

ANNUAL REPORT

2017

RESEARCH REVIEW



WCRI

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Research Institute

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WORKERS COMPENSATION RESEARCH INSTITUTE

ANNUAL REPORT

CEO's Letter	3
The Institute	4
The Need	5
The Impact	6
Membership	8
Governance	9
The Research Program	11
Core Benchmark Studies	11
Topical Studies	12
WCRI Website	13

RESEARCH REVIEW

Core Benchmark Studies	15
Topical Studies	28
Publication List	37

WCRI Annual Report

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OUR MISSION: TO BE A CATALYST FOR SIGNIFICANT IMPROVEMENTS IN WORKERS' COMPENSATION SYSTEMS, PROVIDING THE PUBLIC WITH OBJECTIVE, CREDIBLE, HIGH-QUALITY RESEARCH ON IMPORTANT PUBLIC POLICY ISSUES.

To WCRI Members and Friends:

Dear WCRI Members and Friends,

In January of 2016, I took over as president and CEO of WCRI. I had big shoes to fill, namely those of WCRI's founder and executive director of more than 30 years, Dr. Richard Victor. It is not easy taking over from someone who founded an organization, especially one doing such complex and important research as WCRI. However, I benefited from a great transition plan, a strong board, a great staff, and the support of our members and supporters from across the country.



Transition can be disruptive. My first-year goal was for the transition to be transparent to those outside the Institute. I believe we were successful, as we continue producing credible, independent, and high-quality research that is used by policymakers and system stakeholders across the country. Examples of our impact can be viewed on page six of this report.

That said, producing impactful research means providing research findings that are used in public policy debates to improve workers' compensation systems. Although many rave about our research, we also hear from some of our members and non-members alike that it tends to be very scholarly and technical. With the transition behind us, I am focused on making our research more easily accessible to a broader set of stakeholders without sacrificing the rigor that has defined our work for so many years. This means developing new formats for disseminating our research, as well as exploring new ways to get the work in front of people.

An example of a new delivery vehicle is our new website, which will be released later this year and takes into account the latest design elements and features available today. In addition to an overall cleaner design and navigation system, all users will have the ability to search our research using various filters from their phone, tablet, or desktop computer. This is just one of the ways we are working to improve how we communicate our research and what we offer, especially to policymakers and others system stakeholders.

Last year brought many changes and challenges to the workers' compensation system. One of the more notable was the U.S. Department of Labor's report, which questioned whether the workers' compensation system is fulfilling its obligations to injured workers. Recent elections at the federal and state level as well as key court decisions also pose potential changes and challenges, some large, for the system in the years ahead.

More than ever in this challenging environment, WCRI's research is needed to move beyond the anecdotes, to better inform efforts to improve state workers' compensation systems. Only through research and careful monitoring can we have a fruitful dialogue about the challenges and opportunities that are available in a given system. If reforms are proposed or enacted, we are prepared to study them so that we understand the consequences, both intended and unintended.

WCRI is prepared to research the many challenges that face us in the years to come. We will continue to educate policymakers and system stakeholders and provide the sound research, credible data, and objective analysis that contribute to an informed debate while avoiding taking positions or making recommendations.

We thank our members for their generous support of our research through their data, funding, and expertise. WCRI would not be where it is today without your help.

Respectfully yours,

John W. Ruser, Ph.D.
President and CEO

The Institute

“The research, analysis, and publications provided by WCRI are instrumental in benchmarking and comparing Kentucky’s workers’ compensation system across a wide spectrum of measures. The research, which accurately reflects the status of our system, enables development of appropriate recommendations to improve the delivery of workers’ compensation benefits and system performance.”

*Bill Londrigan,
President, Kentucky State
AFL-CIO*

The Workers Compensation Research Institute (WCRI) is an independent, not-for-profit research organization providing high-quality, objective information about public policy issues involving workers’ compensation systems.

The Institute’s work helps those interested in improving workers’ compensation systems by providing much-needed data and analyses that help answer the following questions:

- How are workers’ compensation systems performing?
- How do various state systems compare?
- How can systems better meet workers’ needs?
- What factors are driving costs?
- What is the impact of legislative change on system outcomes?
- What are the possible consequences of proposed system changes? Are there alternative solutions that merit consideration? What are their consequences?

Those who benefit from the Institute’s work include public officials, insurers, employers, injured workers, organized labor, and others affected by workers’ compensation systems across the United States and around the world.

Organized in late 1983, the Institute is independent, not controlled by any industry or trade group. The Institute does not take positions on the issues it researches; rather, it provides information obtained through studies and data-collection efforts that conform to recognized scientific methods, with objectivity further ensured through rigorous, unbiased quality control procedures.

The Institute’s work takes several forms:

- **Original research studies of major issues** confronting workers’ compensation systems (for example, permanent partial disability, litigiousness, and medical management)
- **Studies of individual state systems** where policymakers have shown an interest in change and where there is an unmet need for objective information
- **Studies of states that have undergone major legislative changes** to measure the impact of those changes and draw possible lessons for other states
- **Studies to identify those system features** that are associated with positive and negative outcomes
- **Presentations** on research findings to legislators, workers’ compensation administrators, industry groups, and others interested in workers’ compensation issues

The Need

The reports and testimony of WCRI act as a catalyst for constructive change in improving workers’ compensation systems throughout the U.S. and internationally. Too often, public policies are shaped by anecdote and emotion, not by objective evidence about current system performance or the consequences of proposed changes. As a result of WCRI research, policymakers and stakeholders can make information-based decisions that prove to be more enduring because they are more efficient, more equitable, and better designed to meet the needs of workers and employers.

Specifically, WCRI research meets the following important stakeholder needs:

- **Measuring system results** to encourage continuous improvement and move the system away from the historic cycle of crisis-reform-crisis that has frequently characterized workers’ compensation in the past.
- **Examining disability and medical management** by evaluating and measuring the outcomes of medical care. These studies provide regulators with information about managing workplace injuries, what regulatory barriers are unnecessary or counterproductive, and what regulatory protections are needed for injured workers to assure quality outcomes. These studies also help guide business decisions.
- **Identifying system features that improve performance** or drive costs and quantifying their impact on system performance. These studies focus attention on system strengths and opportunities for improvement. They also provide lessons from successful states that other states may adopt.

WCRI provides reliable information to legislators, governors, state (provincial) and federal administrators, task forces and study commissions, industry groups, labor organizations, and others interested in improving workers’ compensation systems. The Institute’s research addresses the major issues confronting these systems today. Its public policy studies are disseminated to all interested parties.

“WCRI is a reliable resource that provides a variety of topics and information for workers’ compensation professionals considering program changes or for keeping abreast of trends in state, or national, activities or for primarily improving employee outcomes. The organization’s access to a wide range of information from multiple sources validates the reliability of the data for analysis and decision making by stakeholders.”

*Tony Colangelo,
Manager,
Workers’ Compensation,
The Sherwin-Williams
Company*

The Impact

“With a reputation for independent and high-quality research, WCRI has gained an incredible amount of respect in the industry. Their research, coupled with their reputation, provides a solid foundation for informed dialogue about our workers’ compensation system. They provide policymakers, member companies, and other stakeholders with actionable insights that allow us to improve the system for injured workers.”

Frank Radack,
Vice President,
Liberty Mutual

Improvement in workers’ compensation systems is a product of many factors. WCRI’s research is one important factor. Policymakers continue to look to the Institute as a source of objective information to help them make informed decisions about legislation and administrative changes.

Below are some examples from the past year.

- WCRI’s opioid and physician-dispensing studies identified substantial issues in many states having to do with usage, cost, and prescribing methods. These studies continue to have impact throughout the country. The following are some examples of how state policymakers used this research last year:
 - **Massachusetts:** Governor Charlie Baker cited our research on the use of opioids among injured workers in Massachusetts as justification for rolling out a new program to curb opioid addiction among injured workers.
 - **Louisiana:** Insurance Commissioner James Donelon issued a press release that warned of increased deaths and costs due to the prescription opioid epidemic in Louisiana. Findings from WCRI’s *Longer-Term Use of Opioids, 3rd Edition*, were used in the release to support the Commissioner’s argument.
 - **Wisconsin:** Governor Scott Walker signed Assembly Bill 724 into law as Act 180. Among other things, the legislation addressed physician dispensing and permanent partial disability (PPD) rates. During the debate, our research was widely used and WCRI staff were called upon numerous times to answer questions.
 - **Florida:** The Florida State Senate Committee on Banking and Insurance held a meeting on workers’ compensation insurance. WCRI’s July 2013 study, *Physician Dispensing in Workers’ Compensation*, was cited in a report on cost drivers in workers’ compensation that was made available at the meeting by the Florida Office of Insurance Regulation.
- WCRI’s medical fee schedule studies, which quantify the large differences among states in workers’ compensation medical fee schedules, are well-used by public officials to evaluate their own fee regulations. The following are some examples of how state policymakers used this research last year:
 - **Tennessee:** WCRI’s president and CEO, John Ruser, Ph.D., was invited to brief the Tennessee Department of Labor & Industry’s Medical Payment Committee on two of our studies: *Designing Workers’ Compensation Medical Fee Schedules, 2016* and *WCRI Medical Price Index for Workers’ Compensation, Eighth Edition*. The committee advises the state’s workers’ compensation administrator on issues relating to the medical fee schedule and medical cost containment in the workers’ compensation system.

- **Virginia:** Governor Terry McAuliffe signed into law a bill to create a workers’ compensation fee schedule. WCRI’s research was widely used in policy debates.
- **Florida:** Governor Rick Scott signed into law House Bill 1402, which ratifies the updated professional fee schedule adopted by the state Division of Workers’ Compensation. Previously, WCRI published a FlashReport, *Evaluation of the 2015 Professional Fee Schedule Update for Florida*, at the request of the Florida Division of Workers’ Compensation. The report, which was available during the legislative session and leading up to the vote, compares the fee schedule to Medicare rates for the same set of procedures.
- **Michigan:** The Michigan Workers’ Compensation Agency was looking to adopt changes to their medical fee schedule and used WCRI’s work in their regulatory impact statement and cost-benefit analysis, which was submitted to the Michigan Department of Licensing and Regulatory Affairs.
- WCRI’s worker outcomes studies compare outcomes of injured workers across multiple states, and include such metrics as recovery of physical health and functioning return to work, earnings recovery, access to medical care, and satisfaction with medical care. By examining outcomes of injured workers, policymakers and stakeholders can better understand how different state systems compare in order to identify and prioritize opportunities to improve system performance and, more importantly, worker outcomes. The following are examples of how state and national policymakers used this research last year:
 - **National:** WCRI’s reports on workers’ compensation laws and worker outcomes were cited in a U.S. Department of Labor report, *Does the Workers’ Compensation System Fulfill Its Obligations to Injured Workers?*
 - **Kentucky:** WCRI’s president and CEO, John Ruser, Ph.D., was invited to the first meeting of the newly formed Kentucky Workers’ Compensation Task Force by co-chairs Senator Alice Forgy Kerr and Representative Chris Harris. Among the research WCRI shared with the task force were our *CompScope™ Benchmarks for Kentucky, 16th Edition* and *Comparing Outcomes for Injured Workers in Kentucky*.
 - **Pennsylvania:** The Pennsylvania Labor & Industry Committee heard testimony on House Bill 1800, which would implement workers’ compensation medical treatment guidelines. During testimony, those on both sides of the bill used findings from various WCRI studies, including our worker outcomes and opioid research, to ground the debate.
- WCRI’s study, *Impact of a Texas-Like Formulary in Other States*, examined how a Texas-like closed drug formulary might affect the prevalence and costs of drugs in 23 other state workers’ compensation systems that do not currently have a drug formulary. The following are some examples of how state policymakers used this research last year:

“The reports produced by WCRI have served as an invaluable tool for not only the Division, but other stakeholders as well. The data provided helps us understand the impact of various policy changes on the system, and provides context on the impact related to neighboring states. In addition, their willingness to travel and give in-depth presentations, as a non-partisan research group, to our state’s Advisory Council and legislative committees has benefited Wisconsin’s Worker’s Compensation System for everyone involved.”

BJ Dernbach,
Division Administrator,
Workers Compensation,
Wisconsin Department
of Workforce
Development

- **North Carolina:** At the request of the Chairman of the North Carolina Industrial Commission, WCRI published the study *Texas-Like Formulary for North Carolina State Employees*. In his request to WCRI, the Chairman noted, “WCRI is the gold standard when it comes to performing statistical studies of workers’ compensation issues.” The commission’s final report to the North Carolina General Assembly was issued in April 2016. It cited the studies mentioned above.
- **Tennessee:** A drug formulary was implemented and findings from WCRI’s study were used in the debate.
- **Montana:** The Montana Labor Management Advisory Council requested a webinar briefing on this study. The purpose was to inform their discussions on implementing a workers’ compensation drug formulary in Montana.
- **CompScope™** Benchmarks studies, published annually, examine the impact of legislative changes and quantify differences in key metrics among study states. They continue to help policymakers identify key leverage points in their systems. The following is an example of how this research was used last year:
 - **Kentucky:** Our research was cited by a medical doctor in testimony at an October meeting of the Kentucky Workers’ Compensation Task Force. In his testimony, the doctor said WCRI’s research “should be used in reference to the system...its comparative research on various states can be helpful in making beneficial changes to the system.”

To support our research programs, WCRI has developed the largest, most comprehensive, most representative claims database in use today. The Detailed Benchmark/Evaluation (DBE) database, contains over 52.5 million claims from insurers, state funds, and self-insurers and represents nearly 87 percent of the workers’ compensation benefits paid nationwide. This resource is a unique asset for WCRI and the workers’ compensation community and allows WCRI to respond quickly to requests from public officials and other stakeholder groups with detailed, timely analysis of important issues.

Membership

To sustain and strengthen its impact, WCRI continues to expand its active and diverse membership, which elects the board of directors and is the source of representatives serving on key governance committees. Currently, over one hundred and fifty organizations support the Institute. (A list of members and associate members appears on the inside back cover of this report.)

Organizations may join the Institute as members or associate members.

Membership in the Institute is open to insured and self-insured employers, insurers, reinsurers, national trade and professional associations, national labor organizations, universities, insurance brokers, third-party administrators, managed care organizations, other service providers, and law firms. Members have electronic access to key research findings from WCRI studies on the Institute’s website. They also receive all publications from the Institute, preferred rates for registration to WCRI’s acclaimed Annual Issues & Research Conference, and preferential invitations to other WCRI briefings. Member representatives participate in the governance of the Institute.

Associate members have electronic access to key research findings from WCRI studies on WCRI’s website. They also receive all publications from the Institute and preferred rates for registration to WCRI’s Annual Issues & Research Conference and to other WCRI briefings. Associate memberships are available in several categories:

- **Associate member—public sector:** available to state workers’ compensation agencies (except state funds), insurance commissioners, labor departments, and foreign entities
- **Associate member—labor association:** available to state labor organizations
- **Associate member—rating organization:** available to rating organizations

Governance

The responsibility for policymaking rests with the Institute’s board of directors—a representative group of members who are elected by the membership for staggered, three-year terms and meet three times a year. (A list of board members and officers appears on the inside front cover of this report.)

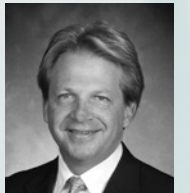
Operating responsibility is vested in the president and CEO by the board, with direction from the board and advice from committees established by the board.

The research committee, composed of representatives of member companies, gives the president and CEO guidance on the Institute’s research program.

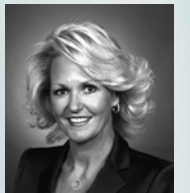
The Disability and Medical Management Research Board provides guidance to the president and CEO as well as funding for issues related to disability and medical management.

Project advisory committees assist the research staff in the formulation and conduct of specific studies. These committees are made up of representatives of member companies, public officials, academic researchers, and others knowledgeable about the specific topics before them.

Officers of the Board of Directors



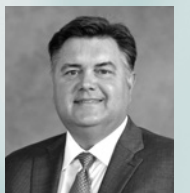
Vincent Armentano,
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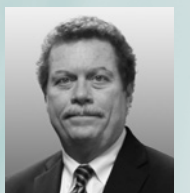
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The Research Program

THE INSTITUTE'S RESEARCH PROGRAM FOCUSES ON THE MAJOR PUBLIC POLICY ISSUES CONFRONTING WORKERS' COMPENSATION SYSTEMS. OUR RESEARCH MEASURES SYSTEM PERFORMANCE, IDENTIFIES COST DRIVERS, QUANTIFIES OUTCOMES RECEIVED BY INJURED WORKERS, EVALUATES THE IMPACT OF ALTERNATIVE SOLUTIONS, AND HIGHLIGHTS EMERGING TRENDS. THE LESSONS FROM WCRI STUDIES ARE USED TO FACILITATE ACTION-ORIENTED DECISIONS BY PUBLIC OFFICIALS, EMPLOYERS, INSURERS, WORKER REPRESENTATIVES, AND OTHERS AFFECTED BY WORKERS' COMPENSATION, BOTH NATIONALLY AND INTERNATIONALLY.

WCRI research can be broken into the following two categories:

Core Benchmark Studies

Topical Studies

The Core Benchmark Studies are the Institute's flagship line of benchmarking studies. From claim costs to worker outcomes, the studies in this program examine the changes in performance of individual state systems and make meaningful interstate comparisons. The studies quantify performance trends, benchmark improvement opportunities, and assess the effectiveness of policy changes. Using these meaningful comparisons, system stakeholders, public officials, and policymakers can monitor their systems on a regular basis, make informed choices about goals for their systems, and better manage change.

- The following are among the studies within this program:
- Compscope™ Benchmarks
 - Compscope™ Medical Benchmarks
 - Worker Outcomes
 - Medical Price Index for Workers' Compensation
 - Hospital Outpatient Payment Index
 - Ambulatory Surgery Center Comparisons

CORE BENCHMARK STUDIES

- Managed Care and Medical Cost Containment Inventory
- Longer-Term Use of Opioids
- Interstate Variations in Use of Opioids
- Pharmaceutical Cost and Use Inventory

The Institute's Topical Studies focus on the major current public policy issues and long-term challenges confronting workers' compensation systems. The studies evaluate the impact of recent reforms, identify emerging trends and issues, identify actions and policies that improve disability and medical management, and identify key leverage points to improve system performance.

The following are a few examples of recent studies that fall within this research program:

- *Do Higher Fee Schedules Increase the Number of Workers' Compensation Cases?*
- *Physician Dispensing of Higher-Priced New Drug Strengths and Formulation*
- *Predictors of Worker Outcomes*
- *Why Surgery Rates Vary Across States*
- *The Impact of Physician Dispensing on Opioid Use*

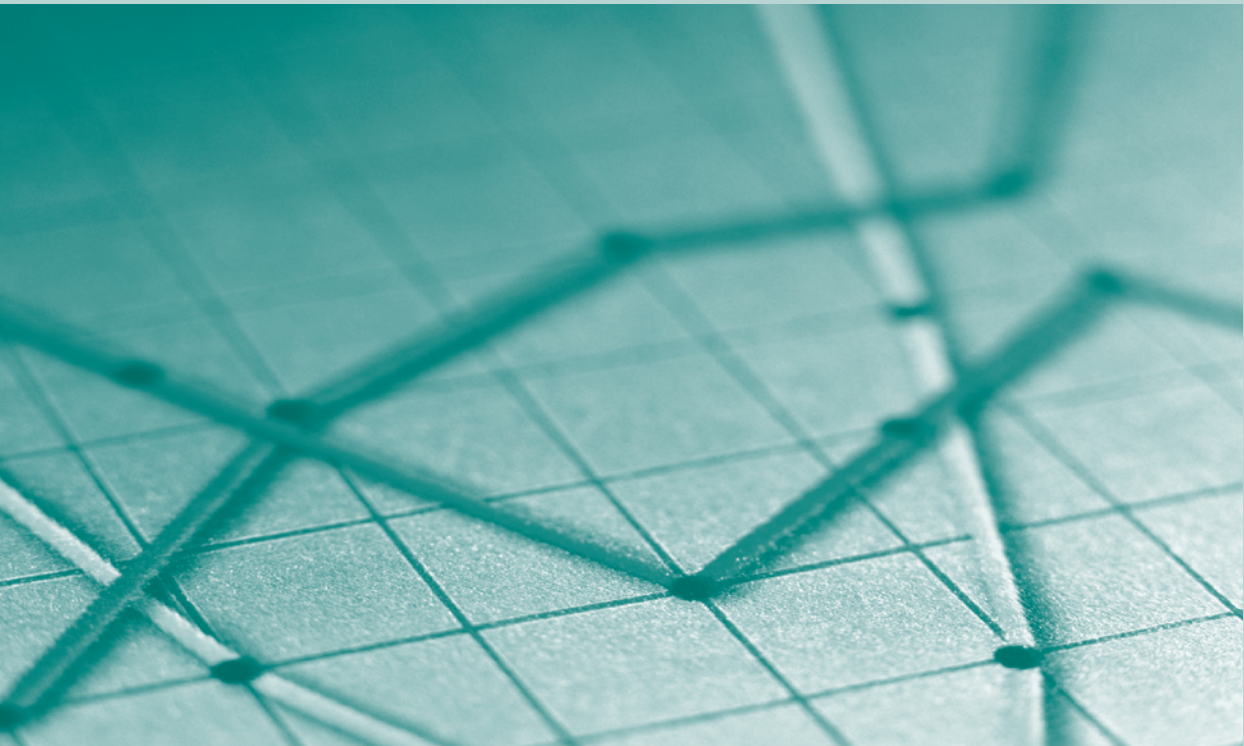
The following are some areas of research that we plan to explore in the near future:

- *The Impact of Higher Deductibles and Co-Payments in Group Health Insurance on Claim Shifting to Workers' Compensation*
- *Healthcare Market Structure and Workers' Compensation Costs—Accountable Care Organizations and Consolidation of Health Care*
- *Impact of Kentucky Opioid Reforms*
- *Examining Compound Drug Use in Workers' Compensation*
- *Impact of Fee Schedules on Access to Care*
- *Impact of Treatment Guidelines and Utilization Review to Enforce Them*
- *Effect of Opioids on Return to Work*

Visit us at www.wcrinet.org to learn more about the work of the Institute and to quickly access over 600 WCRI studies. WCRI's website is one of the most content-rich workers' compensation research websites. The following are among the things you will find on our site:

- Abstracts and executive summaries of over 600 research studies
- Conference and webinar information
- Online ordering of books and recorded webinars
- Press releases





In its 33rd year, the Institute published over 60 major studies on a broad range of topics. This brings the Institute’s total to over 600 books on a wide variety of important workers’ compensation issues affecting a growing number of states.

COMPARING OUTCOMES FOR INJURED WORKERS

These studies compare outcomes of injured workers across the following 15 states: Arkansas, Connecticut, Florida, Georgia, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, North Carolina, Pennsylvania, Tennessee, Virginia, and Wisconsin. The outcomes examined include recovery of physical health and functioning, return to work, earnings recovery, access to medical care, and satisfaction with medical care.

The goal of the studies is to provide information about injured workers’ experiences with the workers’ compensation system. By examining outcomes of injured workers, policymakers and stakeholders can better understand how different state systems compare in order to identify and prioritize opportunities to improve system performance. This research is a product of an ongoing, multiyear effort by WCRI to collect and examine data on the outcomes of medical care achieved by injured workers in a growing number of states.

A sample of the findings from the 15 individual state studies is below.

- **Florida:** Workers in the state reported outcomes that were similar to the median study state on some of the key measures, but reported somewhat higher rates of problems accessing desired services, higher rates of problems accessing desired providers, and higher rates of dissatisfaction with overall medical care.
- **Michigan:** Workers in the state reported outcomes that were generally similar to the median study state on most measures and somewhat lower than the median study state on two of the measures—workers reported a somewhat lower-than-typical rate of not achieving substantial return to work and a somewhat lower-than-typical rate of problems getting desired medical services.
- **Pennsylvania:** Workers in the state reported outcomes that were often in the middle of the range of outcomes observed in other study states. One exception was a somewhat lower-than-typical likelihood that workers reported “big problems” getting the services that they wanted.
- **Virginia:** Workers in the state reported outcomes that were often in the middle of the range of outcomes observed in other study states.
- **Wisconsin:** Workers in the state, when compared with workers in a typical study state, reported somewhat higher rates of substantial return to work, lower rates of problems accessing desired providers and services, and higher rates of satisfaction with medical care.

Comparing Outcomes for Injured Workers. Bogdan Savych and Vennela Thumula. May 2016. WC-16-23 to 37.



INTERSTATE VARIATIONS IN USE OF OPIOIDS, 3RD EDITION

This study observed noticeable decreases in the amount of opioids prescribed per workers’ compensation claim in a majority of study states, coinciding with reforms directed at opioid use.

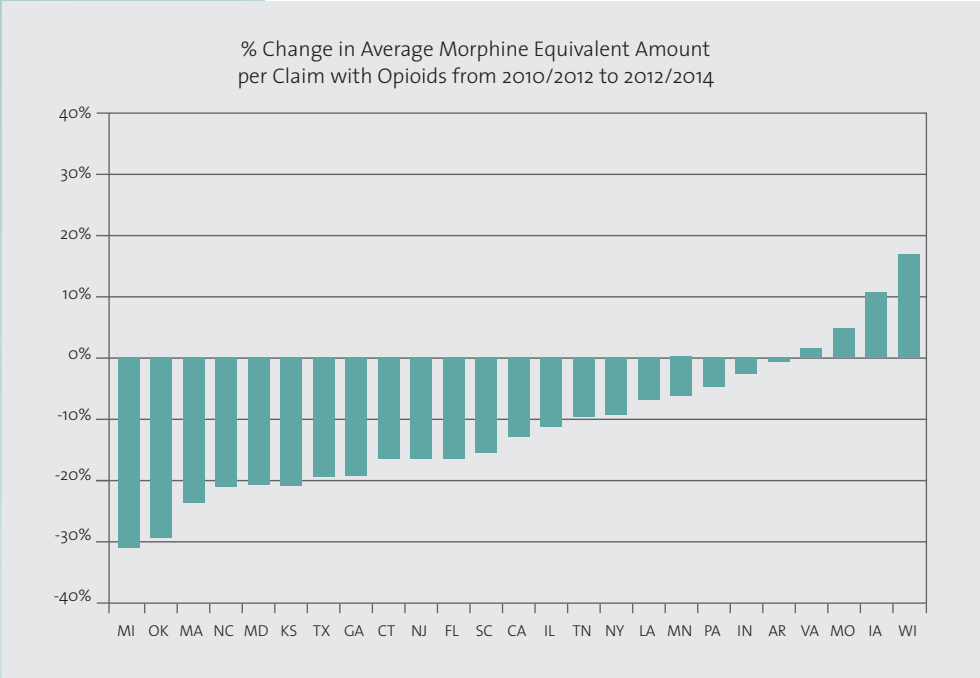
The study examines interstate variations and trends in the use of opioids and prescribing patterns of pain medications across 25 states. It compares the amount of opioids prescribed per claim over two roughly 24-month periods of time ending March 2012 and March 2014.

According to the study, the amount of opioids received by injured workers decreased over the two time periods in the majority of the study states. Statistically significant reductions in the range of 20 to 31 percent were seen in Maryland, Massachusetts, Michigan, Oklahoma, North Carolina, and Texas.

Some of the study’s other findings are as follows:

- Opioid use was prevalent among nonsurgical claims with more than seven days of lost time. About 65 to 80 percent of these injured workers with pain medications received opioids in most states.
- Among claims with opioids, the average amounts of opioids received by injured workers in Louisiana, New York, and Pennsylvania were the highest among the 25 study states. Although Wisconsin, Iowa, and Missouri had an increase in the average amount of opioids per claim over the study period, they had a lower amount of opioids per claim than the median state at the end of the study period.
- Among claims with opioids, simultaneous use of opioids and benzodiazepines was seen in 1–9 percent of injured workers across the 25 states. Use of both opioids and muscle relaxants at the same time was seen in 30–45 percent of claims.

This information should be useful for (1) state officials who wonder if the use of opioids is unusual in their state, (2) payors and managed care companies looking to set priorities for targeting opioid management programs, (3) injured workers and worker advocates looking to understand the extent of the problem in their state, and (4) providers who wonder what the prescribing norms in their state may be and if the state norms are unusual.



This study uses data comprising over 337,000 nonsurgical workers’ compensation claims and nearly 1.9 million prescriptions associated with those claims from 25 states. The claims represent injuries arising from October 1, 2009, to September 30, 2012, with prescriptions filled through March 31, 2014. The underlying data reflect an average 24 months of experience for each claim. The data included in this study represent 40–75 percent of workers’ compensation claims in each state.

The 25 states in the study are Arkansas, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin.

Interstate Variations in Use of Opioids, 3rd Edition. Vennela Thumula, Dongchun Wang, and Te-Chun Liu. June 2016. WC-16-22.

LONGER-TERM USE OF OPIOIDS, 3RD EDITION

This report examines the prevalence and trends of longer-term use of opioids in 25 states and how often the services recommended by medical treatment guidelines were used for monitoring and managing chronic opioid therapy. The study looks at longer-term opioid use over a two-year time period ending March 2014 and compares that with longer-term use over the two-year time period ending March 2012.

The following are among the study’s major findings:

- The frequency of claims that received opioids on a longer-term basis decreased more than 2 percentage points in Michigan over the study period, which translates to an approximately 31 percent reduction. The same measure decreased 1–2 percentage points in several other states (Maryland, New Jersey, New York, North Carolina, and Texas).
- Although longer-term opioid use increased in Wisconsin and Indiana, the frequency of longer-term use was lower compared with the other study states.
- In the roughly two-year time period ending March 2014, longer-term opioid use was most prevalent in Louisiana—1 in 6 injured workers with opioids was identified as having longer-term use of opioids. Compared with most study states, the number was also higher in California, New York, and Pennsylvania. Missouri and New Jersey had the lowest rate among the study states.
- While the percentage of injured workers with longer-term use of opioids receiving drug testing was lower than recommended by treatment guidelines, the frequency of drug tests was unusually high among the top 5 percent of injured workers who received opioids on a longer-term basis and had drug testing.
- In most states, few injured workers with longer-term opioid use received psychological evaluations and psychological treatment. Even in Texas, the state with the highest use of these services, about 1 in 3 had a psychological evaluation and 1 in 8 received psychological treatment.

This study uses data comprising over 300,000 nonsurgical workers' compensation claims with more than seven days of lost time and over 1 million prescriptions associated with these claims from 25 states. The study is focused on two time periods, with the latest period covering claims with injuries arising from October 1, 2011, to September 30, 2012, with prescriptions filled through March 31, 2014. The data included in this study represent 40–75 percent of workers' compensation claims in each state.

The 25 states in the study are Arkansas, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin.

Longer-Term Use of Opioids, 3rd Edition. Dongchun Wang. June 2016. WC-16-42.

COMPSCOPE™ MEDICAL BENCHMARKS, 17TH EDITION

These studies examine trends in payments, prices, and utilization of medical care for injured workers in 18 states (Arkansas, California, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, Virginia, and Wisconsin). The studies cover the period from 2009 through 2014, with claims experience through March 2015. Individual reports are available for every state except Arkansas and Iowa.

They can help identify changes over time in the provision of workers' compensation medical care; detect areas where medical payments per claim, prices, or utilization may be higher or lower compared with other study states for a set of similar claims; or reveal areas where legislative changes or state system features and processes may be impacting the costs or delivery of medical services.

The following are among the questions the studies answer:

- How are workers' compensation medical payments distributed across providers and services?
- How do medical payments, prices, and utilization per claim differ across states for similar injuries and workers?
- How have medical payments, prices, and utilization per claim changed over time within a state, and what are the major drivers of those changes?

The following are some sample findings from the studies:

- **California:** Medical payments per claim decreased 3 percent in 2014, after dropping 4 percent in 2013, for claims with more than seven days of lost time at 12 months of experience. This trend mainly reflected the impact of Senate Bill (SB) 863, particularly the 2013 and 2014 fee schedule changes.
- **Texas:** Medical payments per workers' compensation claim in Texas changed little from 2013 to 2014, reflecting nearly all the effects of reforms focused on medical costs passed in 2005. From 2010 to 2013, medical payments per claim increased 6 percent per year, double the rate in the median state.

- **Illinois:** Medical payments per workers' compensation claim in Illinois increased annually an average of 3.1 percent between 2012 and 2014. Although payments were higher than the other study states, Illinois moved closer to the median study state, which can be attributed, in part, to the state's 2011 reforms.
- **Virginia:** Medical payments per claim grew the fastest of all study states, between 2009 and 2014, driven by both hospital and nonhospital costs. After several years of debate, the state enacted a law in 2016 to establish maximum reimbursement rates for workers' compensation services starting in 2018.
- **North Carolina:** Medical payments per workers' compensation claim changed little after 2009 following growth averaging 6 and 7 percent per year from 2004 to 2009 at all claim maturities. The study attributed the change in trends to several factors, including a decrease in hospital payments per claim. That decrease likely reflects, in part, 2013 interim changes in the state's fee schedules.
- **Indiana:** Medical payments per claim changed little between 2013 and 2014, after nine years of increases. One factor was a decrease in hospital outpatient payments per claim, which may be related to the introduction of a hospital fee schedule effective in July 2014.

CompScope™ Medical Benchmarks, 17th Edition. Sharon E. Belton, Roman Dolinschi, Evelina Radeva, Karen Rothkin, Bogdan Savych, Carol A. Telles, and Rui Yang. October 2016. WC-16-53 to 68.

COMPSCOPE™ BENCHMARKS, 16TH EDITION

The factors behind changing costs in state workers' compensation systems, including the impact of legislative and regulatory reform on those costs, are examined in this 18-state study. These comprehensive reference reports measure the performance of different state workers' compensation systems, how they compare with each other, and how they have changed over time.

The reports are designed to help policymakers and others benchmark state system performance or a company's workers' compensation program. The benchmarks provide an excellent baseline for tracking the effectiveness of policy changes and identifying important trends. They examine how income benefits, overall medical payments, costs, use of benefits, duration of disability, litigiousness, benefit delivery expenses, timeliness of payment, and other metrics of system performance have changed from 2009 through 2014, with claims experience through 2015.

The following is a sample of the key findings across the 18 states:

- **California:** The average medical payment per workers' compensation claim with more than seven days of lost time decreased in 2013 and 2014 after the state implemented the reform legislation, SB 863, in 2013.
- **North Carolina:** Indemnity benefits per claim remained substantially above

the median state studied, but growth has slowed consistent with the aims of the 2011 reforms.

- **Louisiana:** The growth in payments per claim moderated since 2009.
- **Illinois:** The average total cost per workers' compensation claim decreased 8 percent, primarily because of reduction in the medical fee schedule rates in 2011.

The study is based on more than 7.6 million claims filed in the 18 states, which together represent about 60 percent of the nation's workers' compensation benefits paid. The 18 states in the study are Arkansas, California, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, Pennsylvania, Texas, Virginia, and Wisconsin. There are individual reports for every state except Arkansas and Iowa.

CompScope™ Benchmarks, 16th Edition. Sharon E. Belton, Roman Dolinschi, Molly Flanagan, Evelina Radeva, Karen Rothkin, Bogdan Savych, Carol A. Telles, and Rui Yang. April 2016. WC-16-01 to 16.

HOSPITAL OUTPATIENT PAYMENT INDEX: INTERSTATE VARIATIONS AND POLICY ANALYSIS, 5TH EDITION

Rising hospital costs in the treatment of injured workers receive attention from public policymakers and system stakeholders in many states. To assist in better understanding these costs, this study compares hospital outpatient payments across states and monitors the impact of fee schedule reforms. The study also includes an additional benchmark comparing workers' compensation hospital outpatient payments and Medicare rates. This helps states better understand their hospital payments since Medicare is one of the largest payors.

The following are some major findings from the study:

- Hospital outpatient payments per surgical episode varied significantly across states, ranging from 69 percent below the study-state median in New York to 142 percent above the study-state median in Alabama in 2014. Variation in the difference between average workers' compensation payments and Medicare rates for a common group of procedures across states was even greater—reaching as low as 27 percent (or \$631) below Medicare in New York and as much as 430 percent (or \$8,244) above Medicare in Louisiana.
- States with no workers' compensation fee schedules for hospital outpatient reimbursement had higher hospital outpatient payments per episode compared with states with fixed-amount fee schedules—63 to 150 percent higher than the median of the study states with fixed-amount fee schedules. Also, in non-fee schedule states, workers' compensation paid between \$4,262 (or 166 percent) and \$8,107 (or 378 percent) more than Medicare for similar hospital outpatient services.
- States with percent-of-charge-based fee regulations had substantially higher hospital outpatient payments per surgical episode than states with fixed-amount

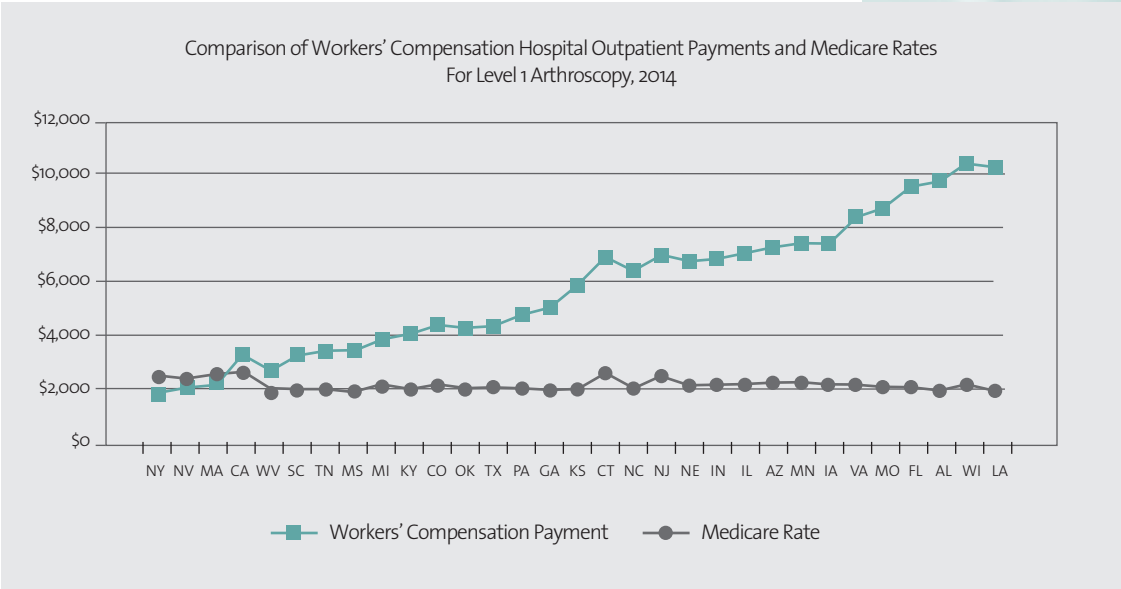
fee schedules—32 to 211 percent higher than the median of the study states with fixed-amount fee schedules. Similar to non-fee schedule states, workers' compensation payments in states with percent-of-charge based fee regulations for common surgical procedures were at least \$3,792 (or 190 percent) and as much as \$8,244 (or 430 percent) higher than Medicare hospital outpatient rates.

- Most states with fixed-amount fee schedules and states with cost-to-charge ratio fee regulations had relatively lower payments per episode among the study states. In particular, for states with fixed-amount fee schedules, the difference between workers' compensation payments and Medicare rates ranged between negative 27 percent (or -\$631) and 144 percent (or \$2,916).

The hospital outpatient payment indices compare payments (per surgical episode) for common outpatient surgeries under workers' compensation from state to state for each study year and the trends within each state from 2005 to 2014. The analysis captures payments for services provided and billed by hospitals, and it excludes professional services billed by non-hospital medical providers (such as physicians, physical therapists, and chiropractors) and transactions for durable medical equipment and pharmaceuticals billed by providers other than hospitals. The analysis also excludes payments made to ambulatory surgery centers.

The 33 states included in this study represent 87 percent of the workers' compensation benefits paid in the United States. The states are Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, West Virginia, and Wisconsin. Note the 2014 workers' compensation and Medicare comparison is conducted for 31 states.

Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 5th Edition. Olesya Fomenko and Rui Yang. August 2016. WC-16-72.



MONITORING TRENDS IN THE NEW YORK WORKERS' COMPENSATION SYSTEM, 2005–2013

The metrics in this report provide the information necessary to observe the possible effects of some of the 2007 legislation and related administrative changes to the New York workers' compensation system. The data that underlie some of the measures in this report are of sufficient maturity to begin to see changes in some of the metrics addressed by the statutory revisions and other changes. It is important to note, however, it will still be several more years before the full impact of the reforms will be realized.

The regular monitoring of system performance helps policymakers and system stakeholders focus attention on the objectives that are being met, objectives that are not being met, and any unintended consequences that have emerged.

The following are among the study's findings:

- **Medical Treatment Guidelines:** In 2011 claims evaluated in 2012 (reflecting 16 months of experience under the treatment guidelines), the number of visits per indemnity claim decreased for chiropractors and physical/occupational therapists when compared with the prior year, while there was little change for physicians.
- **Increase in Indemnity Payments per Claim:** From 2007 through 2009, indemnity payments per claim increased at double-digit rates at all claim maturities. Since 2009, indemnity payments per claim continued to grow, at about 6 percent per year for claims at 12 months of experience and somewhat faster (7–9 percent per year) at the longer claim maturities.
- **Duration Limits on Permanent Partial Disability (PPD) Benefits:** From 2007 to 2011, for PPD/lump-sum cases at an average 36 months of experience, there was a 14 percentage point decrease in cases that received PPD payments only (with no lump-sum payment) and a nearly corresponding 13 percentage point increase in cases with a lump-sum settlement only (with no PPD payments). This may suggest earlier settlements for some types of cases. Over that same period and claim maturity, the average PPD/lump-sum payment increased at double-digit rates in most years for cases with only a lump sum and for cases with both PPD payments and a lump-sum settlement. We observed similar patterns in PPD/lump-sum frequency and payments by type at other claim maturities.
- **Diagnostic Testing and Networks:** Raising the dollar threshold from \$500 to \$1,000 for prior authorization of physician-ordered diagnostic medical tests was aimed at reducing hearings over the medical necessity for these services. From 2007 to 2013 for claims at 12 months of experience, we observed little change on average in the number of visits for major radiology services by nonhospital providers.
- **“Rocket Docket”:** There was little change in the average defense attorney payment per claim in 2010, but an increase of nearly 10 percent per year from 2011 to 2013 for claims at 12 months of experience.

The study uses open and closed indemnity and medical-only claims with dates of injury from October 2004 through September 2013, with experience as of March 2014. The data are representative of the New York system.

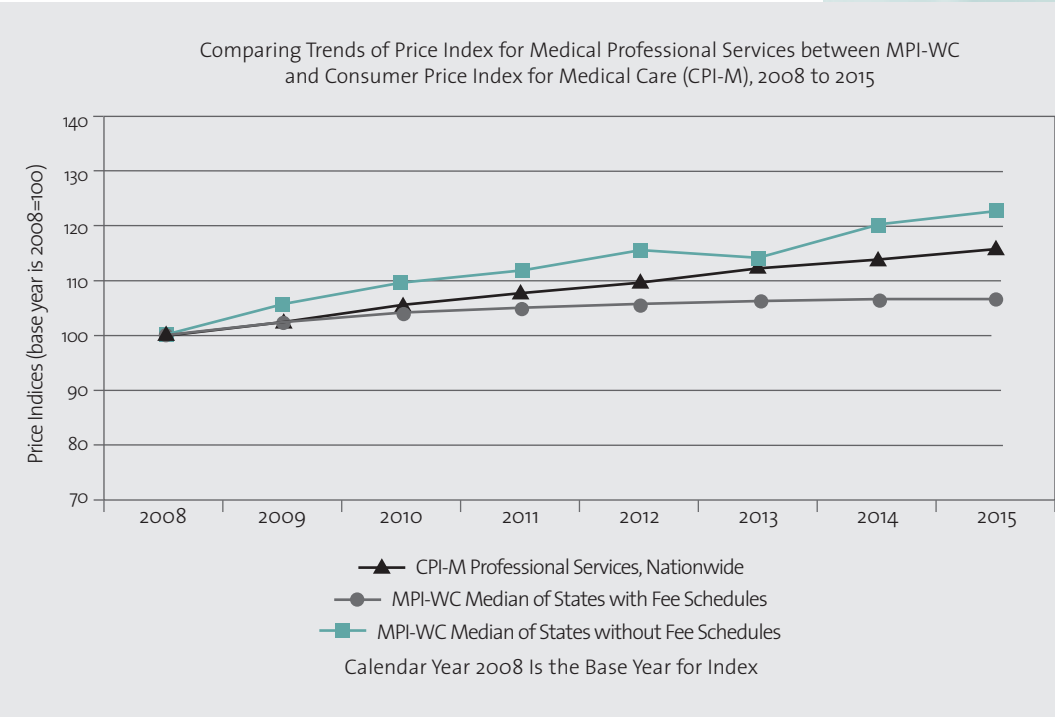
Monitoring Trends in the New York Workers' Compensation System, 2005–2013.
Carol A. Telles and Ramona P. Tanabe. February 2016. WC-16-38.

WCRI MEDICAL PRICE INDEX FOR WORKERS' COMPENSATION, EIGHTH EDITION (MPI-WC)

In recent policy debates, increasing costs of medical care for treating injured workers have been a focus of public policymakers and system stakeholders in many states. To help them conduct meaningful comparisons of prices paid across states, and to monitor the price trends in relation to policy choices and changes in fee schedules, this annual study creates an index for the actual prices paid for professional services based on a marketbasket of commonly used services for treating injured workers.

The following are among the study's key findings:

- Prices paid for a similar set of professional services varied significantly across states, ranging from 31 percent below the 31-state median in Florida to 138 percent above the 31-state median in Wisconsin in 2014. The price index in 2015 shows similar results.
- States with no fee schedules for professional services had higher prices paid compared with states with fee schedules—36 to 154 percent higher than the median of the study states with fee schedules in 2014. Similar results were observed in 2015.
- Growth in prices paid for professional services exhibited tremendous variation across states, spanning between negative 18 percent in Illinois and positive 30 percent in Wisconsin over the time period from 2008 to 2015.



- Most states with no fee schedules experienced faster growth in prices paid for professional services compared with states with fee schedules—the median growth rate among these non-fee schedule states was 26 percent from 2008 to 2015 compared with the median growth rate of 7 percent among the fee schedule states.
- Five study states (Arizona, Illinois, Kentucky, Massachusetts, and Texas) had substantial changes in overall prices paid following major fee schedule changes during the study period. Many study states had substantial price changes at the service-type level. Among these states, California had a major change in the basis of its fee schedule that resulted in a substantial shift in relative prices paid for different types of services.

The MPI-WC tracks medical prices paid in 31 states from calendar year 2008 through 2015 for professional services billed by physicians, physical therapists, and chiropractors. The medical services fall into eight groups: evaluation and management, physical medicine, surgery, major radiology, minor radiology, neurological testing, pain management injections, and emergency care.

The 31 states included in the MPI-WC, which represent 85 percent of the workers' compensation benefits paid in the United States, are Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin.

WCRI Medical Price Index for Workers' Compensation, Eighth Edition (MPI-WC).
Rui Yang and Olesya Fomenko. November 2016. WC-16-74

WORKERS' COMPENSATION LAWS AS OF JANUARY 1, 2016

An essential tool for researching and understanding the distinctions among workers' compensation laws in all U.S. states and certain Canadian provinces is now available from the International Association of Industrial Accident Boards and Commissions (IAIABC) and the Workers Compensation Research Institute (WCRI).

The report is a key resource for policymakers and system stakeholders to identify the similarities and distinctions between workers' compensation regulations in multiple jurisdictions in effect as of January 1, 2016.

The publication is best used to understand macro-level differences and general tendencies across jurisdictions, such as:

- How many states/provinces allow individual or group self-insurance?
- How do the maximum and minimum payments for temporary and permanent total disability benefits vary?
- How many states cover mental stress claims, hearing loss, and cumulative trauma?

- How many jurisdictions allow the worker to choose the treating physician, and how many allow the employer to do so?

In Canada and the United States, workers' compensation is entirely under the control of sub-national legislative bodies and administrative agencies. As a result, it is easy to misunderstand subtle differences between jurisdictional laws and regulations. This survey gives you the ability to understand those differences.

Workers' Compensation Laws as of January 1, 2016. May 2016. WC-16-43.

PAYMENTS TO AMBULATORY SURGERY CENTERS, 2ND EDITION

The substantial expansion of ambulatory surgery centers (ASCs) has attracted the attention of workers' compensation policymakers and system stakeholders in many states. In 1996, there were about 2,200 ASCs nationwide, increasing to 5,364 in 2013.

This report expands analysis in the first edition of this study by comparing ASC payments for common knee and shoulder surgeries across 33 states in calendar year 2013. States included in this analysis represent 86 percent of the workers' compensation benefits paid in the United States.

The report also examines rates of growth in ASC payments over time by looking at how average ASC payments changed from 2008 to 2013 for 29 states. Major fee schedule changes that happened over that time period are also discussed. In particular, changes in ASC payments resulting from major policy changes in North Carolina in 2013 and South Carolina in 2010, as well as substantial changes in fee schedule rates in California in 2013, Illinois in 2011, Massachusetts in 2009, and Texas in 2008, are examined.

Among the study's findings are the following:

- States with no ASC fee schedules had higher ASC payments per episode compared with states with fixed-amount fee schedules—37 to 172 percent higher than the median of the study states with fixed-amount fee schedules.
- States with percent-of-charge-based fee schedules had considerably higher ASC payments per surgical episode than states with fixed-amount fee schedules—38 to 167 percent higher than the median of the study states with fixed-amount fee schedules.
- Between 2008 and 2013, the average ASC payments per shoulder surgical episode in most states without fee schedules (except New Jersey and Wisconsin) grew 8 to 62 percentage points faster than the median rate of growth in states with fixed-amount fee schedules.
- The average ASC payments per shoulder surgical episode in states with charge-based fee schedules grew 19 to 94 percentage points faster than the median rate of growth in states with fixed-amount fee schedules.

The 33 states included in this study are Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland,

Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and Wisconsin.

Payments to Ambulatory Surgery Centers, 2nd Edition.
Bogdan Savych. May 2016. WC-16-39.

WORKERS' COMPENSATION MEDICAL COST CONTAINMENT: A NATIONAL INVENTORY, 2015

This study provides policymakers and system stakeholders with an inventory of the cost containment initiatives employed by 51 jurisdictions. This study updates the tables from the previous edition with the statutory provisions, administrative rules, and administrative procedures as of January 1, 2015. However, it does not provide written explanations of the initiatives in use by each state.

The report contains key features of each state's cost containment initiatives, including

- medical fee schedules;
- regulation of hospital charges;
- choice of provider;
- treatment guidelines;
- utilization review/management;
- managed care;
- pharmaceutical regulations;
- urgent care and ambulatory surgical center fee schedules; and
- medical dispute regulations.

These initiatives aim to curb the cost of a particular service or to reduce the amount of services provided. Cost containment regulatory initiatives entail a balancing act of limiting the cost of services and inappropriate or unnecessary treatment without negatively affecting the quality of treatment or access to care for injured workers.

Workers' Compensation Medical Cost Containment: A National Inventory, 2015.
Ramona P. Tanabe. April 2015. WC-15-27.

DESIGNING WORKERS' COMPENSATION MEDICAL FEE SCHEDULES, 2016

The purpose of this report is to highlight some of the most important design choices that public officials face in adopting, reforming, and updating a fee schedule for physicians and to show how the 43 states with fee schedules and the District of Columbia have resolved these choices, as of March 2016. This study also includes a discussion of the substantial fee schedule changes for professional medical services since July 2011, which was covered by the previous edition of the study.

These choices include the following:

- Should the fee schedule be based on the relative value units (RVUs) of different professional medical services, or based on some other metric (e.g., historical charges or usual and customary charges)?
- If based on relative value units, should the fee schedule for physician services use the relative values developed for the Medicare program or some other relative value scale?
- Should the state use a single conversion factor (monetizing factor) for all services, or implement different conversion factors for different groups of services (e.g., surgery, radiology, etc.)?
- If multiple conversion factors are adopted, how large should the disparity be between different service groups?
- Should the state use a single fee schedule for the entire state, or have different fee schedules for different regions?
- How high or low should the fee schedule level be set?
- How frequently should fee schedules be updated (e.g., relative values, list of procedures, etc.)?
- How should medical services without assigned maximum allowable reimbursement rates be reimbursed?

Additionally, the state- and service group-level comparisons of the workers' compensation fee schedules answer a common question that policymakers and stakeholders ask: "How does my state compare with other states?"

The following are among some findings from the study:

- Seventy percent of fee schedule jurisdictions used Medicare RVUs as a benchmark to set their fee schedule.
- About one-quarter of the fee schedule states established their reimbursement rates for office visits near the Medicare level or below.
- In contrast, about 20 percent established their fees for major surgery at triple the Medicare rates or more in each state.

- In general, the difference between workers’ compensation and Medicare rates varied widely from 2 percent below in Massachusetts and Florida to 189 percent above in Alaska.
- Substantial variation in workers’ compensation fees across states cannot be explained by differences in provider expenses.

Designing Workers’ Compensation Medical Fee Schedules, 2016.
Olesya Fomenko and Te-Chun Liu. November 2016. WC-16-71.

PHYSICIAN DISPENSING OF HIGHER-PRICED NEW DRUG STRENGTHS AND FORMULATION

This report found evidence of frequent physician dispensing of new drug strengths and a new formulation at much higher prices. This phenomenon was observed in several states with recent reforms aimed at reducing prices paid for physician-dispensed prescriptions. Frequent dispensing of higher-priced new drug products led to substantial increases in average prices paid for some common physician-dispensed drugs.

This report is part of a series of WCRI studies that examine the effects of regulatory or legislative changes to the rules governing reimbursement for physician-dispensed prescriptions. In the past decade, many states in the U.S. have enacted reforms to cap prices paid to physicians by tying the maximum reimbursement amount to the average wholesale price (AWP) set by the original manufacturer of the drug. However, these new strengths and formulations are labeled as drugs made by generic manufacturers, not repackagers, and therefore, are not subject to the new reimbursement rules targeting physician-dispensed repackaged drugs.

The study reported several drugs that exhibited this phenomenon and highlighted several states where physician dispensing of these new drug products was prevalent. Take cyclobenzaprine, a muscle-relaxant, as an example. The 7.5-milligram new strength was not seen in the market until 2012. For many years, the most common strengths were 5 and 10 milligrams. The manufacturer of this new strength assigned a new AWP, which was much higher than the AWP for the 5- and 10-milligram products. Below are some examples from the study of the frequent physician dispensing of higher-priced new strengths.

- **California:** The average prices paid to physicians for cyclobenzaprine of 5 and 10 milligrams ranged from \$0.38 to \$0.39 per pill in the first quarter of 2014. The 7.5-milligram product, introduced in 2012 and almost always dispensed by physicians, cost \$3.01 per pill in the same quarter. The percentage of physician-dispensed cyclobenzaprine prescriptions that were for the 7.5-milligram strength increased from 0 percent prior to 2012 to 55 percent in the first quarter of 2014.
- **Florida:** The average prices paid for physician-dispensed cyclobenzaprine of 5 and 10 milligrams were \$1.75 and \$1.29 per pill, respectively, in the first quarter of 2014. The 7.5-milligram new strength was seen prior to Florida’s 2013 reform, but the frequency of dispensing increased substantially post-reform—from 16 percent in the

pre-reform second quarter of 2013 to 49 percent in the first quarter of 2014. When physicians dispensed the 7.5-milligram new-strength product, they were paid an average of \$4.11 per pill.

- **Illinois:** The average prices paid to physicians for cyclobenzaprine of 5 and 10 milligrams were \$1.55 and \$1.25 per pill, respectively, in the first quarter of 2014. Prior to Illinois’ 2012 reforms, the 7.5-milligram new strength was rarely seen in the market, but by the first quarter of 2014, 22 percent of all physician-dispensed cyclobenzaprine prescriptions were for the new strength. When physicians dispensed the new strength, they were paid on average \$3.86 per pill.
- **Tennessee:** Ten-milligram cyclobenzaprine was the most-commonly dispensed drug strength by physicians in the state, which cost \$1.08 per pill on average in the first quarter of 2014. The 7.5-milligram product was not seen in the initial post-reform quarters until the fourth quarter of 2013. By the first quarter of 2014, 19 percent of physician-dispensed cyclobenzaprine prescriptions were for the 7.5-milligram new strength. When physicians dispensed the new strength, it cost \$3.97 per pill on average.

The data used for this report came from payors that represented 31–70 percent of all medical claims across 22 states studied and comprised detailed prescriptions based on calendar quarter from the first quarter of 2012 through the first quarter of 2014. The 22 states in the study are Arizona, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Missouri, New Jersey, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Virginia, and Wisconsin.

Physician Dispensing of Higher-Priced New Drug Strengths and Formulation.
Dongchun Wang, Vennela Thumula, and Te-Chun Liu. April 2016. WC-16-18.

EIGHT STATE REPORTS ON PHYSICIAN DISPENSING

As of June 2016, 20 states have made changes to rules governing the reimbursement for physician-dispensed drugs. These studies examine the impact of price-focused reforms on the frequency and costs of physician dispensing in the following eight states: Connecticut, Florida, Georgia, Illinois, Indiana, Michigan, South Carolina, and Tennessee.

The reports address three important policy questions regarding the impact of the price-focused reforms: (1) did the reforms lead to price reductions for physician-dispensed drugs? (2) did physicians continue to dispense after the reforms? and (3) are there emerging issues that suggest unintended consequences of the reforms?

Below are major findings for each of the eight states studied. A more detailed analysis can be found in each state report.

- **Connecticut:** Twenty months after the reform, physician dispensing was still common. The average price paid per pill to physicians for 6 of the 10 drugs most commonly dispensed by Connecticut physicians decreased 18–48 percent. However, increased physician dispensing of higher-priced new strengths for cyclobenzaprine and tramadol raised the cost of physician dispensing of these two drugs in the latest study quarter.

- **Florida:** Nine months after the reform, mixed results were seen in prices paid to physicians for the 10 drugs most commonly dispensed by Florida physicians—the prices decreased for some but increased or changed little for others. Most striking was the substantial increase in physician prices for cyclobenzaprine and tramadol, due to some physicians dispensing higher-priced new strengths. Physician dispensing was common after Florida’s reform, although physicians in the state dispensed fewer prescriptions.
- **Georgia:** Thirty-six months after the reform, physician dispensing was still frequent. In the initial months after the reform, a sizeable price reduction was seen, consistent with the goal of the reform. However, some physicians dispensed higher-priced new strengths of cyclobenzaprine and tramadol in the latest study quarters, which raised the average price paid per pill for these two drugs.
- **Illinois:** Over a year and a quarter after Illinois’ reform, the average price per pill paid for 7 of the top 11 drugs commonly dispensed by Illinois physicians decreased 22–55 percent. However, physician prices for hydrocodone-acetaminophen, cyclobenzaprine, and tramadol increased substantially as a result of some physicians dispensing higher-priced new drug strengths. Physician dispensing was still common after the 2012 reform in Illinois.
- **Indiana:** Nine months after the reform, the average price paid per pill to physicians for 9 of the 10 drugs most commonly dispensed by Indiana physicians decreased 14–44 percent. While physician dispensing was still fairly common after the 2013 reform, physician dispensing of higher-priced new drug strengths was infrequent in Indiana over the study period.
- **Michigan:** Fifteen months after Michigan’s reform, physician dispensing was still common in the state. Substantial price reductions were seen for most drugs commonly dispensed by Michigan physicians, which was consistent with the goal of the price-focused reform. Physician dispensing of higher-priced new strengths was infrequent in Michigan over the study period.
- **South Carolina:** Sizable price reductions were seen for the drugs most commonly dispensed by physicians after South Carolina’s reform. At the same time, frequency of physician dispensing decreased steadily over the post-reform quarters.
- **Tennessee:** Twenty months after the reform, physician dispensing was still frequent. The average price paid per pill to physicians for 7 of the 10 drugs most commonly dispensed by Tennessee physicians decreased 21–56 percent. However, an increase in physician dispensing of higher-priced new strengths was observed for cyclobenzaprine and tramadol in the latest quarters of the study period, which raised the average price paid per pill for these two drugs.

The studies evaluate the impact of the price-focused reforms on the frequency and costs of physician dispensing in these eight states using detailed transaction data for physician- and pharmacy-dispensed prescriptions filled by injured workers up through

the first quarter of 2014. With future data over a longer time period, we will examine the subsequent effects of the reforms.

Eight State Reports on Physician Dispensing. Dongchun Wang, Vennela Thumula, and Te-Chun Liu. July 2016. WC-16-44 to 51.

DO HIGHER FEE SCHEDULES INCREASE THE NUMBER OF WORKERS’ COMPENSATION CASES?

This study explores to what extent higher workers’ compensation reimbursement rates influence the medical provider classification of an injury as work-related or not. Currently, 43 states have physician fee schedules that set maximum prices for health care providers to be paid, and the established fee schedule rates vary widely across states.

According to previously published WCRI research, in many states, workers’ compensation pays higher prices than group health. For example, one study found that in some states, workers’ compensation prices were two to four times higher than group health prices. Moreover, in most states, workers’ compensation systems rely heavily on the treating physician to determine whether a specific patient’s injury is work-related or not.

Policymakers have always focused on the impact fee schedules have on access to care as well as utilization of services. This study shines a light on an issue that policymakers and other system stakeholders might not be thinking of, which is that physicians may call an injury work-related in order to receive a higher reimbursement for care he or she provides to the patient.

The following are among the study’s findings:

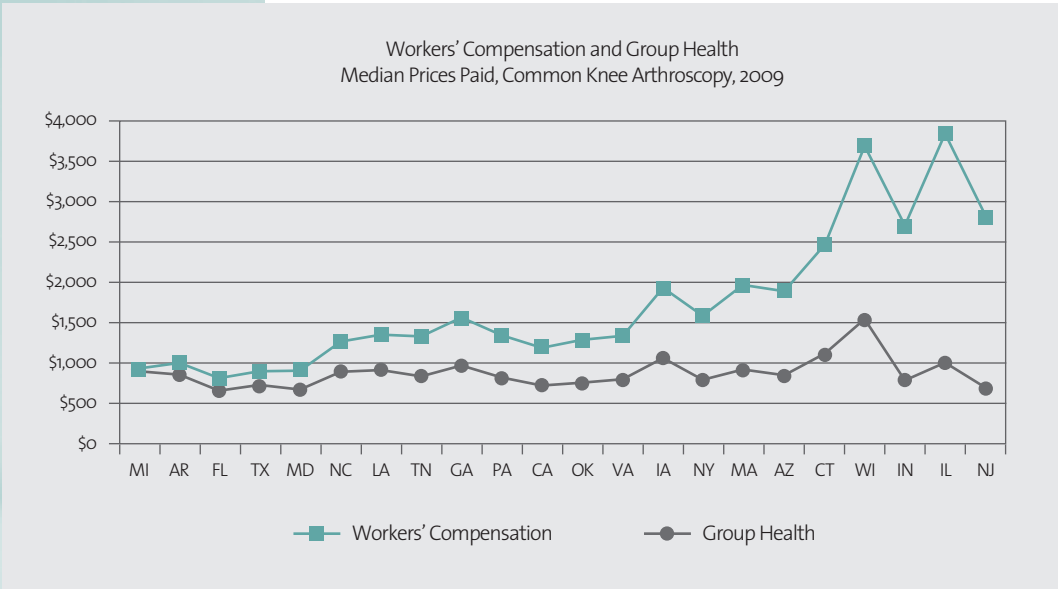
- If the cause of injury is not straightforward (e.g., soft tissue conditions), case-shifting is more common in the states with higher workers’ compensation reimbursement rates. In particular, the study estimated that a 20 percent growth in workers’ compensation payments for physician services provided during an office visit increases the number of soft tissue injuries being called work-related by 6 percent.
- There was no evidence of case-shifting from group health to workers’ compensation for patients with conditions for which causation is more certain (e.g., fractures, lacerations, and contusions).

This analysis relies principally on workers’ compensation and group health medical data coming from a large commercial database. This database is based on a large national sample of patients where the data was provided by health insurers and self-insured employers. It includes individuals employed by mostly large employers and insured or administered by one of approximately 100 group health plans. The database is unique in that, for a given employee, it shows whether a given medical encounter (visit) was paid for by group health or workers’ compensation.

Do Higher Fee Schedules Increase the Number of Workers’ Compensation Cases? Olesya Fomenko and Jonathan Gruber. April 2016. WC-16-21.

A NEW BENCHMARK FOR WORKERS’ COMPENSATION FEE SCHEDULES: PRICES PAID BY COMMERCIAL INSURERS?

In a typical year, 5 to 10 states have significant public policy debates about enacting new fee schedules or making major revisions to existing ones to regulate prices paid in workers’ compensation. Often, the central question debated is what price level is too low—that is, the point at which good health care providers will not provide timely treatment to injured workers. In making such decisions, providers consider what they are paid by other payors. Prices paid by Medicare and commercial insurers are plausible benchmarks for policymakers to use since they are usually the largest payors in a given state.



This study provides the basic comparative data that policymakers can use to ground the debate. For example, if the maximum prices proposed were double those paid by commercial insurers, policymakers might be skeptical of testimony by providers that they would stop treating injured workers if the maximum fees were lowered by a modest amount. Similarly, if the maximum workers’ compensation fees were

lower than what commercial insurers are paying, policymakers might be skeptical of testimony of payor representatives that the prices are too high and can be lowered without adversely affecting access to care for injured workers.

The following is a sample of major findings:

- Workers’ compensation prices are very much shaped by the state fee schedules or their absence. In states with higher (lower) fee schedules, workers’ compensation prices paid were typically higher (lower). In states without fee schedules, prices paid were generally higher. States without fee schedules in this study include Indiana, Iowa, New Jersey, Virginia, and Wisconsin.
- For common surgeries performed on injured workers, the prices paid under workers’ compensation were higher than the prices paid by group health insurers for the same surgery in almost all study states. In some states, the workers’ compensation prices paid were 2–4 times higher than the prices paid by group health insurers in the same state.

- For office visits, the prices paid under workers’ compensation were typically within 30 percent of the prices paid by group health insurers. In nearly half of the states studied, the prices paid under workers’ compensation were within 15 percent of the group health price.

This study focuses on the median nonhospital price paid for five common surgeries and four common established patient office visits in 22 large states for services delivered in 2009. These are the prices actually paid for professional services billed under a specific Current Procedural Terminology (CPT) code. This study also discusses how to generalize these results to later years.

The 22 states included in this study are Arizona, Arkansas, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, New Jersey, New York, North Carolina, Oklahoma, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.

A New Benchmark for Workers’ Compensation Fee Schedules: Prices Paid by Commercial Insurers? Olesya Fomenko and Richard A. Victor. June 2013. WC-13-17.

COMPARING WORKERS’ COMPENSATION AND GROUP HEALTH HOSPITAL OUTPATIENT PAYMENTS

This study compares hospital payments for the same surgical procedure when paid for by group health versus workers’ compensation in 16 states. According to this study, in a majority of the study states, workers’ compensation incurred substantially higher hospital payments than group health for the same surgical procedure. Some speculate that there is an additional burden associated with taking care of a worker injured on the job, such as uncertainty or delay in payments. If so, the question for policymakers and other stakeholders is, what additional reimbursement is necessary to get quality care for injured workers?

Rising hospital payments have been a focus of recent policy debates in many states. Policymakers and stakeholders have considered various means of cost containment, with special attention devoted to implementation of and updates to workers’ compensation fee schedules. To set fee schedule levels, policymakers often seek a reference point or benchmark to which they can tie the state’s reimbursement rates.

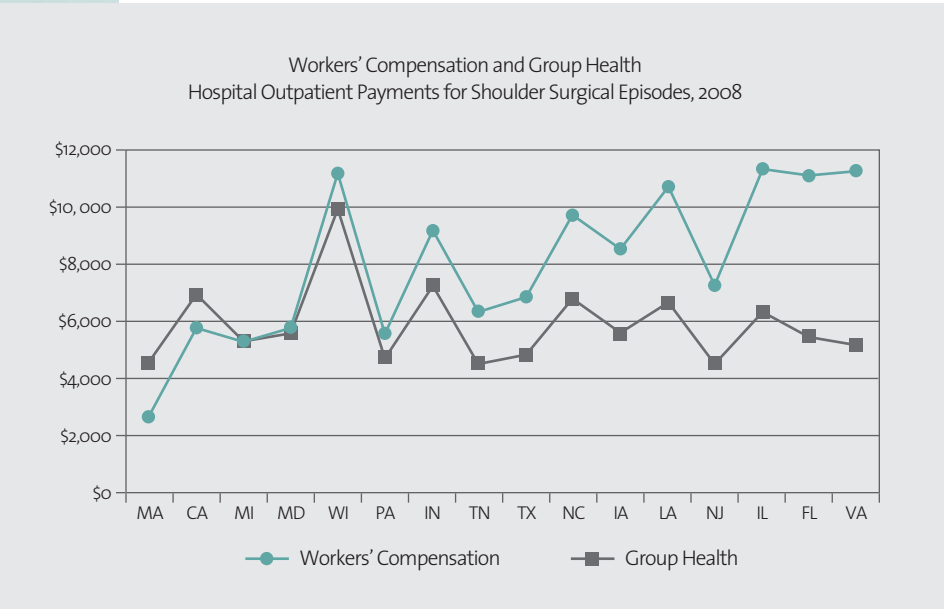
Increasingly, states rely on Medicare rates as a benchmark, while other states use some form of usual and customary charges in the area. This study uses group health reimbursement levels as an alternative benchmark. Group health has some important advantages as a benchmark for workers’ compensation fee schedules, including being the largest provider of health insurance with the most widely accepted reimbursement rates by medical providers.

Among the study’s findings are the following:

- In two-thirds of the study states, workers’ compensation hospital outpatient payments related to common surgeries were higher than those paid by group health, and, in half of the study states, the workers’ compensation and group health difference for shoulder surgeries exceeded \$2,000 (or at least 43 percent).
- The workers’ compensation payment premiums over group health were highest in the study states with percent-of-charge-based fee regulations or no fee schedule.
- States with high workers’ compensation hospital outpatient payments were rarely states with above-typical group health hospital payments.
- The hospital outpatient payments per surgical episode demonstrated substantially greater interstate variation in workers’ compensation than in group health.

This study compares hospital outpatient payments incurred by workers’ compensation and group health for treatment of similar common surgical cases in 16 large states, which represent 60 percent of the workers’ compensation benefits paid in the United

States, and covers hospital outpatient services delivered in 2008. Given that most study states, except Illinois, North Carolina, and Texas, did not have substantial changes in their fee schedule regulations after 2008, the interstate comparisons should provide a reasonable approximation for current state rankings in workers’ compensation/ group health payment differences.



Comparing Workers’ Compensation and Group Health Hospital Outpatient Payments.
Olesya Fomenko. June 2013. WC-13-18.

IMPACT OF A TEXAS-LIKE FORMULARY IN OTHER STATES

As policymakers and other system stakeholders seek to contain medical costs, part of the focus is on prescription drug costs. This study examines how a Texas-like closed drug formulary might affect the prevalence and costs of drugs in 23 other state workers’ compensation systems that do not currently have a drug formulary. With an evidence-based closed formulary, states have the potential to contain pharmaceutical costs while encouraging evidence-based care.

According to the study, physicians in the other 23 states may have similar or different responses to the closed formulary from Texas physicians. A Texas-like closed formulary limits access to some drugs by requiring prior-authorization for drugs not included in the formulary. The study provides multiple scenarios to the readers to illustrate the impact of the formulary based on how physicians respond.

One of the scenarios finds if physicians in the 23 other study states were to change their prescribing patterns like physicians in Texas, they could reduce their total prescription costs by an estimated 14–29 percent. Non-formulary drug prevalence is estimated to drop from 10–17 percent to 3–5 percent of all prescriptions. Larger effects can be expected in Connecticut, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, and Virginia.

The study found non-formulary drugs were as prevalent in the 23 study states as they were in pre-reform Texas. They accounted for 10–17 percent of all prescriptions and 18–37 percent of total prescription costs. The comparable numbers for pre-reform Texas were 11 percent and 22 percent, respectively. Non-formulary drugs were most common in New York (17 percent) and Louisiana (16 percent). The most commonly prescribed non-formulary drugs in the majority of study states were Lidoderm®, OxyContin®, Soma®, Valium®, and Voltaren®.

The data for the study are based on utilization and costs of non-formulary drugs among newly injured workers in Texas and 23 other states that represent over 70 percent of workers’ compensation benefits in the United States. The study looks at prescription utilization for injuries arising from October 1, 2010, to September 30, 2011, with prescriptions filled through March 31, 2012, and paid for by a workers’ compensation payor. The data reflect an average 12 months of experience for claims included in the analysis.

The 23 states included in this study are Arkansas, California, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, Tennessee, Virginia, and Wisconsin.

Impact of a Texas-Like Formulary in Other States. Vennela Thumula and Te-Chun Liu.
June 2014. WC-14-31.

AVOIDING LITIGATION: WHAT CAN EMPLOYERS, INSURERS, AND STATE WORKERS' COMPENSATION AGENCIES DO?

One goal of a workers' compensation program is to deliver necessary medical care and income benefits to workers injured on the job without the uncertainty, delay, and expense of litigation. In many states, however, disputes and attorney involvement in the benefit delivery process are common.

Policy debates about attorney involvement have common themes from state to state. Workers' attorneys argue that they help workers receive benefits that these workers would not be able to obtain themselves, help workers navigate a sometimes complex system, and protect workers from retaliation by the employer or insurer. Advocates for employers and insurers contend that attorneys are involved more often than necessary, that workers can often receive the benefits they are entitled to without representation, and that attorneys may even reduce the total amount of benefits that workers take home.

Some of the existing attorney involvement is inevitably unnecessary, such as cases where the worker would have received the statutory entitlement without resorting to hiring an attorney. If unnecessary attorney involvement can be avoided, this would be a win-win-win scenario. Workers would receive benefits without the expense of paying an attorney and the delays of dispute resolution; employers and insurers would save the costs of defending the case; and increasingly resource-short state workers' compensation agencies would have smaller caseloads to manage and would have to provide fewer dispute-resolution services.

This study identifies and quantifies some of the more important factors that lead injured workers to seek representation by an attorney, providing some key elements for employers, claims organizations, and state agencies to take away.

Major findings:

The study found that workers were more likely to seek attorneys when they felt threatened. Sources of perceived threats were found in two areas:

- *The employment relationship.* Workers believed they would be fired as a result of the injury, and/or workers perceived that the supervisor did not think the injury was legitimate.
- *The claims process.* The worker perceived that his or her claim had been denied, although it was later paid. This perception may have stemmed from a formal denial, delays in payment, or communications that the worker deemed to be a denial.

Potential implications for employers, claims organizations, and state agencies:

It is possible that attorney involvement can be decreased if employers, claims organizations, and state agencies reduce or eliminate *unnecessary actions* that workers interpret as threats. The suggested actions below, while logical implications of this study, are not themselves the findings of the empirical research:

- **Train supervisors.** Help supervisors create timely communications that focus on trust, job security, and entitlement to medical care and income benefits.
- **Create state agency education materials and help lines.** Provide written materials and an accessible help line that answers workers' questions to help ease feelings of vulnerability and uncertainty.
- **Communicate in a clear and timely fashion about the status of the claim.** Prevent misunderstandings through unambiguous, timely communication from the claims manager so the worker does not mistakenly conclude that the claim has been denied.
- **Eliminate system features that encourage denials or payment delays.** Eliminating system features that discourage timely payments may help prevent a worker's misconstruing a delay as a denial.

Avoiding Litigation: What Can Employers, Insurers, and State Workers' Compensation Agencies Do? Richard A. Victor and Bogdan Savych. July 2010. WC-10-18.

Publication List

This is an abbreviated list of WCRI studies. A complete list is available on our website at www.wcrinternet.org.

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CompScope™ Benchmarks: Multistate Comparisons, 15th Edition (April 2015) WC-15-07 to WC-15-21

CompScope™ Benchmarks: Multistate Comparisons, 14th Edition (October 2013) WC-13-25 to WC-13-38, WC-13-41

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CompScope™ Benchmarks: Multistate Comparisons, 12th Edition (December 2011) WC-11-41 to WC-11-54

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DISABILITY AND MEDICAL MANAGEMENT

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Hospital Outpatient Payment Index: Interstate Variations and Policy Analysis, 5th Edition (August 2016) WC-16-72

Monitoring Connecticut Reforms on Physician Dispensing (July 2016) WC-16-44

Early Impact of Florida Reforms on Physician Dispensing (July 2016) WC-16-45

Impact of Georgia Reforms on Physician Dispensing (July 2016) WC-16-46

Monitoring Illinois Reforms on Physician Dispensing (July 2016) WC-16-47

Monitoring Indiana Reforms on Physician Dispensing (July 2016) WC-16-48

Monitoring Michigan Reforms on Physician Dispensing (July 2016) WC-16-49

Impact of South Carolina Reforms on Physician Dispensing (July 2016) WC-16-50

Monitoring Tennessee Reforms on Physician Dispensing (July 2016) WC-16-51

Longer-Term Use of Opioids, 3rd Edition (June 2016) WC-16-41

Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments, 2nd Edition (May 2016) WC-16-40

Payments to Ambulatory Surgery Centers, 2nd Edition (May 2016) WC-16-39

Crossing State Lines for Ambulatory Surgical Care: Exploring Claims from New York (May 2016) WC-16-41

Do Higher Fee Schedules Increase the Number of Workers' Compensation Cases? (April 2016) WC-16-21

Physician Dispensing of Higher-Priced New Drug Strengths and Formulation (April 2016) WC-16-18

Texas-Like Formulary for North Carolina State Employees (March 2016) WC-16-19

Interstate Variations in Use of Opioids, 3rd Edition (June 2016) WC-16-22

Evaluation of the 2015 Fee Schedule Rates in Illinois (February 2016) WC-16-20

WCRI Medical Price Index for Workers' Compensation, Seventh Edition (MPI-WC) (November 2015) WC-15-47

Evaluation of the 2015 Professional Fee Schedule Updates for Florida—A WCRI FLASHREPORT (November 2015) FR-15-01

CompScope™ Medical Benchmarks, 16th Edition (October 2015) WC-15-31 to WC-15-45

Will the Affordable Care Act Shift Claims to Workers' Compensation Payors? (September 2015) WC-15-26

Why Surgery Rates Vary (June 2015) WC-15-24

Workers' Compensation Medical Cost Containment: A National Inventory, 2015 (April 2015) WC-15-27

Hospital Outpatient Cost Index for Workers' Compensation, 4th Edition (February 2015) WC-15-23

Are Physician Dispensing Reforms Sustainable? (January 2015) WC-15-01

The Impact of Physician Dispensing on Opioid Use (December 2014) WC-14-56

Hospital Outpatient Cost Index for Workers' Compensation, 3rd Edition (December 2014) WC-14-66

Early Impact of Tennessee Reforms on Physician Dispensing (December 2014) WC-14-55

Early Impact of South Carolina Reforms on Physician Dispensing (November 2014) WC-14-54

Early Impact of Connecticut Reforms on Physician Dispensing (November 2014) WC-14-53

Estimating the Effect of California's Fee Schedule Changes: Lessons from WCRI Studies (October 2014) WC-14-19

CompScope™ Medical Benchmarks, 15th Edition (October 2014) WC-14-35 to WC-14-48

Impact of Physician Dispensing Reform in Georgia, 2nd Edition (September 2014) WC-14-50

Physician Dispensing in Pennsylvania, 2nd Edition (September 2014) WC-14-51

WCRI Medical Price Index for Workers' Compensation, Sixth Edition (MPI-WC) (July 2014) WC-14-34

Impact of a Texas-Like Formulary in Other States (June 2014) WC-14-31

Comparing Payments to Ambulatory Surgery Centers and Hospital Outpatient Departments (June 2014) WC-14-29

Payments to Ambulatory Surgery Centers (June 2014) WC-14-30

Interstate Variations in Use of Narcotics, 2nd Edition (May 2014) WC-14-18

Longer-Term Use of Opioids, 2nd Edition (May 2014) WC-14-19

CompScope™ Medical Benchmarks, 14th Edition (February 2014) WC-14-02 to WC-14-15

WORKER OUTCOMES

Comparing Outcomes for Injured Workers in Arkansas (May 2016) WC-16-23

Comparing Outcomes for Injured Workers in Connecticut (May 2016) WC-16-24

Comparing Outcomes for Injured Workers in Florida (May 2016) WC-16-25

Comparing Outcomes for Injured Workers in Georgia (May 2016) WC-16-26

Comparing Outcomes for Injured Workers in Indiana (May 2016) WC-16-27

Comparing Outcomes for Injured Workers in Iowa (May 2016) WC-16-28

Comparing Outcomes for Injured Workers in Kentucky (May 2016) WC-16-29

Comparing Outcomes for Injured Workers in Massachusetts (May 2016) WC-16-30

Comparing Outcomes for Injured Workers in Michigan (May 2016) WC-16-31

Comparing Outcomes for Injured Workers in Minnesota (May 2016) WC-16-32

Comparing Outcomes for Injured Workers in North Carolina (May 2016) WC-16-33

Comparing Outcomes for Injured Workers in Pennsylvania (May 2016) WC-16-34

Comparing Outcomes for Injured Workers in Tennessee (May 2016) WC-16-35

Comparing Outcomes for Injured Workers in Virginia (May 2016) WC-16-36

Comparing Outcomes for Injured Workers in Wisconsin (May 2016) WC-16-37

Predictors of Worker Outcomes in Arkansas (February 2015) WC-15-02

Predictors of Worker Outcomes in Connecticut (February 2015) WC-15-03

Predictors of Worker Outcomes in Iowa (February 2015) WC-15-04

Predictors of Worker Outcomes in Tennessee (February 2015) WC-15-05

Predictors of Worker Outcomes in Indiana (June 2014) WC-14-20

Predictors of Worker Outcomes in Massachusetts (June 2014) WC-14-21

Predictors of Worker Outcomes in Michigan (June 2014) WC-14-22

Predictors of Worker Outcomes in Minnesota (June 2014) WC-14-23

Predictors of Worker Outcomes in North Carolina (June 2014) WC-14-24

Predictors of Worker Outcomes in Pennsylvania (June 2014) WC-14-25

Predictors of Worker Outcomes in Virginia (June 2014) WC-14-26

Predictors of Worker Outcomes in Wisconsin (June 2014) WC-14-27

ADMINISTRATION/ LITIGATION

Workers' Compensation Laws as of January 1, 2016 (May 2016) WC-16-43

Workers' Compensation Laws as of January 1, 2014 (April 2014) WC-14-28

Workers' Compensation Laws as of January 2012 (March 2012) WC-12-18

Workers' Compensation Laws, 3rd Edition (October 2010) WC-10-52

Avoiding Litigation: What Can Employers, Insurers, and State Workers' Compensation Agencies Do? (July 2010) WC-10-18

Workers' Compensation Laws, 2nd Edition (June 2009) WC-09-30

Did Florida Reforms Reduce Attorney Involvement? (June 2009) WC-09-16

Lessons from the Oregon Workers' Compensation System (March 2008) WC-08-13

Workers' Compensation in Montana: Administrative Inventory (March 2007) WC-07-12

Workers' Compensation in Nevada: Administrative Inventory (December 2006) WC-06-15

Workers' Compensation in Hawaii: Administrative Inventory (April 2006) WC-06-12

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The 1991 Reforms in Massachusetts: An Assessment of Impact (May 1996) WC-96-3

The Impact of Oregon's Cost Containment Reforms (February 1996) WC-96-1

Cost Drivers and System Change in Georgia, 1984–1994 (November 1995) WC-95-3

Cost Drivers in Missouri (December 1994) WC-94-6

Cost Drivers in New Jersey (September 1994) WC-94-4

Cost Drivers in Six States (December 1992) WC-92-9

VOCATIONAL REHABILITATION

Improving Vocational Rehabilitation Outcomes: Opportunities for Early Intervention (August 1988) WC-88-3

Appropriateness and Effectiveness of Vocational Rehabilitation in Florida: Costs, Referrals, Services, and Outcomes (February 1988) WC-88-2

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Liability for Employee Grievances: Mental Stress and Wrongful Termination (October 1988) WC-88-6

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Monitoring Trends in the New York Workers' Compensation System, 2005–2013 (February 2016) WC-16-38

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