0.01	0.01	0.01	0.28	0.01	0.00
Percentage difference before an	d after dat	a caps ap	plied															
Total costs	-1.9	-1.2	-1.8	-1.1	-3.1	-0.8	-0.4	-1.0	-0.3	-0.7	-1.1	-0.8	-1.5	-1.0	-2.7	-2.5	-0.1	-0.6
Benefit payments	-1.6	-1.4	-1.2	-1.1	-3.4	-0.8	-0.3	-1.0	-0.3	-0.6	-1.1	-0.6	-1.5	-0.3	-2.6	-2.4	0.0	-0.3
Medical payments	-2.9	-2.4	-1.4	-2.6	-6.5	-1.7	-0.3	-1.9	-0.6	-2.1	-2.4	-1.1	-3.0	-0.5	-6.1	-3.5	0.0	-0.5
Indemnity benefits	0.0	-0.6	-1.1	0.0	0.0	0.0	-0.5	-0.3	0.0	0.0	0.0	0.0	-0.5	0.0	0.0	-1.0	0.0	0.0
Benefit delivery expenses	-3.4	-0.5	-4.7	-0.4	-0.7	-0.9	-1.2	-0.6	-0.2	-0.5	-1.1	-0.8	-0.4	-2.7	-3.2	-3.0	-0.4	-1.1
Total incurred costs	-5.0	-2.8	-3.0	-3.7	-4.5	-1.6	-1.7	-2.0	-0.3	-4.6	-3.1	-3.0	-4.6	-1.7	-6.5	-8.7	-0.7	-0.7
Incurred benefits	-5.6	-3.3	-2.9	-4.3	-4.8	-1.8	-1.8	-2.4	-0.4	-5.1	-3.5	-3.4	-5.2	-2.0	-6.2	-9.8	-0.8	-0.8
Incurred medical benefits	-9.3	-5.3	-4.4	-9.7	-9.4	-4.1	-2.5	-5.3	-0.9	-14.6	-7.6	-5.9	-11.5	-3.8	-14.2	-9.5	-1.5	-1.2
Incurred indemnity benefits	0.0	-1.4	-0.9	-0.2	-0.3	0.0	-0.3	0.0	0.0	-0.1	0.0	-0.7	-0.4	-0.2	0.0	-10.2	0.0	0.0
•																		

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> The percentage of claims with benefit delivery expenses capped is calculated based on claims with more than seven days of lost time that have benefit delivery expenses. The percentages of claims capped for the benefit variables and for the benefit delivery expenses do not add up to the percentage of claims capped for total costs because different modules were used for benefits and benefit delivery expenses. See the section titled, "Other Computation Methods," in this technical appendix for a discussion of computation modules.

Table TA.12 Maximum and Minimum Temporary Total Disability Benefits, 2010–2016

Effective Date	TTD Benefit Rate	Maximum Benefit	Minimum Benefit (not to exceed AWW or percentage of AWW, as noted)				
AR (see note)							
1/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$550.00	\$20.00				
1/1/10–12/31/10	663/3% of AWW	\$562.00	\$20.00				
1/1/11–12/31/11	663/3% of AWW	\$575.00	\$20.00				
1/1/12–12/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$584.00	\$20.00				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$602.00	\$20.00				
1/1/14–12/31/14	66¾% of AWW	\$617.00	\$20.00				
1/1/15–12/31/15	66¾% of AWW	\$629.00	\$20.00				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$646.00	\$20.00				
CA (see note)							
1/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$958.01	\$143.70				
1/1/10–12/31/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$986.69	\$148.00				
1/1/11–12/31/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$986.69	\$148.00				
1/1/12–12/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,010.50	\$151.57				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,066.72	\$160.00				
1/1/14–12/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,074.64	\$161.19				
1/1/15–12/31/15	66% of AWW	\$1,103.29	\$165.49				
1/1/16–12/31/16	66% of AWW	\$1,128.43	\$169.26				
FL (see note)							
1/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$765.00	\$20.00 or worker's AWW, whichever is less				
1/1/10–12/31/10	66⅔% of AWW	\$772.00	\$20.00 or worker's AWW, whichever is less				
1/1/11–12/31/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$782.00	\$20.00 or worker's AWW, whichever is less				
1/1/12–12/31/12	66¾ of AWW	\$803.00	\$20.00 or worker's AWW, whichever is less				
1/1/13–12/31/13	663/3% of AWW	\$816.00	\$20.00 or worker's AWW, whichever is less				
1/1/14–12/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$827.00	\$20.00 or worker's AWW, whichever is less				
1/1/15–12/31/15	66¾% of AWW	\$842.00	\$20.00 or worker's AWW, whichever is less				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$863.00	\$20.00 or worker's AWW, whichever is less				
GA (see note)							
7/1/09–6/30/10	66⅔% of AWW	\$500.00	\$50.00 or worker's AWW, whichever is less				
7/1/10–6/30/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$500.00	\$50.00 or worker's AWW, whichever is less				
7/1/11–6/30/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$500.00	\$50.00 or worker's AWW, whichever is less				
7/1/12–6/30/13	663/4% of AWW	\$500.00	\$50.00 or worker's AWW, whichever is less				
7/1/13–6/30/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$525.00	\$50.00 or worker's AWW, whichever is less				
7/1/14–6/30/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$525.00	\$50.00 or worker's AWW, whichever is less				
7/1/15–6/30/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$550.00	\$50.00 or worker's AWW, whichever is less				
IA (see note)	30/3/031/1111	<del>4550.00</del>	\$50.00 of Worker 5711111, Whitehever 151635				
in (see note)			Based on AWW of \$247 or worker's spendable earnings,				
7/1/09–6/30/10	80% of spendable (after-tax) income	\$1,413.00	whichever is less				
	·		Based on AWW of \$249 or worker's spendable earnings,				
7/1/10–6/30/11	80% of spendable (after-tax) income	\$1,420.00	whichever is less				
			Based on AWW of \$255 or worker's spendable earnings,				
7/1/11–6/30/12	80% of spendable (after-tax) income	\$1,457.00	whichever is less				
7/1/12 6/20/12	000/ - 6   - -  ( -6 + )	£1 400 00	Based on AWW of \$262 or worker's spendable earnings,				
7/1/12–6/30/13	80% of spendable (after-tax) income	\$1,498.00	whichever is less				
7/1/13–6/30/14	80% of spendable (after-tax) income	\$1,543.00	Based on AWW of \$270 or worker's spendable earnings, whichever is less				
771713 0730714	oo // or speriodole (diter tax) income	\$1,515.00	Based on AWW of \$275 or worker's spendable earnings,				
7/1/14–6/30/15	80% of spendable (after-tax) income	\$1,572.00	whichever is less				
	· · · · · · · · · · · · · · · · · · ·		Based on AWW of \$275 or worker's spendable earnings,				
7/1/15–6/30/16	80% of spendable (after-tax) income	\$1,628.00	whichever is less				
IL (see note)							
1/15/09–7/14/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,231.41	\$206.67 or worker's AWW, whichever is less				
7/15/09–1/14/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,243.00	\$213.33 or worker's AWW, whichever is less				
1/15/10–7/14/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,243.00	\$213.33 or worker's AWW, whichever is less				
7/15/10–7/14/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,243.00	\$220.00 or worker's AWW, whichever is less				
7/15/11–1/14/12	66% of AWW	\$1,243.00	\$220.00 or worker's AWW, whichever is less				
			\$220.00 or worker's AWW, whichever is less				
1/15/12-7/14/12	66% of AWW	\$1,288.96					
7/15/12–1/14/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,295.47	\$220.00 or worker's AWW, whichever is less				
1/15/13-7/14/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,320.03	\$220.00 or worker's AWW, whichever is less				
7/15/13–1/14/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,331.20	\$220.00 or worker's AWW, whichever is less				
1/15/14–7/14/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,336.91	\$220.00 or worker's AWW, whichever is less				
7/15/14–1/14/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,341.07	\$220.00 or worker's AWW, whichever is less				
1/15/15–7/14/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,361.79	\$220.00 or worker's AWW, whichever is less				
7/15/15 1/14/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,379.73	\$220.00 or worker's AWW, whichever is less				
7/15/15–1/14/16	227,012 231 331 33		· · · · · · · · · · · · · · · · · · ·				

Table TA.12 Maximum and Minimum Temporary Total Disability Benefits, 2010–2016 (continued)

Effective Date	TTD Benefit Rate	Maximum Benefit	Minimum Benefit (not to exceed AWW or percentage of AWW, as noted)				
IN (see note)							
7/1/09–6/30/10	663/4% of AWW	\$650.00	\$50.00				
7/1/10–6/30/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$650.00	\$50.00				
7/1/11–6/30/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$650.00	\$50.00				
7/1/12–6/30/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$650.00	\$50.00				
7/1/13–6/30/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$650.00	\$50.00				
7/1/14–6/30/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$693.33	\$75.00				
7/1/15–6/30/16	66%% of AWW	\$736.67	\$75.00				
KY (see note)							
1/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$694.30	\$138.86				
1/1/10–12/31/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$711.79	\$142.36				
1/1/11–12/31/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$721.97	\$144.40				
1/1/12–12/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$736.19	\$147.24				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$752.69	\$150.54				
1/1/14-12/31/14	66%% of AWW	\$769.06	\$153.81				
1/1/15–12/31/15	66%% of AWW	\$773.61	\$154.72				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$798.63	\$159.72				
LA (see note)	CC2/O/ - CANADAI	¢577.00	\$154.00				
9/1/09-8/31/10	66%% of AWW	\$577.00	\$154.00 or worker's AWW, whichever is less				
9/1/10-8/31/11 9/1/11-8/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW 66 <sup>2</sup> / <sub>3</sub> % of AWW	\$579.00 \$592.00	\$154.00 or worker's AWW, whichever is less \$158.00 or worker's AWW, whichever is less				
		\$605.00					
9/1/12-8/31/13 9/1/13-8/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW 66 <sup>2</sup> / <sub>3</sub> % of AWW	\$619.00	\$161.00 or worker's AWW, whichever is less \$165.00 or worker's AWW, whichever is less				
9/1/14-8/31/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$630.00	\$168.00 or worker's AWW, whichever is less				
9/1/15–8/31/16	66%% of AWW	\$649.00	\$173.00 or worker's AWW, whichever is less				
MA (see note)	00/370 OI AVVVV	Ç049.00	\$173.00 of worker 5 AWW, Whichlever is less				
10/1/09-9/30/10	60% of AWW	\$1,094.70	\$218.94 or worker's AWW, whichever is less				
10/1/10=9/30/11	60% of AWW	\$1,088.06	\$217.61 or worker's AWW, whichever is less				
10/1/11-9/30/12	60% of AWW	\$1,135.82	\$227.16 or worker's AWW, whichever is less				
10/1/12-9/30/13	60% of AWW	\$1,173.06	\$234.61 or worker's AWW, whichever is less				
10/1/13-9/30/14	60% of AWW	\$1,181.28	\$236.26 or worker's AWW, whichever is less				
10/1/14-9/30/15	60% of AWW	\$1,214.99	\$243.00 or worker's AWW, whichever is less				
10/1/15–9/30/16	60% of AWW	\$1,256.47	\$251.29 or worker's AWW, whichever is less				
MI (see note)			,				
1/1/09–12/31/09	80% of spendable (after-tax) income	\$752.00	n/a				
1/1/10–12/31/10	80% of spendable (after-tax) income	\$746.00	n/a				
1/1/11–12/31/11	80% of spendable (after-tax) income	\$742.00	n/a				
1/1/12–6/29/12	80% of spendable (after-tax) income	\$775.00	n/a				
6/30/12-12/31/12	80% of spendable (after-tax) income	\$798.00	n/a				
1/1/13–12/31/13	80% of spendable (after-tax) income	\$798.00	n/a				
1/1/14–12/31/14	80% of spendable (after-tax) income	\$805.00	n/a				
1/1/15–12/31/15	80% of spendable (after-tax) income	\$820.00	n/a				
1/1/16–12/31/16	80% of spendable (after-tax) income	\$842.00	n/a				
MN (see note)							
10/1/08-9/30/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$850.00	\$130.00 or worker's AWW, whichever is less				
10/1/13-9/30/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$963.90	\$130.00 or worker's AWW, whichever is less				
10/1/14-9/30/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$980.22	\$130.00 or worker's AWW, whichever is less				
10/1/15-9/30/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$1,008.78	\$130.00 or worker's AWW, whichever is less				
NC (see note)							
1/1/09–12/31/09	663% of AWW	\$816.00	\$30.00				
1/1/10–12/31/10	663% of AWW	\$834.00	\$30.00				
1/1/11–12/31/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$836.00	\$30.00				
1/1/12–12/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$862.00	\$30.00				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$884.00	\$30.00				
1/1/14–12/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$904.00	\$30.00				
1/1/15–12/31/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$920.00	\$30.00				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$944.00	\$30.00				
NJ (see note)							
1/1/09–12/31/09	70% of AWW	\$773.00	\$206.00				
1/1/10–12/31/10	70% of AWW	\$794.00	\$212.00				
1/1/11–12/31/11	70% of AWW	\$792.00	\$211.00				
1/1/12–12/31/12	70% of AWW	\$810.00	\$216.00				
1/1/13–12/31/13	70% of AWW	\$826.00	\$220.00				
1/1/14–12/31/14	70% of AWW	\$843.00	\$225.00				
1/1/15–12/31/15	70% of AWW	\$855.00	\$228.00				
1/1/16-12/31/16	70% of AWW	\$871.00	\$232.00				

Table TA.12 Maximum and Minimum Temporary Total Disability Benefits, 2010–2016 (continued)

Effective Date	TTD Benefit Rate	Maximum Benefit	Minimum Benefit (not to exceed AWW or percentag of AWW, as noted)				
PA (see note)							
1/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$836.00	\$418.00 or 90% of worker's AWW, whichever is less				
1/1/10–12/31/10	66¾% of AWW	\$845.00	\$422.50 or 90% of worker's AWW, whichever is less				
1/1/11–12/31/11	66¾% of AWW	\$858.00	\$429.00 or 90% of worker's AWW, whichever is less				
1/1/12–12/31/12	66¾% of AWW	\$888.00	\$444.00 or 90% of worker's AWW, whichever is less				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$917.00	\$458.50 or 90% of worker's AWW, whichever is less				
1/1/14–12/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$932.00	\$466.00 or 90% of worker's AWW, whichever is less				
1/1/15–12/31/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$951.00	\$475.50 or 90% of worker's AWW, whichever is less				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$978.00	\$489.00 or 90% of worker's AWW, whichever is less				
ΓX (see note)							
10/1/09–9/30/10	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$773.00	\$116.00				
10/1/10–9/30/11	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$766.00	\$115.00				
10/1/11–9/30/12	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$787.00	\$118.00				
10/1/12–9/30/13	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$818.00	\$123.00				
10/1/13–9/30/14	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$850.00	\$127.00				
10/1/14–9/30/15	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$861.00	\$129.00				
10/1/15–9/30/16	70%; if hourly wage less than \$8.50 per hour, then 75% of AWW (for 26 weeks)	\$895.00	\$134.00				
VA (see note)							
7/1/09–6/30/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$895.00	\$223.75 or worker's AWW, whichever is less				
7/1/10–6/30/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$885.00	\$221.25 or worker's AWW, whichever is less				
7/1/11–6/30/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$905.00	\$226.25 or worker's AWW, whichever is less				
7/1/12–6/30/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$935.00	\$233.75 or worker's AWW, whichever is less				
7/1/13–6/30/14	66¾% of AWW	\$955.00	\$238.75 or worker's AWW, whichever is less				
7/1/14–6/30/15	66¾% of AWW	\$967.00	\$241.75 or worker's AWW, whichever is less				
7/1/15–6/30/16	66¾% of AWW	\$975.00	\$243.75 or worker's AWW, whichever is less				
NI (see note)							
/1/09–12/31/09	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$808.00	\$20.00				
1/1/10–12/31/10	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$815.00	\$20.00				
/1/11–12/31/11	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$820.00	\$20.00				
1/1/12–12/31/12	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$854.00	\$20.00				
1/1/13–12/31/13	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$879.00	\$20.00				
1/1/14–12/31/14	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$892.00	\$20.00				
1/1/15–12/31/15	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$911.00	\$20.00				
1/1/16–12/31/16	66 <sup>2</sup> / <sub>3</sub> % of AWW	\$936.00	\$20.00				

### Notes:

AR: Annual increases in maximum and minimum benefits go into effect on January 1.

CA: Under legislation signed into law February 15, 2002, maximum temporary disability benefits were increased to \$602 per week effective January 2003 and to \$840 per week by 2005. Beginning in 2006, the maximum weekly benefit is indexed to the SAWW.

FL: The annual increase in the maximum benefit takes effect on January 1. Florida pays temporary total catastrophic benefits to workers who suffer the loss of a hand, arm, leg, or foot, or the loss of sight in both eyes, or are rendered paraplegic or quadriplegic. Benefits are set at 80 percent of the worker's preinjury AWW, subject to a weekly maximum of \$700, and are payable for up to six months.

GA: Annual increases in maximum and minimum benefits go into effect on July 1.

IA: Annual increases in maximum and minimum benefits go into effect on July 1. Minimum benefit is "the amount to which a worker who earns 35% of SAWW is entitled," not 35% of SAWW as reported in some publications. "80% of spendable earnings" works out to between 60–70% of AWW and varies by tax status (married/number of exemptions). The state publishes a full benefit table.

IL: Increases in maximum benefits go into effect on January 15 and July 15 of each year.

IN: Maximum and minimum benefits are changed by legislation and go into effect on July 1.

KY: Annual increases in maximum and minimum benefits go into effect on January 1.

LA: Annual increases in maximum and minimum benefits go into effect on September 1.

 $\mbox{MA:}$  Annual increases in maximum and minimum benefits go into effect on October 1.

MI: The agency publishes tables that determine 80 percent of the after-tax value of a given wage. Factors included in this calculation include the tax filing status, the number of dependents, and the state and federal tax rates. Annual increases in maximum benefits go into effect on January 1. The value of most discontinued fringe benefits, including the cost of health insurance, pension benefits, and holiday and vacation pay, are included in the calculation of the AWW, provided they do not raise the AWW above two-thirds of the SAWW for the year of injury.

MN: Maximum and minimum benefits are changed by legislation and go into effect on October 1.

NC: Annual increases in maximum and minimum benefits go into effect on January 1.

NJ: Annual increases in maximum and minimum benefits go into effect on January 1.

### Table TA.12 Maximum and Minimum Temporary Total Disability Benefits, 2010–2016 (continued)

PA: If the statutory benefit rate is less than 50 percent of the SAWW, the benefit must be calculated using the lower of 50 percent of the SAWW or 90 percent of the worker's AWW. The minimum benefit is the point at which benefits computed using the statutory rate are subject to recalculation. Annual increases in benefits go into effect on January 1

TX: Temporary total disability benefits are called temporary income benefits in Texas. For workers who earn less than \$8.50 an hour, the benefit rate is 75 percent of their AWW for the first 26 weeks; the benefit rate reverts to 70 percent after 26 weeks. The minimum weekly benefit for temporary disability is 15 percent of the SAWW for manufacturing production workers. The SAWW was set by legislation for fiscal years beginning from September 1, 2003, through September 1, 2005. The SAWW, used to calculate the maximum weekly compensation income benefits, was set at 88 percent of the AWW in covered employment as computed by the Texas Workforce Commission (TWC) effective on or after October 1, 2006. House Bill 7 allows the Commissioner to raise the SAWW to no more than 100 percent of the TWC rate.

VA: Annual increases in maximum and minimum benefits go into effect on July 1.

WI: Annual increases in maximum and minimum benefits go into effect on January 1.

Key: AWW: average weekly wage; n/a: not applicable; SAWW: statewide average weekly wage; TTD: temporary total disability.

Sources: State statutes; Arkansas Workers' Compensation Commission; California Division of Workers' Compensation; Florida Division of Workers' Compensation; Georgia State Board of Workers' Compensation; Illinois Workers' Compensation Commission; Workers' Compensation Board of Indiana; Iowa Workforce Development, Division of Workers' Compensation; Kentucky Department of Workers' Claims; Louisiana Office of Workers' Compensation Administration; Massachusetts Department of Industrial Accidents; Michigan Workers' Compensation Agency; Minnesota Department of Labor and Industry, Workers' Compensation Division; New Jersey Department of Labor and Workforce Development; North Carolina Industrial Commission; Pennsylvania Bureau of Workers' Compensation; Texas Division of Workers' Compensation; Virginia Workers' Compensation Commission; and Wisconsin Division of Worker's Compensation

Table TA.13 Effect of Selecting a Subset of Claims with More Than 7 Days of Lost Time, 2015/2016

	AR	CA	FL	GA	IA	IL	IN	KY	LA	MA	MI	MN	NC	NJ	PA	TX	VA	WI
Statutory waiting period for indemnity benefits (days)	7	3	7	7	3	3	7	7	7	5	7	3	7	7	7	7	7	3
Before selection																		
Classification																		
Medical-only claims (percentage)	83%	71%	79%	79%	77%	71%	85%	83%	76%	67%	84%	78%	81%	74%	81%	77%	84%	77%
Indemnity claims (percentage)	17%	29%	21%	21%	23%	29%	15%	17%	24%	33%	16%	22%	19%	26%	19%	23%	16%	23%
After selection																		
Classification																		
Claims with less than or equal to 7 days of lost time (percentage)	83%	74%	79%	79%	80%	73%	85%	83%	76%	69%	84%	80%	81%	74%	81%	77%	84%	81%
Claims with more than 7 days of lost time (percentage)	17%	26%	21%	21%	20%	27%	15%	17%	24%	31%	16%	20%	19%	26%	19%	23%	16%	19%

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. Notice the effects of the subset selection on the states with waiting periods of less than seven days: California, Illinois, Iowa, Massachusetts, Minnesota, and Wisconsin.

Table TA.14 Effect of Selecting a Subset of Claims with More Than 7 Days of Lost Time in States with Waiting Periods of Less Than 7 Days, 2015/2016

			Length of V	Vaiting Perio	od	
Performance Measure			3 Days			5 Days
	CA	IA	IL	MN	WI <sup>a</sup>	MA
Total number of paid and reserv	ed indemnity clain	ns				
Before subset selection	74,825	5,630	23,225	9,916	9,943	12,853
After subset selection	68,104	5,027	21,621	8,766	8,301	11,986
Percentage difference	-9%	-11%	-7%	-12%	-17%	-7%
Average duration of temporary	disability (weeks)					
Before subset selection	13.6	8.0	12.8	8.5	7.2	13.5
After subset selection	15.1	9.0	13.7	9.6	8.5	14.4
Percentage difference	11%	12%	8%	13%	18%	7%
Average medical payment per i	ndemnity claim					
Before subset selection	\$6,310	\$15,296	\$14,238	\$10,117	\$16,719	\$6,105
After subset selection	\$6,866	\$16,879	\$15,205	\$11,225	\$19,516	\$6,472
Percentage difference	9%	10%	7%	11%	17%	6%
Average indemnity payment pe	r indemnity claim					
Before subset selection	\$8,902	\$6,893	\$9,545	\$5,785	\$5,091	\$8,983
After subset selection	\$9,891	\$7,768	\$10,317	\$6,562	\$6,087	\$9,620
Percentage difference	11%	13%	8%	13%	20%	7%

*Note*: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> Wisconsin had a higher percentage of injured workers who were away from work for between four and seven days, which is higher than the other states with three- or five-day waiting periods. This may be related to several factors. Wisconsin had a higher percentage of its workforce in manufacturing, about 16 percent compared with 8 to 14 percent in the other states. Employers in manufacturing often have on-site medical care, which facilitates return to work. In addition, Wisconsin statutes encourage offers of light duty employment to injured workers (Wis. Stat. s. 102.43(9) and DWD 80.47). This is discussed in the WCRI report Factors Influencing Return to Work for Injured Workers: Lessons from Pennsylvania and Wisconsin (Belton, 2011).

Table TA.15 Distribution of Claims by Injury and Industry, Claims with More Than 7 Days of Lost Time, 2015/2016

						Injury Cl	assification						
Industry Classification	Spine (back and neck) Sprains, Strains, and Non- Specific Pain	Other Sprains and Strains	Carpal Tunnel	Neurological Spine Pain	Fractures, Lower Extremity	Fractures, Upper Extremity	Hand Laceration	Inflammations	Lacerations and Contusions	Knee Derangement	Skin	Other Injuries	Total
Clerical and professional	1.2%	2.1%	0.1%	0.2%	0.2%	0.3%	0.5%	0.4%	1.7%	0.1%	0.2%	1.5%	8.3%
Construction	0.8%	1.2%	0.0%	0.2%	0.2%	0.3%	0.6%	0.2%	1.1%	0.1%	0.2%	1.3%	6.1%
High-risk services	4.2%	5.5%	0.1%	0.6%	0.3%	0.5%	2.9%	0.9%	4.3%	0.2%	1.1%	4.2%	24.9%
Low-risk services	2.1%	3.0%	0.1%	0.4%	0.2%	0.3%	1.3%	0.6%	2.1%	0.2%	0.3%	2.3%	12.8%
Manufacturing	2.4%	4.6%	0.3%	0.4%	0.3%	0.7%	2.3%	1.2%	3.7%	0.2%	0.8%	3.7%	20.6%
Trade	2.8%	4.1%	0.1%	0.5%	0.3%	0.4%	1.8%	0.8%	3.5%	0.2%	0.4%	2.6%	17.3%
Other industries or missing	1.4%	2.3%	0.1%	0.2%	0.2%	0.3%	0.9%	0.5%	1.9%	0.1%	0.3%	1.9%	10.1%
Total	14.8%	22.7%	0.7%	2.6%	1.7%	2.7%	10.2%	4.6%	18.2%	1.1%	3.3%	17.5%	100.0%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

Table TA.16 Distribution of Average Weekly Wage by Injury and Industry, Claims with More Than 7 Days of Lost Time, 2015/2016

						Injury Cla	assification					
Industry Classification	Spine (back and neck) Sprains, Strains, and Non- Specific Pain	Other Sprains and Strains	Carpal Tunnel	Neurological Spine Pain	Fractures, Lower Extremity	Fractures, Upper Extremity	Hand Laceration	Inflammations	Lacerations and Contusions	Knee Derangement	Skin	Other Injuries
Clerical and professional	\$741	\$759	\$905	\$835	\$907	\$910	\$642	\$852	\$667	\$940	\$654	\$761
Construction	\$814	\$891	\$917	\$1,040	\$972	\$891	\$651	\$989	\$724	\$1,096	\$832	\$831
High-risk services	\$609	\$619	\$669	\$742	\$695	\$670	\$420	\$713	\$520	\$844	\$400	\$605
Low-risk services	\$751	\$761	\$866	\$883	\$847	\$816	\$669	\$835	\$652	\$995	\$648	\$741
Manufacturing	\$643	\$697	\$743	\$779	\$841	\$739	\$614	\$764	\$614	\$949	\$654	\$702
Trade	\$523	\$524	\$592	\$611	\$556	\$584	\$484	\$561	\$472	\$708	\$467	\$527
Other industries or missing	\$624	\$646	\$724	\$788	\$759	\$706	\$461	\$738	\$528	\$953	\$530	\$629

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016.

Table TA.17 WCRI Measures Adjusted for Wages

WCRI Measure	Figure or Table in Report
Average total cost per claim	Figures 1, 2, 3, 4, 7; Table 2
Average benefit payment per claim	Figures 1, 2, 3, 4, 7, 9, 10, 11; Table 2
Average indemnity benefit per claim	Figures 1, 2, 3, 4, 7, 9, 10, 11; Table 2
Average incurred total cost per claim	Table 2
Average incurred benefit per claim	Figure 5, 6; Table 2
Average incurred indemnity benefit per claim	Figure 5, 6; Table 2
Average temporary disability payment per claim	Figure 7, 8, 11
Average PPD/LS payment per claim	Figure 7, 8, 11
Average weekly TTD benefit rate	Figure 7, 8
Average lump-sum settlement per claim	Figure 11; Table 2

Key: PPD/LS: permanent partial disability or lump sum; TTD: temporary total disability.

Table TA.18 Measures before and after Subset Selection and Adjustment, 2015/2016 and 2013/2016

	Measure before							
Payment Type	Subset	Subset	Selection <sup>a</sup>		/Industry ustment	Overall Effec		
	Selection/ Adjustment	Measure	Effect (percentage)	Measure	Effect (percentage)	Measure	Effect (percentage)	(percentage)
Claims from injury year	r 2015, at 12 months	' average ma	nturity					
Average indemnity benef	it							
Arkansas	\$6,289	\$6,289	0%	\$6,016	-4%	\$6,566	9%	4%
California	\$8,902	\$9,891	11%	\$9,935	0%	\$9,854	-1%	11%
Florida	\$7,001	\$7,001	0%	\$7,118	2%	\$8,011	13%	14%
Georgia	\$10,580	\$10,580	0%	\$10,839	2%	\$12,313	14%	16%
llinois	\$9,545	\$10,317	8%	\$10,238	-1%	\$9,567	-7%	0%
ndiana	\$5,952	\$5,952	0%	\$6,084	2%	\$6,700	10%	13%
owa	\$6,893	\$7,768	13%	\$7,659	-1%	\$7,835	2%	14%
Kentucky	\$7,424	\$7,424	0%	\$7,712	4%	\$8,225	7%	11%
Louisiana	\$10,745	\$10,745	0%	\$10,316	-4%	\$10,367	0%	-4%
Massachusetts	\$8,983	\$9,620	7%	\$9,546	-1%	\$8,222	-14%	-8%
Michigan	\$6,088	\$6,088	0%	\$6,150	1%	\$6,067	-1%	0%
Minnesota	\$5,785	\$6,562	13%	\$6,633	1%	\$6,793	2%	17%
New Jersey	\$7,187	\$7,187	0%	\$7,170	0%	\$6,692	-7%	-7%
North Carolina	\$10,981	\$10,981	0%	\$11,122	1%	\$12,716	14%	16%
Pennsylvania	\$11,889	\$11,889	0%	\$11,997	1%	\$11,450	-5%	-4%
Texas	\$8,553	\$8,553	0%	\$8,466	-1%	\$8,189	-3%	-4%
Virginia	\$8,213	\$8,213	0%	\$8,269	1%	\$8,622	4%	5%
Wisconsin	\$5,091	\$6,087	20%	\$6,176	1%	\$5,976	-3%	17%
Average medical paymen								
Arkansas	\$11,843	\$11,843	0%	\$10,919	-8%	n/a	n/a	-8%
California	\$6,310	\$6,866	9%	\$7,178	5%	n/a	n/a	14%
Florida	\$12,017	\$12,017	0%	\$12,478	4%	n/a	n/a	4%
Georgia	\$11,261	\$11,261	0%	\$11,794	5%	n/a	n/a	5%
Illinois	\$14,238	\$15,205	7%	\$15,542	2%	n/a	n/a	9%
ndiana	\$17,148	\$17,148	0%	\$17,143	0%	n/a	n/a	0%
owa	\$15,296	\$16,879	10%	\$16,279	-4%	n/a	n/a	6%
Kentucky	\$11,170	\$11,170	0%	\$11,524	3%	n/a	n/a	3%
Louisiana	\$15,567	\$15,567	0%	\$15,407	-1%	n/a	n/a	-1%
Massachusetts	\$6,105	\$6,472	6%	\$6,578	2%	n/a	n/a	8%
Michigan	\$8,994	\$8,994	0%	\$9,121	1%	n/a	n/a	1%
Minnesota	\$10,117	\$11,225	11%	\$11,418	2%	n/a	n/a	13%
New Jersey	\$15,625	\$15,625	0%	\$15,624	0%	n/a	n/a	0%
North Carolina	\$10,821	\$10,821	0%	\$10,841	0%	n/a	n/a	0%
Pennsylvania	\$13,761	\$13,761	0%	\$13,838	1%	n/a	n/a	1%
Гехаѕ	\$10,435	\$10,435	0%	\$10,261	-2%	n/a	n/a	-2%
Virginia	\$17,649	\$17,649	0%	\$17,491	-1%	n/a	n/a	-1%
Wisconsin	\$16,719	\$19,516	17%	\$19,594	0%	n/a	n/a	17%
Claims from injury year				¥12/221	0,0	11/4	11, 4	1770
Average indemnity benefi		average illa	iturity					
Arkansas	\$11,966	\$11,966	0%	\$11,853	-1%	\$13,272	12%	11%
								6%
California	\$19,054 \$11,950	\$20,623	8%	\$20,169	-2%	\$20,261	10%	
Florida		\$11,950	0%	\$12,549	5%	\$13,865	10%	16%
Georgia	\$24,177	\$24,177 \$22,254	7%	\$23,857	-1%	\$27,372	15%	13%
llinois	\$20,837		7%	\$22,381	1%	\$21,275	-5%	2%
ndiana	\$9,744	\$9,744	1104	\$10,012	3%	\$10,914	9%	12%
owa Kantuska	\$18,771	\$20,767	11%	\$21,265	2%	\$21,861	3%	16%
Kentucky	\$16,126	\$16,126	0%	\$16,203	0%	\$17,456	8%	8%
ouisiana	\$27,035	\$27,035	0%	\$24,918	-8%	\$25,480	2%	-6%
Massachusetts	\$20,923	\$22,460	7%	\$22,133	-1%	\$19,083	-14%	-9%
Michigan	\$12,718	\$12,718	0%	\$13,743	8%	\$13,747	0%	8%
Minnesota	\$13,465	\$15,068	12%	\$15,578	3%	\$15,210	-2%	13%
New Jersey	\$15,266	\$15,266	0%	\$15,191	0%	\$14,208	-6%	-7%
North Carolina	\$25,305	\$25,305	0%	\$25,984	3%	\$28,279	9%	12%
Pennsylvania	\$26,727	\$26,727	0%	\$26,936	1%	\$25,523	-5%	-5%
Texas	\$11,981	\$11,981	0%	\$11,914	-1%	\$11,553	-3%	-4%
Virginia	\$19,035	\$19,035	0%	\$19,342	2%	\$19,858	3%	4%
Wisconsin	\$10,203	\$12,077	18%	\$12,077	0%	\$11,405	-6%	12%

Table TA.18 Measures before and after Subset Selection and Adjustment, 2015/2016 and 2013/2016 (continued)

				Meas	ure after			
Payment Type	Measure before Subset Selection/	Subset	Selection <sup>a</sup>		/Industry Istment	Wage A	djustment <sup>b</sup>	Overall Effect (percentage)
	Adjustment	Measure	Effect (percentage)	Measure	Effect (percentage)	Measure	Effect (percentage)	(percentage)
Average medical payı	ment							
Arkansas	\$15,565	\$15,565	0%	\$15,259	-2%	n/a	n/a	-2%
California	\$12,570	\$13,493	7%	\$13,517	0%	n/a	n/a	8%
Florida	\$14,789	\$14,789	0%	\$15,546	5%	n/a	n/a	5%
Georgia	\$16,337	\$16,337	0%	\$16,271	0%	n/a	n/a	0%
Illinois	\$18,796	\$19,955	6%	\$20,354	2%	n/a	n/a	8%
Indiana	\$23,042	\$23,042	0%	\$23,176	1%	n/a	n/a	1%
lowa	\$19,282	\$21,053	9%	\$20,800	-1%	n/a	n/a	8%
Kentucky	\$13,115	\$13,115	0%	\$13,193	1%	n/a	n/a	1%
Louisiana	\$23,287	\$23,287	0%	\$21,921	-6%	n/a	n/a	-6%
Massachusetts	\$9,048	\$9,638	7%	\$9,612	0%	n/a	n/a	6%
Michigan	\$10,838	\$10,838	0%	\$11,226	4%	n/a	n/a	4%
Minnesota	\$14,121	\$15,557	10%	\$15,917	2%	n/a	n/a	13%
New Jersey	\$20,324	\$20,324	0%	\$19,681	-3%	n/a	n/a	-3%
North Carolina	\$16,522	\$16,522	0%	\$16,672	1%	n/a	n/a	1%
Pennsylvania	\$18,268	\$18,268	0%	\$18,422	1%	n/a	n/a	1%
Texas	\$15,006	\$15,006	0%	\$15,163	1%	n/a	n/a	1%
Virginia	\$22,936	\$22,936	0%	\$23,143	1%	n/a	n/a	1%
Wisconsin	\$19,937	\$23,158	16%	\$22,704	-2%	n/a	n/a	14%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016; 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

Key: n/a: not applicable.

<sup>&</sup>lt;sup>a</sup> Selection of a subset of claims with more than seven days of lost time.

<sup>&</sup>lt;sup>b</sup> Wage adjustments were not applied to average medical payments.

Table TA.19 Trends of the National Consumer Price Index (CPI) and Producer Price Index (PPI), 2009 to 2015

Price Indices		Annual Average					
	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015	Percentage Change
CPI-U for all products, all urban consumers,							
nationwide	1.6%	3.2%	2.1%	1.5%	1.6%	0.1%	1.7%
CPI-M for all medical care services,							
nationwide	3.5%	3.1%	3.9%	3.1%	2.4%	2.4%	3.1%
PPI-AMUM for all mining, utilities, and							
manufacturing industries nationwide	4.8%	7.2%	1.4%	0.8%	1.3%	-5.2%	1.7%
PPI-ASHC for selected health care							
industries nationwide	2.7%	1.9%	1.9%	1.4%	1.1%	0.6%	1.6%

Notes: For more information on Bureau of Labor Statistics' CPI-U and CPI-M see <a href="http://www.bls.gov/cpi">http://www.bls.gov/cpi</a>. For additional information on Bureau of Labor Statistics' PPI Series ID PCUASHC and PCUAMUM located at <a href="http://www.bls.gov/ppi">http://www.bls.gov/ppi</a>.

Key: CPI-M: Consumer Price Index for medical care; CPI-U: Consumer Price Index for all urban consumers nationwide; PPI-AMUM: Producer Price Index for major industries; PPI-ASHC: Producer Price Index for selected health care industries.

Table TA.20 State Trends in Prices Paid for Professional Services from WCRI Medical Price Index for Workers' Compensation, 2008 to 2015 P

<u></u>	Fee Regulation			Annual Grov	vth Rate (percent	age change)			Annual Average
State	Туре	2008 to 2009	2009 to 2010	2010 to 2011	2011 to 2012	2012 to 2013	2013 to 2014	2014 to 2015 <sup>p</sup>	Percentage Change
AR	FS	2.4%	2.4%	5.9%	0.1%	-1.5%	-4.8%	-1.6%	0.3%
$AZ^a$	FS	3.1%	5.8%	0.0%	-0.2%	2.3%	9.5%	-0.7%	2.8%
CA	FS	2.0%	0.9%	0.0%	-0.9%	-0.3%	7.7%	1.2%	1.5%
COa	FS	1.9%	3.0%	3.7%	2.2%	1.7%	-1.3%	-0.4%	1.5%
CT	FS	3.3%	1.7%	2.6%	-1.0%	-2.1%	-0.1%	-0.4%	0.6%
FL	FS	3.7%	0.3%	-2.4%	-0.2%	-0.6%	1.4%	-1.5%	0.1%
GA	FS	2.7%	3.8%	8.5%	5.4%	0.1%	0.1%	-0.2%	2.9%
IA	Non-FS	5.2%	2.4%	3.2%	-1.3%	-2.4%	1.4%	-1.1%	1.0%
IL	FS	6.0%	3.1%	-9.6%	-19.7%	2.2%	-0.4%	2.1%	-2.7%
IN	Non-FS	7.2%	6.2%	-1.0%	5.7%	-3.7%	6.0%	5.3%	3.6%
KS	FS	2.0%	3.5%	1.2%	4.9%	0.4%	4.8%	-3.3%	1.9%
KY	FS	1.8%	-0.2%	2.7%	-0.6%	-0.6%	9.6%	9.0%	3.0%
LA	FS	3.6%	1.0%	0.5%	1.0%	1.1%	1.3%	0.3%	1.2%
MA	FS	12.5%	2.0%	0.1%	-0.5%	-0.5%	0.4%	0.9%	2.0%
MD	FS	2.3%	3.1%	8.9%	3.4%	0.4%	-3.1%	0.4%	2.1%
MI	FS	1.2%	1.3%	-0.3%	0.1%	0.7%	0.9%	-5.1%	-0.2%
MN	FS	4.8%	1.0%	-2.7%	3.3%	1.3%	1.0%	0.7%	1.3%
MO <sup>a</sup>	Non-FS	9.1%	3.3%	-0.4%	1.7%	0.8%	4.8%	2.8%	3.1%
MS <sup>b</sup>	FS	0.8%	0.9%	-0.6%	-0.6%	-0.4%	7.6%	n/a	n/a
NC	FS	2.6%	1.1%	-1.5%	0.7%	4.7%	0.4%	0.1%	1.1%
NE <sup>b</sup>	FS	1.1%	1.2%	2.1%	-1.4%	-0.4%	-2.6%	n/a	n/a
NJ	Non-FS	4.5%	3.2%	3.8%	2.9%	-13.2%	2.8%	5.4%	1.2%
NY <sup>a</sup>	FS	0.1%	0.4%	0.5%	1.0%	-0.6%	0.1%	0.6%	0.3%
OK <sup>a</sup>	FS	0.4%	2.2%	0.7%	4.4%	0.9%	0.0%	-0.6%	1.1%
OR <sup>a,b</sup>	FS	7.1%	7.5%	5.6%	-1.0%	-1.1%	-0.4%	n/a	n/a
PA	FS	0.2%	-0.2%	0.6%	2.7%	0.8%	1.3%	1.1%	0.9%
SC	FS	0.0%	3.3%	1.4%	0.9%	0.4%	-1.1%	1.2%	0.9%
TN	FS	1.9%	9.2%	4.4%	-1.1%	-7.9%	-4.7%	-0.2%	0.1%
TX	FS	7.2%	4.1%	16.2%	1.9%	-0.2%	-3.8%	0.3%	3.5%
VA	Non-FS	4.0%	4.3%	1.7%	3.7%	0.0%	6.0%	-0.2%	2.8%
WI	Non-FS	6.5%	6.4%	2.5%	3.8%	0.8%	5.2%	1.8%	3.8%

Special notation: We use the notation p to indicate that the 2015 numbers are preliminary results based on half-year price data through June 30, 2015.

### Notes:

The 18 states included in CompScope™ Benchmark studies, 17th edition, are shown in bold type.

Professional services in the WCRI Medical Price Index study refer to medical professional services that are billed by physicians, physical therapists/occupational therapists, and chiropractors. Medical professional services include eight types of services: evaluation and management, physical medicine, minor radiology, major radiology, major surgery, pain management injections, neurological/neuromuscular testing, and emergency services.

The fee regulation type column in this table labels states with and without workers' compensation fee schedules for professional services with FS and Non-FS, respectively.

<sup>a</sup> The data for each of these states are not necessarily representative because each state is missing data from a larger data source that is significant in that state. The results in AZ, CO, NY, OK, and OR are unlikely to be significantly under- or overestimated, given that these states use fee schedules to regulate the payment for professional services, and it is unlikely that the prices paid for the missing data source in each state were materially different from other data sources included in this study from the same state. For MO, to the extent that prices paid may differ for the missing data source compared with other data sources in the state, this may lead to possible under- or overestimations in the results.

Key: FS: fee schedule; n/a: not applicable.

Source: Yang and Fomenko. 2016. WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).

b MS, NE, and OR have been excluded because of insufficient cell sizes in 2015 (half-year) to support this trend analysis.

Table TA.21 Rate of Payment, Claims with More Than 7 Days of Lost Time, 2015/2016 and 2013/2016

State	nid to Incurred	
State	Medical Payments (percentage)	Indemnity Benefits (percentage)
Claims from injur	y year 2015, at 12 months' average m	aturity
Arkansas	60%	55%
California	41%	64%
Florida	71%	77%
Georgia	65%	64%
Illinois	67%	48%
Indiana	74%	63%
lowa	73%	44%
Kentucky	61%	53%
Louisiana	61%	59%
Massachusetts	57%	56%
Michigan	67%	66%
Minnesota	66%	63%
New Jersey	78%	39%
North Carolina	60%	57%
Pennsylvania	70%	58%
Texas	65%	66%
Virginia	69%	60%
Wisconsin	80%	60%
Claims from injur	y year 2013, at 36 months' average m	aturity
Arkansas	86%	90%
California	60%	84%
Florida	89%	91%
Georgia	85%	88%
Illinois	84%	72%
Indiana	93%	85%
lowa	88%	78%
Kentucky	80%	74%
Louisiana	77%	77%
Massachusetts	77%	82%
Michigan	87%	82%
Minnesota	84%	83%
New Jersey	91%	65%
North Carolina	84%	87%
Pennsylvania	87%	83%
Texas	85%	86%
Virginia	84%	80%
Wisconsin	91%	79%

Notes: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016. The numbers in the table reflect the percentage of payments expected to be paid on a claim that had been paid as of the evaluation date. For example, in Texas, for 2015/2016 claims, 65 percent of medical payments and 66 percent of indemnity benefits expected to be made on those claims had been made by March 31, 2016. In California, just 41 percent of expected medical payments and 64 percent of expected indemnity benefits had been made by the evaluation date.

Table TA.22 Simulated Results in Texas, Subscribers Versus Nonsubscribers, Claims with More Than 7 Days of Lost Time, 2015/2016 and 2013/2016

	Av	verage Paid Benefit pe	r Claim	
- Assumption	Subscribers	Simulated Nonsubscribers	Simulated Result for Subscribers and Nonsubscribers <sup>a</sup>	Difference (percentage) <sup>b</sup>
Claims from injury year 2015, at 12 months' avera	age maturity			
Nonsubscriber results are similar to average result of all 18 states	\$18,449	\$21,397	\$18,980	-3%
Nonsubscriber results are similar to results in the lowest-cost state (Massachusetts)	\$18,449	\$14,800	\$17,792	4%
Nonsubscriber results are similar to results in the 18-state median	\$18,449	\$22,937	\$19,257	-4%
Nonsubscriber results are similar to Texas subscribers' median results	\$18,449	\$10,548	\$17,027	8%
Claims from injury year 2013, at 36 months' avera	age maturity			
Nonsubscriber results are similar to average result of all 18 states	\$26,716	\$35,743	\$28,341	-6%
Nonsubscriber results are similar to results in the lowest-cost state (Michigan)	\$26,716	\$24,973	\$26,402	1%
Nonsubscriber results are similar to results in the 18-state median	\$26,716	\$33,990	\$28,026	-5%
Nonsubscriber results are similar to Texas subscribers' median results	\$26,716	\$12,526	\$24,162	11%

Note: 2015/2016 refers to claims with injuries arising from October 1, 2014, through September 30, 2015, evaluated as of March 31, 2016. 2013/2016 refers to claims with injuries arising from October 1, 2012, through September 30, 2013, evaluated as of March 31, 2016.

<sup>&</sup>lt;sup>a</sup> The simulated result is the weighted average of benefit payments per claim across the subscribers and the simulated subscribers and nonsubscribers, based on the assumption that the subscribers have 82 percent of the market and the nonsubscribers have 18 percent of the market. This assumption is based on the Survey of Employer Participation in the Texas Workers' Compensation System (2016) by the Texas Department of Insurance, which indicates that the percentage of Texas private sector employees employed by subscribers is 82 percent and by non-subscribers is 18 percent in 2016 (Texas Department of Insurance. 2016. Employer Participation in the Texas Workers' Compensation System: 2016 Estimates).

b The percentage difference in the average benefit per claim between the subscribers and the simulated result for subscribers and nonsubscribers.

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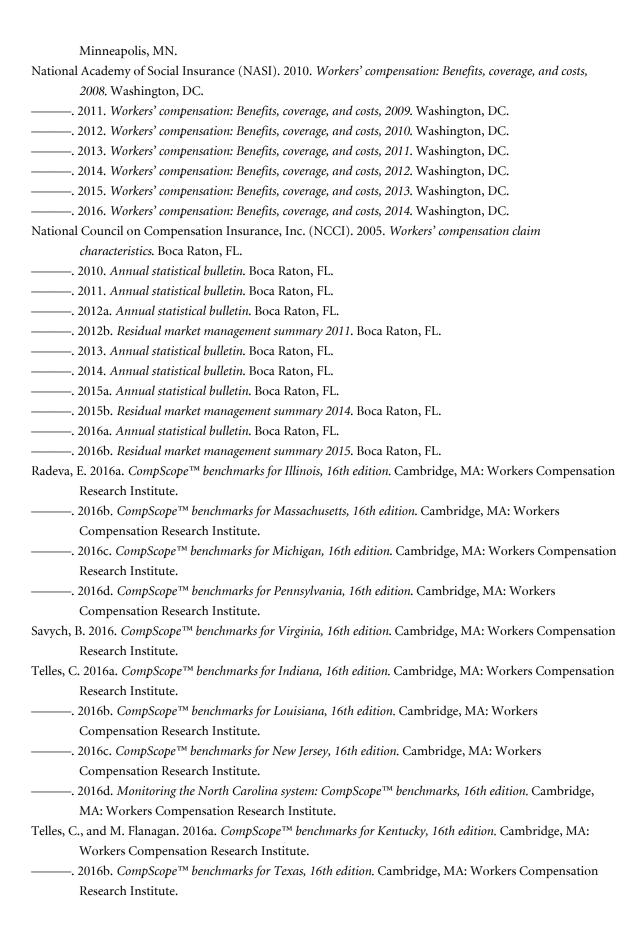
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