2016 WORKERS' COMPENSATION BENCHMARKING STUDY

CLAIMS MANAGEMENT OPERATIONAL STUDY

Differentiators of High Performing Organizations

Principal Researcher & Report Author
Denise Zoe Algire

Study Director & Publisher
Rising Medical Solutions

RISING

Table of Contents

Preface

About the Study

The Workers' Compensation Benchmarking Study is a national research program that examines the complex forces impacting claims management in workers' compensation today. The study's mission is to advocate for the advancement of claims management by providing both quantitative and qualitative research that allows organizations to evaluate priorities, hurdles, and strategies amongst their peers. Conceived by Rising Medical Solutions (Rising), the study's impetus evolved from various conversations Rising had with industry executives about the gap in available research focusing on how claims organizations address daily operational challenges.

Today, the ongoing study program is a collaboration of workers' compensation leaders who represent diverse perspectives and share a commitment to providing meaningful information about claims management trends and best opportunities for advancement. Recognizing the need for an unbiased approach, the study is guided by an independent Principal Researcher and an Advisory Council of industry experts whose involvement is critical to maintaining a framework that produces impartial and compelling research.

About the Study Director & Publisher, Rising Medical Solutions

Rising is a national medical cost containment and care management company serving payers of medical claims in the workers' compensation, auto, liability, and group health markets. Rising spearheaded the study idea and leads the logistical, project management, industry outreach, and publication aspects of the effort. For study inquiries, please contact VP & Study Program Director Rachel Fikes at wcbenchmark@risingms.com.

About the Principal Researcher & Study Report Author, Denise Zoe Algire, MBA, RN, COHN-S/CM, FAAOHN

Denise Zoe Algire is the Director of Managed Care & Disability, Corporate Risk Management for Albertsons Companies. She is a nationally recognized expert in managed care and integrated disability management. She is board certified in occupational and environmental health and is a fellow of the American Association of Occupational & Environmental Health Nurses. Bringing more than 20 years of industry experience, her expertise includes claim operations, medical management, enterprise risk management, and healthcare practice management.

Study Advisory Council

Essential to the study program and research is its Advisory Council, comprised of 20 workers' compensation executives who represent national and regional carriers, employers, third party administrators, brokerages, and industry consultancies.

Since 2013, their varied perspectives have guided the study's continued efforts to examine some of the most significant operational challenges facing claims organizations today. From the formation of research strategies to the interpretation of results, the Council has provided critical expertise throughout this endeavor.

Among those distinguished advisors we thank for their time and commitment are:

- Gale Vogler | Director, Managed Care | **Acuity Insurance**
- Raymond Jacobsen | Senior Managing Director | **AON Benfield**
- Rich Cangiolosi | Vice President, Western Region | **Cannon Cochran Management Services, Inc. (CCMSI)**
- Pamela Highsmith-Johnson, RN, BSN, CCM | Director of Case Management | **CNA Insurance**
- Cathy Vines | Director, Healthcare Cost Containment Strategy | **CopperPoint Mutual Insurance**
- Daniel T. Holden | Manager, Corporate Risk & Insurance | **Daimler Trucks North America LLC**
- Kelly Kuri | Claims Manager | **Frank Winston Crum Insurance**
- Marcos Iglesias, MD | Vice President, Medical Director | **The Hartford**
- Trecia Sigle | Associate Vice President, Workers' Compensation Claims | **Nationwide Insurance**
- Tom Stark | Technical Director, Workers' Compensation | **Nationwide Insurance**
- Tom McCauley | Owner & Consultant | **Networks by Design**
- David Price | President | **POMCO Risk Management**
- Laura Crowe | Risk Management Director | **Presbyterian Healthcare Services**
- Mark Walls | Vice President, Communications & Strategic Analysis | **Safety National**
- Darrell Brown | Chief Claims Officer | **Sedgwick**
- John Smolk | Principal Manager, Workers' Compensation | **Southern California Edison**
- Joe McLaughlin | Senior Vice President, Sales & Marketing | **TRISTAR Insurance Group**
- Linda Butler | Manager, Workers' Compensation | **Walt Disney World Resort**
- Kyle Cato | Workers' Compensation & Safety Manager | **Williams-Sonoma, Inc.**
- Tim Mondon | Senior Vice President, Bill Review | **Zenith Insurance**

Acknowledgments

We would like to acknowledge the industry leaders and organizations that provided additional insight and guidance during this year's study design and report review, as well as those who heightened industry awareness and encouraged survey participation. Thank you for your invaluable support:

- Roberto Ceniceros | Senior Editor, Risk & Insurance
- Denise Johnson, AIC, ASLI | Editor, Claims Journal
- Dan Reynolds | Editor-in-Chief, Risk & Insurance
- Peter Rousmaniere | Risk Management Consultant & Writer
- Stephen Sullivan | Managing Editor, WorkCompWire.com
- Robert Wilson | President & CEO, WorkersCompensation.com
- William Wilt, FCAS, CFA | President, Assured Research
- William Zachry | Former Group Vice President, Risk Management, Albertsons Companies
- Association of Occupational Health Professionals in Healthcare (AOHP)
- California Self-Insurers Association (CSIA)
- Colorado Self Insurers Association (CSIA)
- Florida Association of Self Insureds (FASI)
- Illinois Self-Insurers Association (ISIA)
- National Council of Self-Insurers (NCSI)
- New York Self-Insurers Association (NYSIA)
- New Jersey Self Insurers' Association (NJSIA)
- Oregon Self-Insurers Association (OSIA)
- Self-Insurance Institute of America (SIIA)
- Texas Self-Insurance Association (TSIA)
- Washington Self-Insurers Association (WSIA)

Introduction

Distilling the many challenges confronting claims organizations today to a critical few is a challenge unto itself. In its fourth annual study, the 2016 Workers' Compensation Benchmarking Study surveys 492 claims leaders to probe deeper into a *handful* of key operational issues and strategies revealed in prior years' research.

From a talent landscape metamorphosis, to a shift in focus from conventional process management to outcomes management, to transformative technology trends, to a migration towards value-driven health care, today's dynamic workers' compensation environment can make problem solving a moving target – not the least of which is determining which challenges to address with often limited resources. Which opportunities will have the most positive impact and ROI? What are some methods for capitalizing on those opportunities? Is there practical research to support these strategic decisions?

Unfortunately, many claims management techniques thought to be "industry best practices" are often met with skepticism because the data to back them up is limited or unavailable. Do some of these "best practices" ***actually*** move the needle?

Which "best practices" *actually* move the needle for claims organizations?

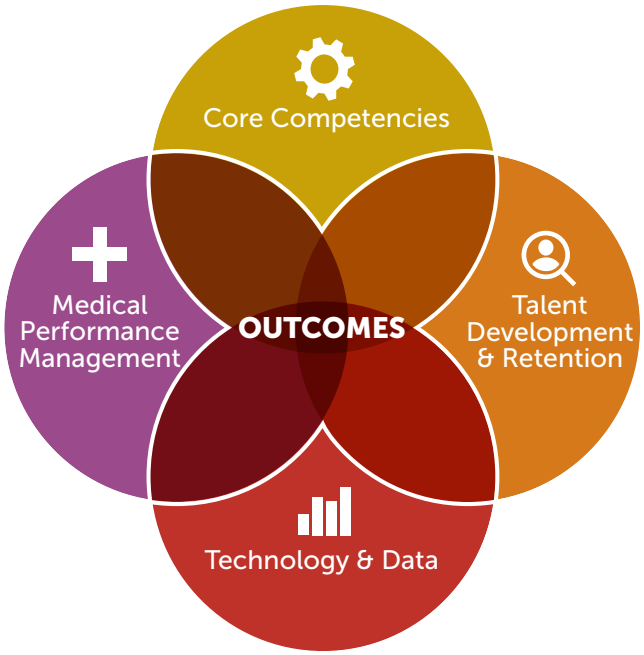
2016 high performance organizational data validates claim best practices

To answer these questions, the 2016 study advances the industry's collective intelligence – using nearly 1,200 claims leader insights over a four-year period – to provide concrete data on the approaches that are differentiating higher performing claims organizations from industry peers.

High performance organizational data validates claim best practices

By exploring these key areas, the 2016 study clearly identifies methods that are generating better claim outcomes amongst workers' compensation payers:

4 Major Drivers of Claim Outcomes



Executive Summary

The workers' compensation industry provides benefits to an estimated 133 million U.S. workers, costing more than $60 billion annually.[1] Managing these claims has become increasingly complex and challenging.

Since 2013, the Workers' Compensation Benchmarking Study has surveyed nearly 1,200 claims leaders about their biggest operational priorities, challenges and opportunities, as well as their strategies for improving claim outcomes. Building on prior research, the 2016 study provides a convincing profile of the successful claims organization.

This year, for the first time, the study identifies claim operational best practices in higher performing organizations – or those payer organizations with a claims closure ratio of 101 percent or greater. Claims closure ratio is a common industry benchmark used as an overall indicator of operational performance.

The 492 responses to the 2016 survey draw from the experience of what drives success from a diverse group of claims leaders, representing large carriers, third party administrators (TPAs) and employers, as well as many midsize and smaller organizations such as risk pools and government entities.

The results reflect the following key operational differentiators of higher performing organizations; they:

1. **Link key performance indicators (KPIs) to claim outcomes.** Claims leaders indicate the most important claim outcome is for the injured worker to return to work at equal or better fitness than before the injury. Claims organizations are prioritizing functional recovery as the main benchmark for claims success. High performing claims organizations are more likely to use KPIs that clearly show how desired claim outcomes are being achieved or not achieved. About half of claims leaders indicate they do not yet apply KPIs that measure their desired outcomes. The report notes how superior claims organizations are more adept at using meaningful KPIs in several areas.

2. **Employ claim decision support tools.** The study identifies how organizations are utilizing systems to manage claims core competencies and performance. The results reflect that 66 percent of participants use workflow automation and just over 50 percent use push technology or predictive modeling to some degree, a significant improvement from prior studies. Higher performing organizations are particularly more likely to use claim decision support tools and use them more frequently throughout the claim lifecycle.

3. **Utilize an employee-centric claims service model, often referred to as an "advocacy-based claims model."** Industry leaders indicate that advocacy models improve claim outcomes *as well as* talent retention. The results reflect that an advocacy-based claims model will have a positive impact on claims talent development and retention strategies. Notably, higher performing organizations are more likely to have implemented an advocacy model and have higher confidence of its impact on claims talent.

4. **Are early adopters.** High performing claims organizations are more engaged in emerging industry areas. While overall adoption is low for many new developments in claims as well as areas that pose significant industry challenges, high performing organizations are more likely to be the early adopters, front runners, and innovators in these areas – including implementing value-based care models, linking provider quality and outcome measures to provider agreements, and employing formal knowledge transfer strategies.

[1] The National Academy of Social Insurance; Workers' Compensation Benefits, Coverage, and Costs 2016. Available: https://www.nasi.org/sites/default/files/research/NASI_Workers_Comp_Report_2016.pdf

Methodology

The 2016 study focus was guided by facilitated think-tank sessions with the Principal Researcher and the Advisory Council Members. The Study Report is based on the survey results of **492** respondents, including managers, directors, vice presidents, and executive-level claims leadership from every major type of workers' compensation payer organization.

The research was conducted using a confidential, online survey tool. The survey tool structure and questionnaire were developed by the Principal Researcher. The survey questions were organized across the Study's four indexes – Prioritizing Core Competencies; Talent Development & Retention; Impact of Technology & Data; and Medical Performance Management. The survey included a total of 36 partially categorized and closed-ended questions, including demographic, dichotomous, rank order scaling, Likert scale, multiple choice, constant sum, and random order question sets in order to reduce response bias.

Survey invitations were directed to leaders who oversee claim operations and sent through direct email invitations, as well as various industry channels. All direct email invitations included an opt-out link, allowing recipients to remove themselves from study communications. The results are presented in average responses of the entire group of participants, no individual or organization who participated in the study is identified.

The survey was open for a total of 37 days from June 1, 2016 through July 8, 2016. Participants were allowed to exit the survey at any point during the questionnaire and were given the option to receive a copy of the Study Report in exchange for completing the survey.

Responses Received

- **492** completed responses
- **21** excluded responses *(participants who did not meet the survey target audience were excluded from the study results)*
- **349** incomplete responses, where the survey was started but not completed *(incomplete responses were excluded from the study results)*
- Average response time to complete the survey was **19** minutes

The Principal Researcher completed the data validation and analysis, as well as authored this Study Report.

Survey Participant Demographics

About the Survey Participants

The study targeted workers' compensation leaders who oversee claim operations. The study includes **492** participants representing workers' compensation claims professionals, with managers representing the largest respondent population followed by director, vice president and C-suite executives. The survey responses include participation across industry sectors, with self-insured employers representing the greatest participation by organizational type, followed by insurance companies and third party administrators (TPAs).

Figure 1 Survey Question: *Role / Level of Responsibility*
[492 Responses]

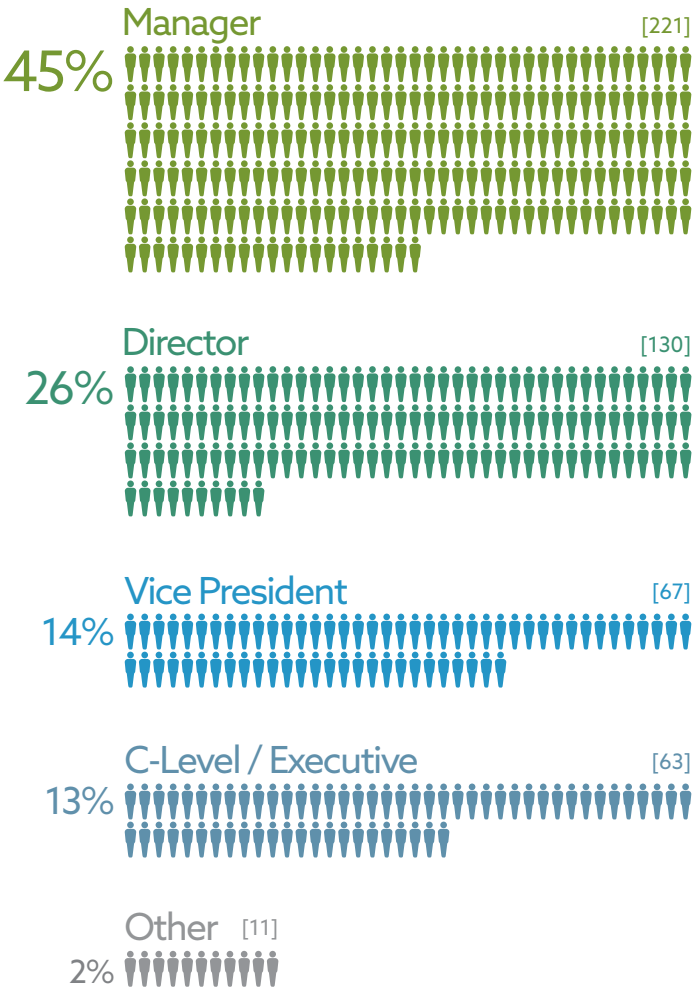


Table 1 Survey Question: *Organization Type*
[492 Responses]

Answer	count	%
Self-Insured Employer	131	27%
Insurance Company	108	22%
Third Party Administrator	78	16%
Insured Employer	73	15%
Governmental Entity	37	8%
Other	26	5%
Risk Pool	21	4%
State Fund / Mutual Fund	12	2%
Reinsurance or Excess Insurance Company	6	1%

Participants include a broad representation of small, midsize and large organizations. Organization size was measured by total annual premium and total annual claims dollars paid (see Table 2), as well as employee headcount. The 2016 survey included some additional answer options to further stratify small to midsize organizations' results. The 2016 results show an increase in large organization participation, with nearly a 50 percent increase in the number of large organization respondents, compared to the 2014 study. Total survey participation increased by 21 percent.

Table 2 Survey Question: *Organizational Size – Total Annual Premium & Total Annual Claims Dollars Paid*
[492 Responses]

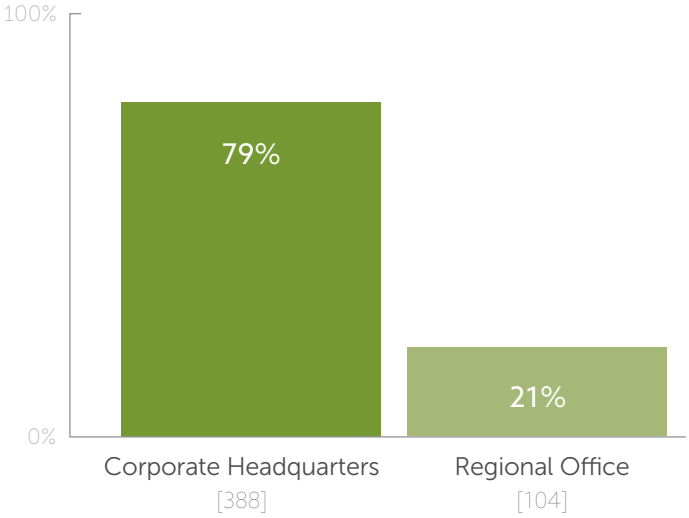
	Total Annual Premium		Total Annual Claims Dollars Paid	
Answer	count	%	count	%
< $25M	118	24%	169	34%
> $25M to $100M	41	8%	74	15%
> $100M to $350M	42	9%	61	13%
> $350M to $750M	19	4%	33	7%
> $750M	63	13%	50	10%
Unknown	95	19%	105	21%
Not Applicable	114	23%	-	-

See **Appendix A** for all results related to "Survey Participant Demographics"

Participant Geographic Focus

Most survey participants are located in their organization's corporate headquarters, as shown in Figure 2. Organizations with regionally-based workers' compensation business have modestly greater representation, with 54 percent of participants reporting claim operations in one or more regions and 46 percent reporting workers' compensation business nationwide (see Figure 3).

Figure 2 Survey Question: *Corporate Headquarters or Regional Office Location*
[492 Responses]

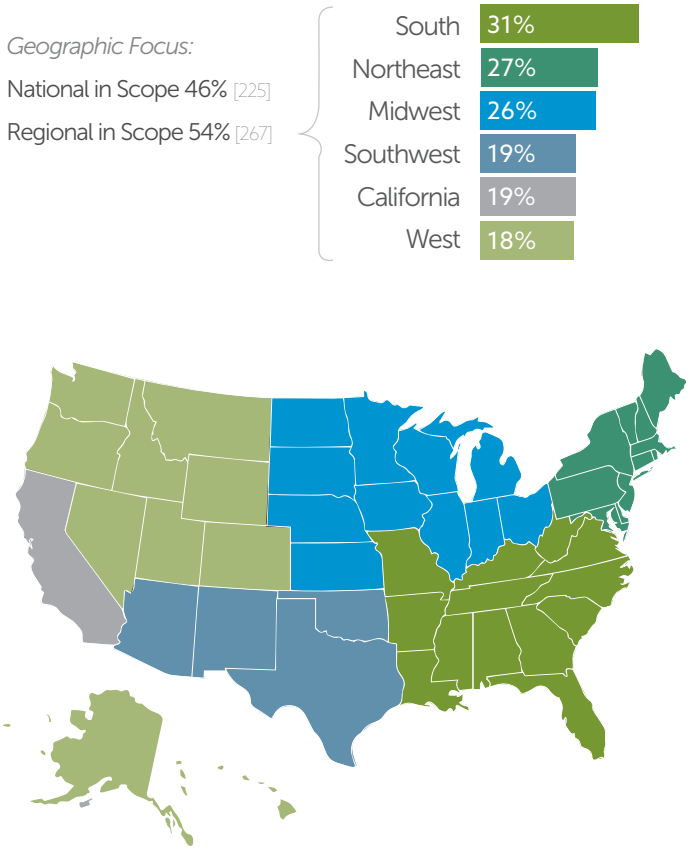


To garner a deeper understanding of claims operational challenges and offer additional areas for organizations to benchmark performance, the demographics section includes: total number of all open workers' compensation claims, average Lost Time caseloads, percentage of claims inventory open for more than five years, and claims closure ratio.

Figure 3 Survey Questions:

Geographic Focus - National or Regional in Scope
[492 Responses]

Indicate the Regions your company currently manages workers' compensation claims. Select all that apply.
(Conditional question for participants who answered "Yes" to Regional in Scope)
[267 Responses]



Note: Participants could select more than one region

Claims Caseloads

The industry has long struggled to define a quantitative number for the optimal caseload for claims examiners. A specific benchmark does not exist. However, several recently interviewed claims leaders indicate that, depending on the jurisdiction, caseloads between 100 to 120 are optimal to achieve desired outcomes.[2] Many factors, including litigation, case complexity, regional differences and regulatory requirements, impact the caseload a claims examiner can effectively manage. Caseload numbers alone do not represent the entire story. It is also important to consider the level of administrative support claims examiners have, the efficiency and number of systems staff need to access to manage claims, as well as the autonomy and settlement authority delegated to claims examiners.

Other considerations include Medical Only to Indemnity Claims ratio, as well as the ratio of Future Medical Claims to Active Indemnity Claims. The study results show 33 percent of respondents report between 80 to 125 Lost Time (i.e. Indemnity Claims) caseloads, and 12 percent report Lost Time caseloads greater than 150 (see Table 3).

The results indicate that organizations with Lost Time caseloads of 125 or less demonstrate more favorable claims closure ratios.

Table 3 Survey Question: *What is your organization's average Lost Time caseload per Lost Time Claims Examiner?*
[492 Responses]

Answer (# of cases)	count	%
< 80	96	20%
80 to 100	63	13%
100 to 125	96	20%
125 to 150	115	23%
150 to 175	42	8%
175 to 200	7	1%
200 to 225	3	1%
225 to 250	1	< 1%
250 to 275	1	< 1%
275 to 300	2	< 1%
> 300	3	1%
Unknown	63	13%

Closure Ratio

Claims closure ratio is a common industry benchmark used as an overall indicator of operational performance. It is defined as the number of claims closed, divided by the number of claims received. The goal is to achieve a 100 percent closure ratio (i.e. 1.0). This ensures organizations maintain stable claim inventories. A closure ratio *less than* 100 percent (1.0) means that claim inventory is growing, and a ratio *greater than* 100 percent (1.0) means that inventory is declining. In a mature, stable workers' compensation program, claims should be closing at a rate of at least one-to-one.

Many factors can impact closing ratios, including jurisdictional differences that don't allow settlement of future medical care, settlement philosophy, and caseloads. Organizations should consider these factors when benchmarking against industry peers.

> "Settlement philosophy can have a significant impact on the closing ratio of claims organizations."
>
> *- Industry Leader, William Zachry*

The survey results reflect that 26 percent of respondents have an average closure ratio of 101 percent or greater, and more than half, 53 percent of respondents, report an average closure ratio of less than 100 percent (see Table 4).

Table 4 Survey Question: *Claims Resolution - What is your current claims closure ratio?*
[492 Responses]

Answer	count	%
≤ 50%	34	7%
51 to 60%	25	5%
61 to 70%	24	5%
71 to 80%	26	5%
81 to 90%	56	11%
91 to 100%	97	20%
101 to 110%	107	22%
111 to 120%	11	2%
121 to 130%	4	1%
131 to 140%	-	-
141 to 150%	-	-
≥ 151%	3	1%
Unknown	105	21%

Claims Inventory

Workers' compensation reforms and employers' focus on workplace safety have resulted in lower premiums, loss costs and claims frequency. However, workers' compensation medical costs, which are higher than the overall medical Consumer Price Index, have outpaced the industry's lower claims frequency trends.[3] These increased medical costs have resulted in increased claims severity, adding to aging claims.

Tail Claims - Regional Differences

Respondents who manage claims in California and in states classified as the "South" region report a higher inventory of claims open greater than five years.

Many factors influence aging claims inventory. Workers' compensation is a long-tail line of insurance, with claim costs often not fully paid for many years after the date of loss. The workers' compensation tail largely consists of the medical component of permanent disability claims. This long-tail nature is further exacerbated by individual state regulations, particularly if unlimited medical benefits are included in statutory coverage. According to the Casualty Actuarial Society, medical cost escalation and declining mortality rates will have a substantial effect on future medical and tail factors in workers' compensation claims.[4] Furthermore, according to the National Council on Compensation Insurance (NCCI), paid loss development issues tend to increase over many successive years of development.[5] There is even wide inter-state variation in the duration of medical treatment which, in some cases can lengthen the tail of these claims. California, for example, has only paid 36 percent of ultimate medical costs at 36 months (compared to a median of 65 percent for other states).[6]

Survey respondents were asked to identify the percentage of their claims inventory that has been open for more than five years. The results indicate that 20 percent of respondents have a high percentage of tail claims (see Table 5).

Table 5 Survey Question: *Tail Claims - What percentage of your open claims inventory has been open for more than five years?*
[492 Responses]

Answer	count	%
1 to 5%	141	29%
6 to 10%	74	15%
11 to 15%	51	10%
16 to 20%	35	7%
21 to 25%	21	4%
26 to 30%	18	4%
31 to 35%	8	2%
36 to 40%	16	3%
41 to 45%	8	2%
46 to 50%	9	2%
≥ 51%	16	3%
Unknown / Not Applicable	95	19%

Appendix A Index – Survey Participant Demographics

For more information on the survey participants' demographic data, please refer to the below tables and figures in **Appendix A**.

A 1: Role / Level of Responsibility

A 2: Organization Type

A 3: Location Type

A 4: Method of Claims Management

A 5: Business Focus

A 6: Geographic Focus

A 6.1: Regional Classification

A 7: Organization Size – Total Claims Dollars Paid
Segmented by Organization Type

A 8: Organization Size – Total Annual Premium
Segmented by Organization Type

A 9: Organization Size – Total Employee Headcount

A 10: Average Claims Caseloads
Segmented by Organization Type

A 11: Current Claims Inventory

A 12: Tail Claims Inventory

A 13: Claims Closure Ratios
Segmented by Organization Type

[2] Cap TPA Adjuster Caseloads to Improve Service, Outcomes. 2010. Available: http://www.businessinsurance.com/article/99999999/NEWS080101/399999969

[3] Insurance Information Institute Workers' Compensation Topic. Jan 2016. Available: http://www.iii.org/issue-update/workers-compensation

[4] The Workers Compensation Tails. Casualty Actuary Society. NCCI 2012. Available: http://www.variancejournal.org/issues/06-01/48.pdf

[5] The Workers Compensation Tail Revisited. NCCI 2009. Available: https://www.ncci.com/Articles/Documents/II_CASJournal-Schmid.pdf

[6] NCCI Annual Statistical Bulletin, 2016. Available: https://www.ncci.com/ServicesTools/pages/ASB.aspx

Operational Challenge

Prioritizing Core Competencies

Defining key performance measures and outcomes

Claim organizations are under constant pressure to achieve performance targets, to reach higher performance levels, and to ensure the claims department supports and advances organizational goals. During the 2015 study's qualitative research exercise, Industry Executives focused on key issues impacting claim core competencies, namely how to: employ outcome-based measures, utilize technology to drive claim best practices, and leverage risk/reward strategies. The 2016 study expands on the focus group research to include *how* organizations: link performance measures to desired outcomes, use claim systems or workflow automation to direct/manage best practices, and utilize analytics to manage claims.

Defining good outcomes is dependent on several factors. First, claims departments must determine the context and level of the outcomes, such as the individual level (i.e. employee, claims examiner, nurse, provider, risk manager), or the organizational level (i.e. company, business unit or department). This is where key performance indicators (KPIs) are used as tangible metrics that reflect *how well* an individual, department or organization is achieving its stated goals and objectives.[7]

Key Considerations:

What strategies can we employ to operationalize qualitative and outcome-based measures? And how do we tackle system limitations that may challenge an organization's ability to implement such measures?

What strategies can organizations undertake to align claims best practices, internal processes, and systems throughout the organization?

Tangible metrics represent the specific interventions that organizations should focus on to achieve the desired outcome. For example, the 2016 study asked participants how they define a "good claims outcome" (see Table 6). Participants rank *employee return to the same or better pre-injury functional capabilities* as the most important claims outcome. Therefore, in this instance, possible tangible metrics to achieve this outcome might be: the employee's functional abilities are assessed/rated at the outset of the claim and throughout the recovery process, the employee and manager are engaged in the return-to-work process and problem solving, and medical treatment within Evidenced-Based Medicine is expedited/facilitated within 24-hours of request – all of which can impact if the employee returns to the same or better pre-injury functional capabilities.

Table 6 Survey Question: *How do you define a good claims outcome? Please rank in the order of importance, with 1 being the "most important" and 5 being of "lower importance."*
[492 Responses]

Answer	Overall Rank	Mean
Employee return to the same or better pre-injury functional capabilities	1	2.14
Return-to-Work (RTW) at or below industry benchmarks	2	2.51
Claims closure / resolution at or below expected average benchmark	3	3.00
Maximum Medical Improvement (MMI) achieved at or below Evidence-Based Medicine (EBM) Guidelines expectations	4	3.32
Lack of litigation	5	4.03

See **Appendix B** for all results related to "Prioritizing Core Competencies"

Having a well-defined stay-at-work/return-to-work program is crucial to successfully returning employees to work after an injury. However, several factors can influence the effectiveness of these programs. Recent research from the Workers Compensation Research Institute (WCRI) found employee trust to be the key predictor of successful return-to-work. The research indicates that workers who were strongly concerned about being fired after an injury experienced poorer return-to-work outcomes than workers without those concerns.[8] This should send a strong industry message to focus on employer/employee relationships, particularly the employee's relationship with their direct supervisor/manager to facilitate favorable return-to-work outcomes.

Obstacles to achieving positive claim outcomes

The 2016 study also examined the greatest obstacles to achieving positive claim outcomes. Survey participants identify *psychosocial/co-morbidities*, *lack of return-to-work options*, and *litigation* as the greatest obstacles (see Table 7). Similarly, WCRI's "Predictors of Worker Outcomes" research indicates that workers with co-morbidities have longer disability durations.[9] Further, NCCI's research findings indicate that claims with co-morbidities cost twice as much as like matched claims.[10] Litigation is a recognized risk factor in workers' compensation claim costs. The cause and effect of litigation are closely linked to the predictors of successful return-to-work. Employees are more likely to seek legal representation when there is poor communication or lack of trust with the employer and/or claims administrator.[11]

Table 7 Survey Question: *What are the greatest obstacles to achieving desired claim outcomes? Please rank in the order of the greatest impediment, with 1 being the "greatest obstacle" and 10 being the "lower obstacle."*
[492 Responses]

Answer	Overall Rank	Mean
Psychosocial / co-morbidities	1	4.08
Lack of RTW option / accommodation	2	4.64
Litigation	3	4.79
Employee / employer relationship	4	5.04
Late injury / claim reporting	5	5.20
Proactive / timely communication with stakeholders (i.e. employee, employer, providers)	6	5.57
Legalese statutory requirements / communication	7	5.63
Employee doesn't understand the workers' comp system	8	5.81
Jurisdiction / geographic differences	9	6.74
Access to care	10	7.50

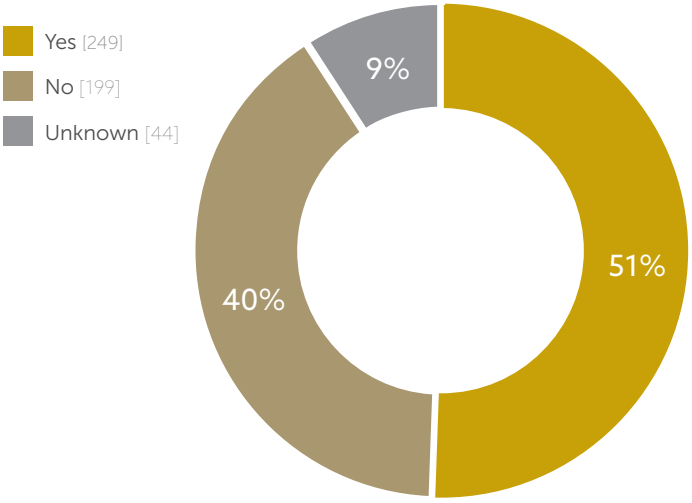
Linking performance measures to desired outcomes

Building on the 2015 study's recommendation to "begin with the end in mind" in order to operationalize outcome-based measures,[12] the 2016 study identifies if organizations *link* claim performance measures to KPIs. The results indicate that only 51 percent of organizations link claim performance measures to desired outcomes (see Figure 4 on the following page). This comes as no surprise, as performance in claim organizations is largely driven by regulatory compliance/penalty aversion and business requirements. The results indicate that higher performing organizations – those with a closure ratio of 101 percent or greater – are more likely to link performance measures to outcomes (see Figure 5 on the following page).

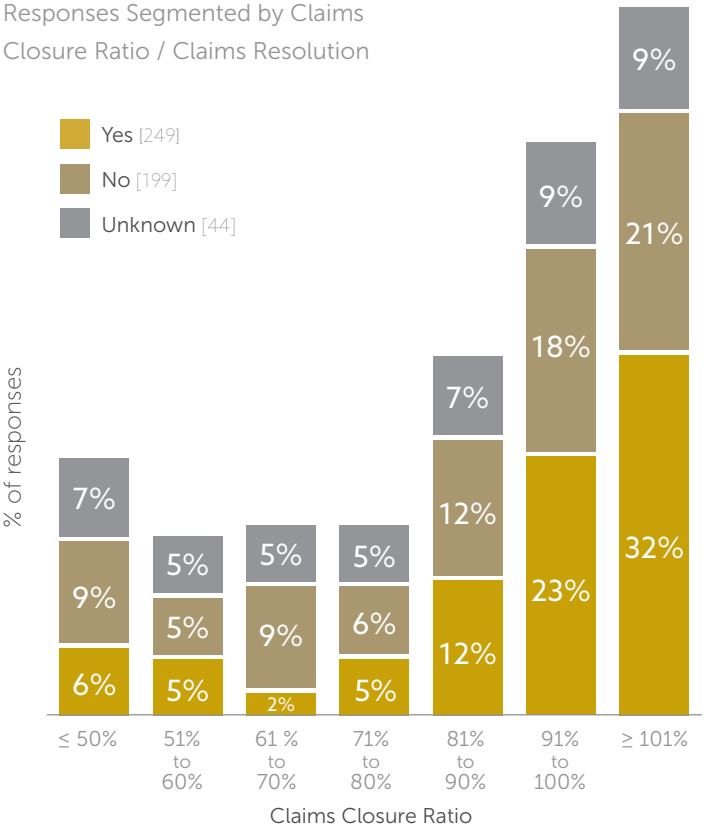
To operationalize outcome-based measures, organizations should start with the ultimate goals and desired outcomes, then ensure an appropriate balance between quantitative and qualitative claim activity-based metrics (KPIs) to ensure the desired cause and effect.

Figures 4 & 5 Survey Question: *Does your organization link any claim performance measures (i.e. KPIs) to desired outcomes?*
[492 Responses]

Overview – All Responses



Responses Segmented by Claims Closure Ratio / Claims Resolution



Participants identify the *lack of business priority* as the greatest obstacle to linking claims performance measures to desired outcomes, followed by the *lack of alignment of existing policies/procedures and business processes* (see Table 8). According to Harvard Business Review, this is a common mistake organizations make. Organizations measure the wrong thing. There is a disconnect between the metrics used to assess performance and the objective; as a result, strategic decisions don't support the goals.[13] Claims organizations can only deliver excellent results by systematically measuring outcomes aligned with business objectives that: identify high and low performers, benchmark against best practices, and gauge improvements over time.

Claims organizations can only deliver excellent results by systematically measuring outcomes aligned with business objectives that: identify high and low performers, benchmark against best practices, and gauge improvements over time.

Table 8 Survey Question: *What are the major obstacles to linking claims performance measures to desired outcomes? Select all that apply.* *(Conditional question for respondents who answered "No" in Figure 4)*
[199 Responses]

Answer	count	%
Not a business priority	85	43%
Existing policies / procedures and business processes	80	40%
Incentives are not tied to the desired outcomes	70	35%
Information technology capabilities	66	33%
Lack of consistency in data definitions	61	31%
Disconnect between core competencies and key performance metrics	57	29%

Note: Participants were able to select more than one answer for this question

Using systems to manage claims performance

The study identified how organizations are utilizing systems to manage claims core competencies and performance. The results reflect that 66 percent of participants use workflow automation and just over 50 percent use push technology or predictive modeling to some degree. This is a significant improvement from the 2014 study where only 42 percent reported utilizing workflow automation and even less, 24 percent, reported utilizing predictive modeling.

The 2016 study indicates that higher performing organizations are more likely to use claim decision support tools, and use them more frequently throughout the claim lifecycle (see examples shown in Figures 6 – 9).

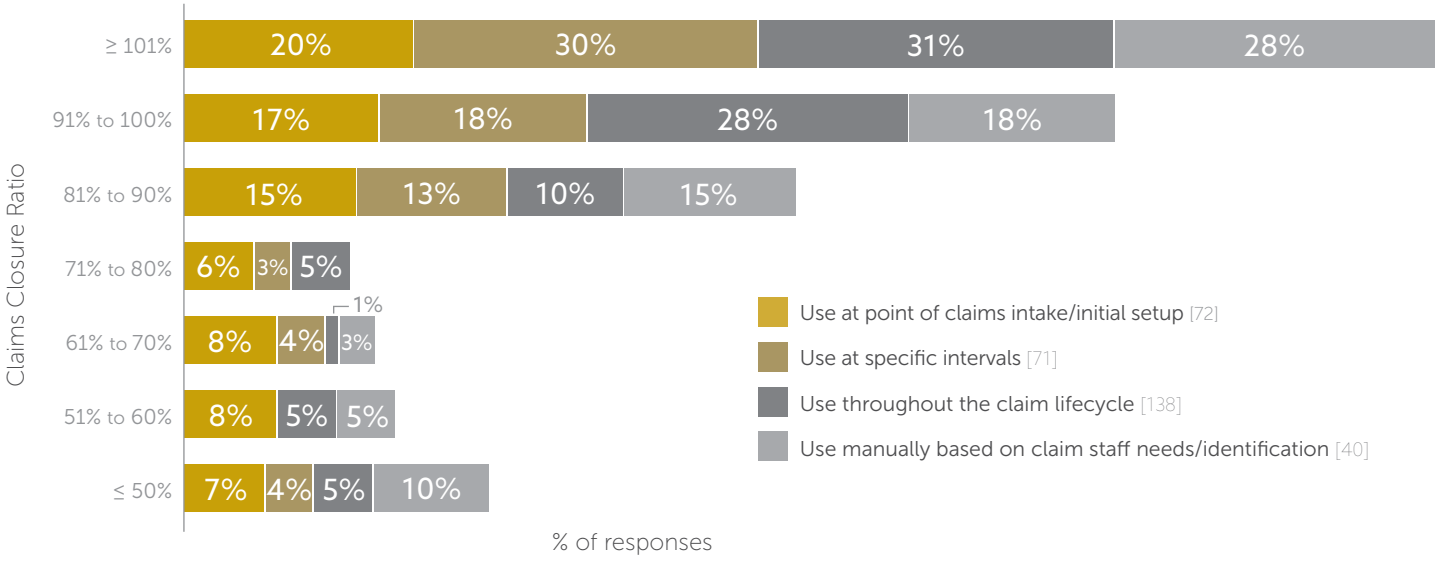
Table 9 & Figures 6-9

Survey Question: *Does your organization utilize claims decision support tools to augment strategic claims decisions/management? Using the drop down list, indicate if/how your organization is utilizing any of the following claims decision support tools.*
[492 Responses]

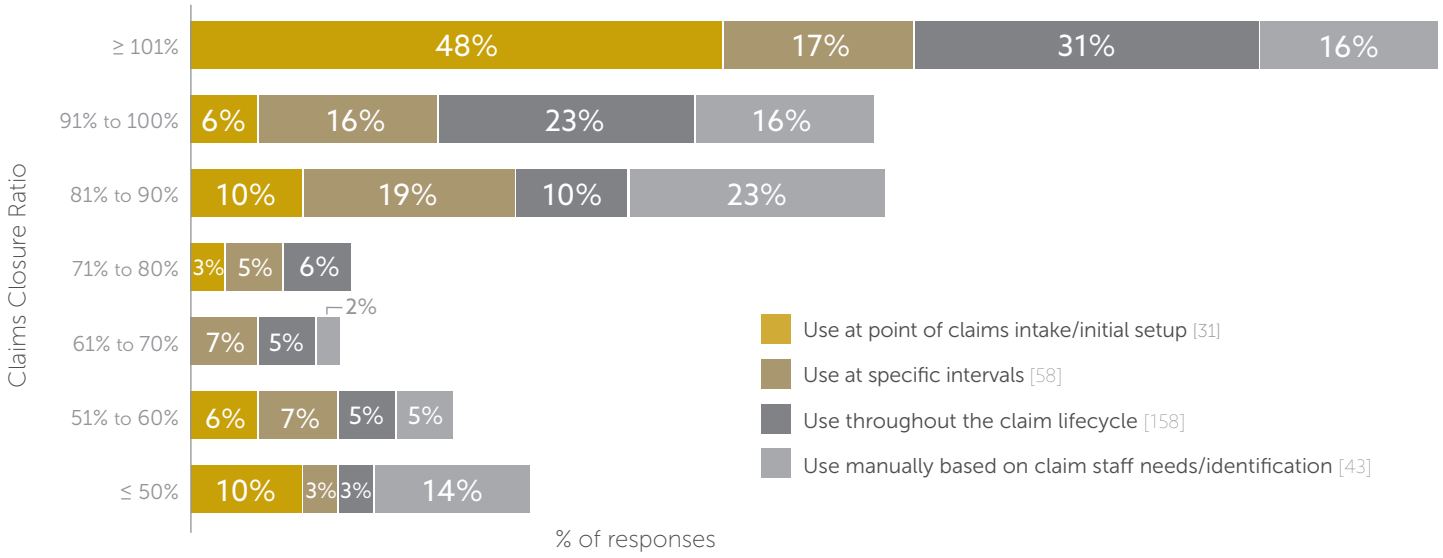
Overview – All Responses

Answer	Use at point of claims intake / initial setup	Use at specific intervals	Use throughout the claim lifecycle	Use manually, based on claim staff	Other	No / Not Applicable
Workflow automation	15%	14%	28%	8%	1%	34%
Business process management	6%	12%	32%	9%	3%	38%
Push technology (information pushed to the injured worker / key stakeholders)	10%	14%	17%	11%	2%	46%
Predictive modeling (process used to create a statistical model of future probability of claim development)	9%	14%	18%	9%	3%	47%
Prescriptive analytics (analytics used to determine the best solutions / activities to achieve outcomes among various choices, given the known risk factors)	4%	14%	16%	12%	1%	53%
Auto adjudication	8%	8%	6%	5%	2%	71%

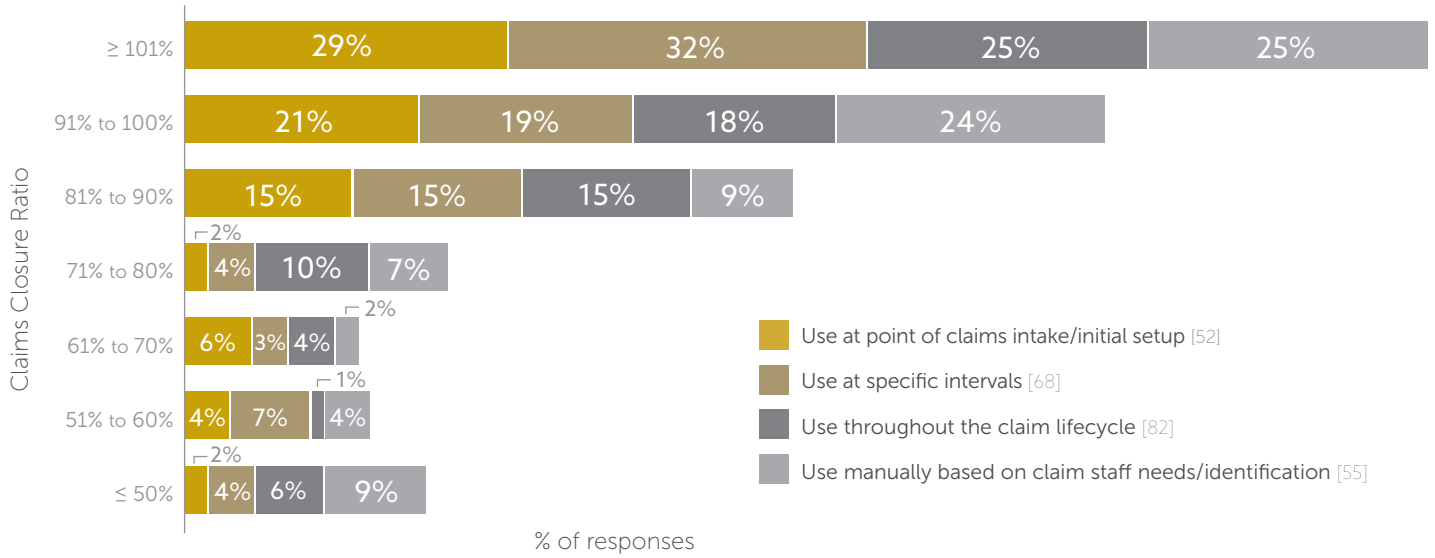
Workflow Automation – Responses Segmented by Claims Closure Ratio / Claims Resolution



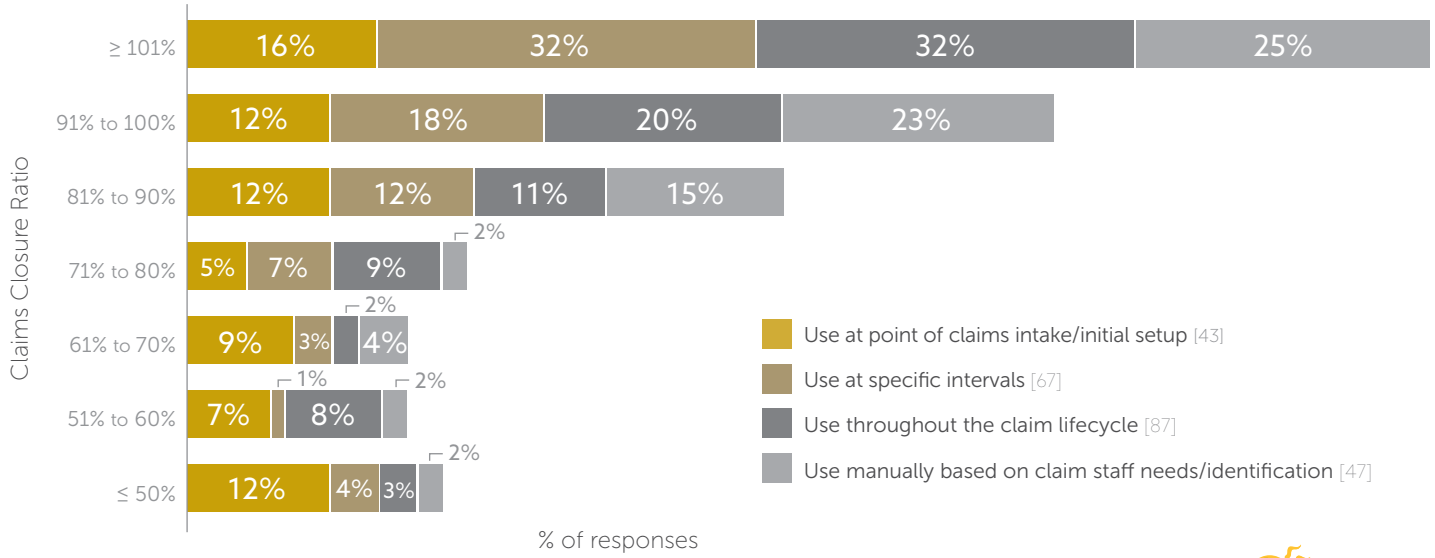
Business Process Management – Responses Segmented by Claims Closure Ratio / Claims Resolution



Push Technology – Responses Segmented by Claims Closure Ratio / Claims Resolution



Predictive Modeling – Responses Segmented by Claims Closure Ratio / Claims Resolution



Appendix B Index – Prioritizing Core Competencies

For more information on all survey question results and additional benchmark analyses related to this focus area, please refer to the below tables and figures in **Appendix B**.

B 1: Ranking of Most Important Claims Outcomes
Rank Detail

B 2: Ranking of Greatest Obstacles to Achieving Desired Claims Outcomes
Rank Detail

B 3: Prevalence of Linking Claims Performance Measures to Desired Outcomes
Segmented by Claims Closure Ratio

B 3.1: Primary Reasons for Not Linking Claims Performance Measures to Desired Outcomes
Segmented by Organization Type

B 4: Use of Claims Decision Support Tools to Augment Strategic Claims Decisions / Management
Segmented by Organization Type

[7] Key Performance Indicators to Improve Workers Comp Outcomes. Available:
http://www.propertycasualty360.com/2015/02/24/7-key-performance-indicators-to-improve-workers-co?slreturn=1476049643

[8/9] Workers Compensation Research Institute. 2014. Available:
http://www.wcrinet.org/media_release_6.19.14_wrkr_survey8.html

[10] NCCI Comorbidities in Workers Compensation. 2012. Available:
https://www.ncci.com/Articles/Documents/II_Research-Brief-Comorbidities-in-Workers-Compensation-2012.pdf

[11] Cause and Effect: Litigation in the Workers Compensation System. 2016. Available:
http://www.alphafund.org/2016/08/06/cause-effect-litigation-workers-compensation-system/

[12] 2015 Workers' Compensation Benchmarking Study. Available:
https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

[13] Harvard Business Review; The True Measures of Success. Available:
https://hbr.org/2012/10/the-true-measures-of-success

Operational Challenge

Talent Development & Retention

Talent recruitment and retention – a business imperative

With a significant percentage of the industry nearing retirement, a major influx of talent is needed. According to a McKinsey & Company report, by 2018, 25 percent of risk management and insurance professionals will be at retirement age.[14] Additionally, only 27 percent of industry employees are under the age of 35.[15] To make any headway will require organizations to think outside of traditional recruitment and retention strategies.

During the 2015 study's qualitative research exercise, Industry Executives targeted the following issues as most critical to talent development and retention: prioritizing talent management as a key business strategy, implementing contingency planning and knowledge transfer programs, and attracting the Millennial generation. The 2016 study expands on the focus group research to include *how* organizations: connect their talent strategy to business strategy/mission, use employee engagement/advocacy models, and implement knowledge transfer strategies.

Advocacy-based claims models, a key talent strategy with dual incentives

An area of interest to the workers' compensation industry is an *advocacy-based claims model*, described as an employee-centric customer service claims model that focuses on employee engagement during the injury recovery process, removes adversarial obstacles, makes access to benefits simple, builds trust, and holds the organization accountable to metrics that go beyond cost containment.

The 2016 study reveals that 31 percent of participants have already implemented an advocacy model (see Figure 10). Additionally, results indicate that self-insured employers, as well as higher performing claims organizations, are more likely to have implemented an advocacy model (see Figure 11 on the following page).

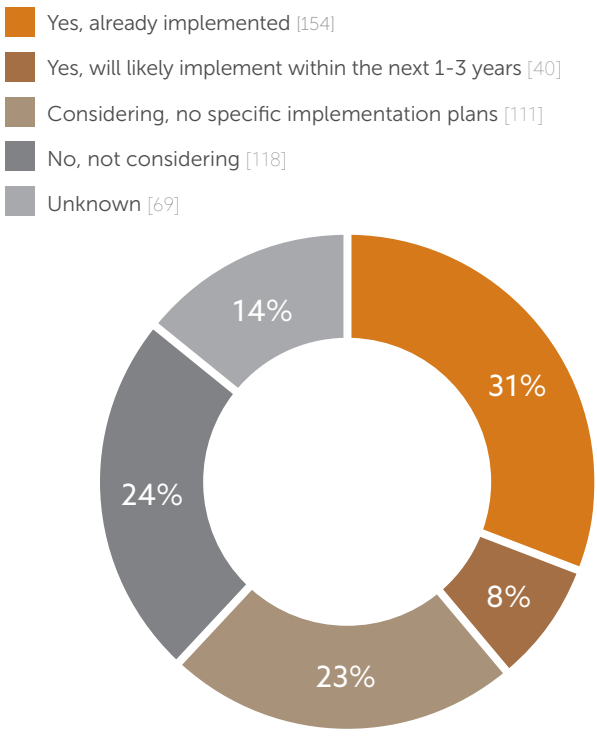
Key Considerations

How do we ensure recruitment, retention and development of claims talent is a key business strategy?

Business continuity and contingency planning are standard business practices. How can we take a similar approach to develop formal knowledge transfer programs to ensure knowledge transfer from senior-level claims staff to less experienced staff?

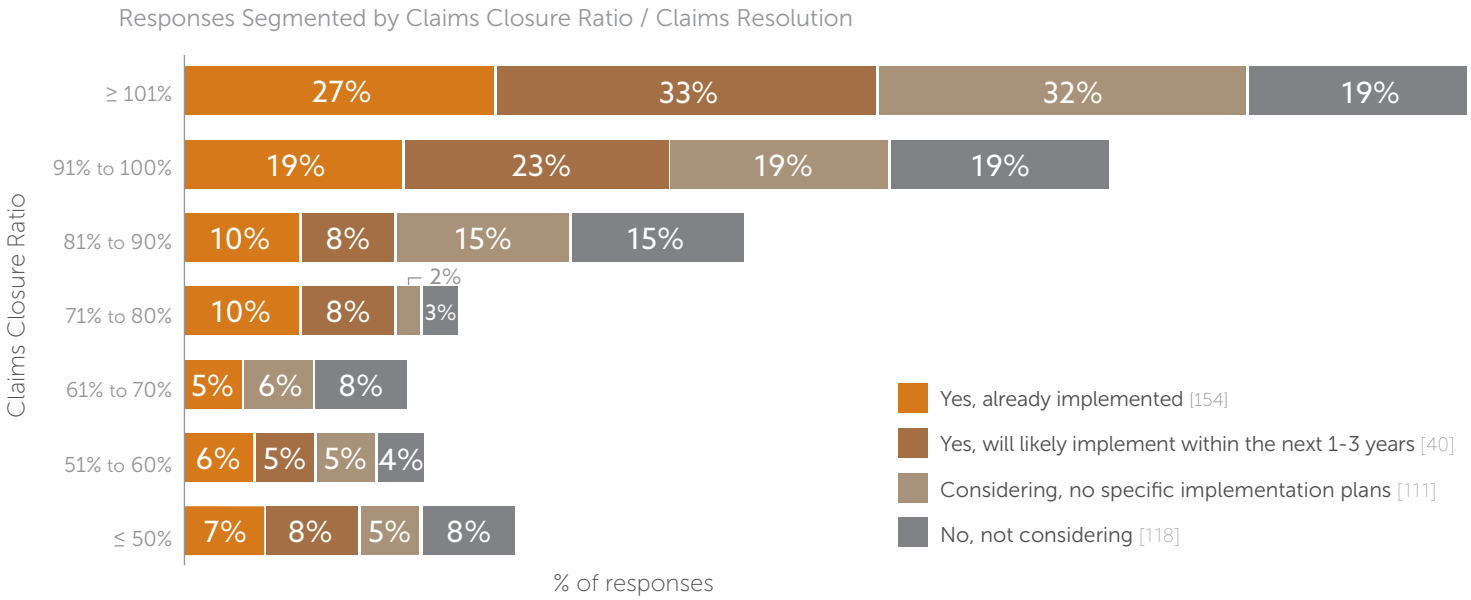
Figure 10 Survey Question: *Has your organization considered implementing/adopting an advocacy-based claims model?* [492 Responses]

Overview – All Responses



See **Appendix C** for all results related to "Talent Development & Retention"

Figure 11 Survey Question: *Has your organization considered implementing/adopting an advocacy-based claims model?* [492 Responses]



According to Darrell Brown, Chief Claims Officer with Sedgwick and a member of the Benchmarking Study's Advisory Council, "We are in the early stages of a paradigm shift toward an advocacy-based claims model – a model that creates a win-win for injured workers and industry stakeholders alike."[16] Could an advocacy model offer an additional incentive for claims organizations – improved claim outcomes *as well as* a talent management incentive? Industry Leaders identified this dual incentive during the study's 2015 focus group research, suggesting organizations elevate claims as a purposeful profession, emphasizing its social factors by "rebranding" the claims adjuster as an advocate.[17] Today's talent wants a seat at the table and to be part of something bigger than profit-making; they want to work for organizations with a greater mission – an organization they can be proud of.[18]

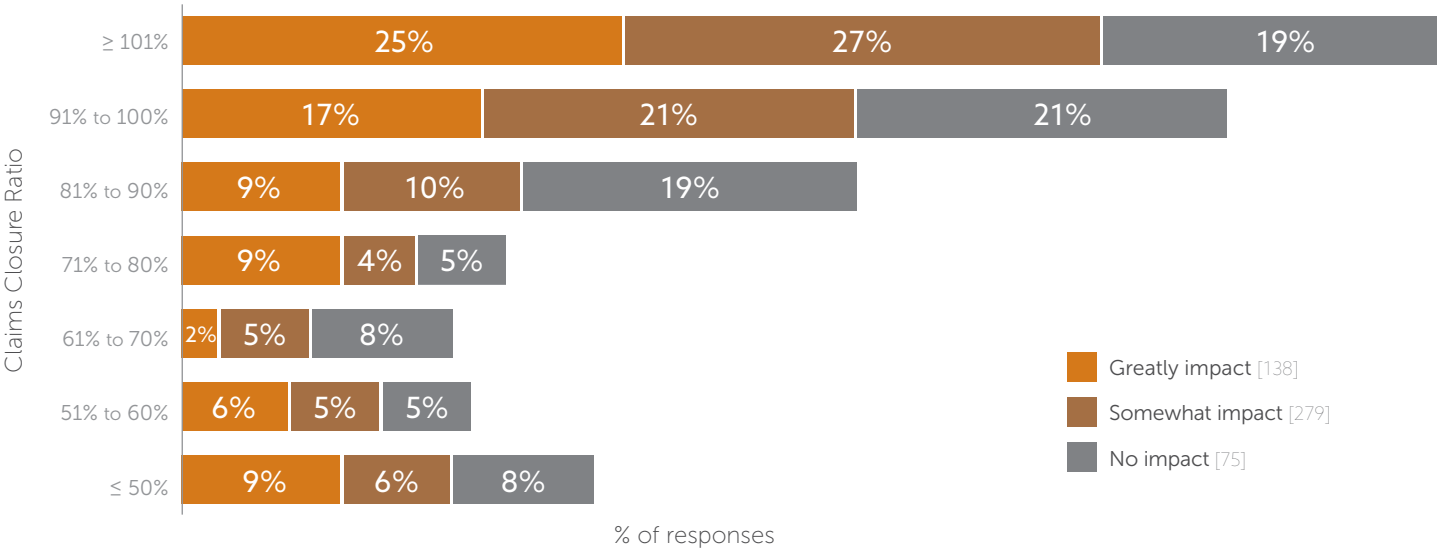
> "We are in the early stages of a paradigm shift toward an advocacy-based claims model – a model that creates a win-win for injured workers and industry stakeholders alike."
>
> -***Darrell Brown**, Chief Claims Officer, Sedgwick*

The results reflect that participants believe an advocacy-based claims model will have a positive impact on claims talent development and retention strategies. The results indicate that 28 percent believe an advocacy model will greatly impact, and 57 percent believe it will somewhat impact talent strategies. The most significant impacts ranked by participants: *employee engagement, transforming the image of the claims profession,* and *connecting claims talent strategy to organizational mission/ customer service model and employee service model* (see Table 10). According to a Deloitte Global Human Capital Trends research, the issue of "engaging people well" is becoming one of the biggest competitive differentiators in business.[19] Organizations need to redefine engagement beyond an annual HR measure to a continuous, holistic component of their business strategy.[20] Notably, higher performing organizations are more likely to believe an advocacy-based model will positively impact claims talent (see Figure 12 on the following page).

Table 10 Survey Question: *Considering an advocacy-based claims model, how could it most impact claims talent development and retention strategies? Please rank in the order of greatest potential impact, with 1 being the "greatest impact" and 5 being the "lower impact."* [492 Responses]

Answer	Overall Rank	Mean
Employee engagement	1	2.39
Transform the image of the claims profession, from "adjuster" to "advocate"	2	2.85
Connect claims talent strategy to organizational mission / customer service model and employee service model	3	2.87
Improve organizational reputation / social image	4	3.41
Elevate the social factors, meaningful work of claims professionals	5	3.48

Figure 12 Survey Question: *In your opinion, will an advocacy-based claims model impact claims talent development and retention strategies?* [492 Responses]



The importance of retaining top talent is critical to business success. In the PricewaterhouseCoopers (PwC) Annual CEO survey, more than 1,000 CEOs were asked, "How important are the following sources of competitive advantage?" The number one response – "access to, and retention of, key talent."[21] Beyond meeting immediate talent recruitment needs, the most successful organizations use diverse human capital strategies to drive strategic change, innovation and long-term organizational health.

The value proposition, investing in talent development

The prior 2013 and 2014 studies evaluated the investment in traditional claims training and development (i.e. new hire and technical claims training). The 2016 study considers many of the soft skills claims professionals need to excel in their demanding role, such as proficient communication skills, active listening and empathy. Skillful communicators listen with full attention to concerns, adapt their communication based on each personality style, and manage conflict in a way that all parties experience a satisfactory outcome. Additionally, they understand multigenerational and cultural differences and adapt accordingly. As one industry insider puts it, "by definition, adjusters work with people under stress."[22] Working with people under varying levels of stress – from low to severe – requires more than technical, legal, medical and/or regulatory training.

Study results indicate that just over 50 percent of organizations include communication skills in their training for frontline claims professionals, and only 29 percent provide training on empathy – a critical skill when dealing with people who are injured (see Table 11).

Table 11 Survey Question: *Does your organization include any of the following skills and abilities testing/training for frontline claims professionals? Select all that apply.* [492 Responses]

Answer	count	%
Customer service skills	282	57%
Communication skills	265	54%
Critical thinking	214	43%
Active listening skills	194	39%
Empathy	143	29%
Aptitude testing	110	22%
None / Not Applicable	170	35%

Note: Participants were able to select more than one answer for this question

Knowledge transfer strategies, critical for business continuity

Knowledge transfer is often an afterthought, and the importance is not recognized until resources are walking out the door. Many organizations have limited resources or are in a constant state of flux with expanding claim inventories, which relegates talent strategy and succession planning to the backburner. Organizations must consider how to preserve the institutional knowledge of seasoned claims professionals; without it, many may find themselves ill-equipped to manage operations in the future.

The 2015 study identified several key strategies for knowledge transfer programs. The 2016 study evaluated the degree to which organizations have implemented these or other knowledge transfer strategies. The results reflect that 71 percent of participants have implemented one or more knowledge transfer initiatives, with *formal training and development programs* being the most common (see Table 12). Higher performing organizations are more likely to have knowledge transfer programs in place, particularly in the areas of *identifying specific experience and knowledge others don't have, documenting knowledge that can be transferred, utilizing retirees and senior level claims staff as trainers,* and *having formal content management repositories* in place.

Table 12 Survey Question: *What knowledge transfer initiatives has your organization implemented? Select all that apply.*
[492 Responses]

Answer	count	%
Formal learning / training / development program	247	50%
Identify positions / employees with specific experience and knowledge that others do not have	226	46%
Document knowledge that can be transferred through processes, procedures, and/or written documentation	217	44%
Develop formal mentoring programs	153	31%
Formalize content management repositories	119	24%
Utilize retirees and/or senior level claims staff as trainers / coaches	95	19%
Other	10	2%
Unknown	29	6%
None / Not Applicable	114	23%

Note: Participants were able to select more than one answer for this question

Appendix C Index – Talent Development & Retention

For more information on all survey question results and additional benchmark analyses related to this focus area, please refer to the below tables and figures in **Appendix C**.

C 1: Prevalence of Advocacy-Based Claims Models
Segmented by Organization Type
Segmented by Claims Closure Ratio

C 2: Impact Rating of Advocacy-Based Claims Models on Talent Development and Retention Strategies
Segmented by Organization Type
Segmented by Claims Closure Ratio

C 3: Ranking of Areas that Advocacy-Based Models Could Most Impact Talent Development and Retention Strategies
Ranking Detail

C 4: Valuation of Claims Professionals as Key to Organization's Operational and Financial Success

C 5: Provision of Soft Skills Testing / Training to Frontline Claims Professionals
Segmented by Organization Type

C 6: Prevalence of Knowledge Transfer Initiatives
Segmented by Organization Type

[14] Building a Talent Magnet; How the P&C Industry Can Solve Its People Needs. 2010. Available: http://www.griffithfoundation.org/uploads/McKinsey-Talent-white-paper-FINAL.pdf

[15] The Insurance Industry Finds Stability In Face of Upcoming Talent Shortage. 2013. Available: https://jacobsononline.com/uploadfiles/leader215.pdf

[16] Diversity and Inclusion Are a Win-Win for the Workers' Compensation Claims Industry. 2016. Available: http://www.wci360.com/news/article/diversity-and-inclusion-are-a-win-win-for-the-workers-compensation-claims-i

[17] 2015 Workers' Compensation Benchmarking Study. Available: https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

[18] How to Manage Millennials. Available: http://www.pwc.com/gx/en/issues/talent/future-of-work/managing-millennials.html

[19/20] Global Human Capital Trends 2016. Available: http://www2.deloitte.com/global/en/pages/human-capital/articles/introduction-human-capital-trends.html

[21] PwC 18th Annual Global CEO Survey. 2015. Available: http://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2015.html

[22] The 6 Soft Skills That Today's Adjusters Need. 2014. Available: http://www.propertycasualty360.com/2014/08/19/the-6-soft-skills-that-todays-adjusters-need

Operational Challenge

Impact of Technology & Data

Technology strategies

Technology and managing multiple data sources remain major factors for improving the claims process and outcomes. During the 2015 study's focus group research, Industry Executives addressed key issues impacting claims technology and data, namely how to utilize data to drive best practices and how to leverage predictive modeling to improve claim outcomes.[23] The 2016 study expands on that qualitative research, to glean *what* data sources organizations are using to develop analytics, and *how* they are using and prioritizing analytics to improve claim operations and outcomes.

The results reflect that the majority of organizations, 82 percent, use internal claims data to develop analytics. This is a good start, as most models – including predictive and prescriptive analytics – depend on internal claims data to build and refine models.

The results also indicate that higher performing organizations utilize more data sources, and are particularly more likely to use Evidenced-Based Medicine Guidelines and HR payroll/employment data to develop analytics (see Table 13).

Key Considerations:

How can organizations use technology to drive high performance?

How can data help to better manage claims, measure best practices and achieve improved outcomes?

Data analytics are a big concern/ opportunity. How can claims operations use analytics strategically?

Predictive modeling is frequently used on the underwriting side. Are organizations leveraging this technology on the claims operations side? How is the information used effectively?

Table 13 Survey Question: *What data sources does your organization use to develop analytics to improve claim operations? Select all that apply.* [492 Responses]

Responses Segmented by Claims Closure Ratio / Claims Resolution

		Claims Closure Ratio						
Answer	count	≤ 50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	≥ 101%
Internal claims data	405	7%	5%	4%	5%	12%	20%	28%
Bill review data	328	5%	3%	4%	4%	12%	22%	32%
Pharmacy / PBM data	315	4%	4%	4%	5%	11%	23%	32%
External / historical claims data	276	7%	5%	4%	7%	13%	20%	25%
Utilization review data	260	7%	4%	5%	5%	11%	21%	29%
Workplace safety data	232	6%	6%	5%	7%	15%	17%	25%
Evidence-Based Medicine (EBM) Guidelines	194	5%	3%	4%	7%	10%	19%	33%
HR payroll / employment data	170	5%	5%	5%	8%	15%	15%	30%
Health data / co-morbidities data	143	6%	1%	3%	8%	10%	21%	30%
Geographic data	115	5%	3%	3%	7%	11%	19%	32%
Social media data	101	5%	4%	6%	7%	14%	20%	28%
Socio-economic data	67	4%	4%	1%	6%	7%	24%	27%
None / Not Applicable	41	7%	5%	5%	5%	10%	20%	7%

Note: Participants were able to select more than one answer for this question

See **Appendix D** for all results related to "Impact of Technology & Data"

Using analytics to impact claim operations

Analytics can help manage claims, resources, and vendors more effectively. Among its many functions, analytics can be used for injury prevention, frequency and severity prediction, specialty claims resource assignment, subrogation, litigation management, settlement evaluation, reserving, fraud detection, risk detection, volatility, and medical severity detection.

On the horizon – using predictive analytics for safety and health applications to reduce injury and illnesses. The National Institute for Occupational Safety and Health (NIOSH) is exploring the potential of predictive analytics, and related approaches, to reduce risk of death, injury, and disease from work-related incidences. "There is tremendous potential for improved prevention if accurate predictions of injury and disease probability are possible. It seems likely that if injuries can be predicted accurately, they can be prevented."[24] This is an area of opportunity for the industry, as survey results indicate that less than 50 percent of all study participants utilize analytics for pre-loss safety oversight management. However, higher performing organizations are more likely to utilize these types of analytics now (see Table 14).

Just over 50 percent of participants use fraud detection analytics to improve claim operations, followed by 48 percent who use analytics to predict claims severity. Fraud is a major issue for the workers' compensation industry. There are different types of fraud in workers' compensation, including: provider, employer and, to a much lesser degree, injured worker fraud. According to the National Insurance Crime Bureau, workers' compensation fraud costs payers $7.2 billion annually, and is a significant crime in America today.[25] With a total workers' compensation market spend of $91.8 billion annually,[26] fraud therefore could account for almost eight percent of total annual costs to the industry. Given the significance of fraud, and the various data sources available, why do most organizations rely on manual detection processes? Some say that, to address fraud scams, claims organizations should – at minimum – be looking at claims data, medical records, medical billing, bill audit data, and pharmacy data.[27] To utilize these distinct data sources requires sophisticated data mining, and will ultimately result in better detection than manual processes. Deploying advanced analytics with automated fraud detection technology is an opportunity area for the industry; however, again, higher performing organizations are more likely to use analytics for fraud detection now.

Table 14 Survey Question: *How does your organization use analytics to improve claim operations? Select all that apply.*
[492 Responses]

Responses Segmented by Claims Closure Ratio / Claims Resolution

		Claims Closure Ratio						
Answer	count	≤ 50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	≥ 101%
Fraud detection	249	5%	5%	6%	6%	11%	20%	26%
Predict / detect claims severity	236	6%	3%	4%	7%	11%	21%	28%
Pre-loss and post-loss safety oversight and management	208	5%	4%	5%	7%	13%	23%	25%
Identify medical treatment / utilization outside of Evidence-Based Medicine (EBM) Guidelines	186	5%	4%	3%	6%	9%	22%	30%
Prescribe optimal activities / interventions in a claim to achieve desired outcomes	169	7%	5%	3%	8%	10%	22%	27%
Identify disability durations outside of EBM	153	5%	5%	3%	8%	8%	23%	31%
Predict / detect creeping catastrophic losses	148	8%	4%	5%	9%	9%	20%	25%
Predict / detect litigation	114	8%	5%	5%	10%	12%	18%	22%
None / Not Applicable	77	9%	10%	6%	4%	10%	16%	13%

Note: Participants were able to select more than one answer for this question

Predictive modeling, key to strategic interventions

Predictive modeling has become increasingly important as a key decision support tool in the management of workers' compensation claims. Claims organizations can no longer rely simply on individual experience and professional judgment. Predictive modeling has the ability to analyze an abundance of past data and apply it to current claims – *without human bias* – and it allows organizations to identify high-risk factors throughout the claim lifecycle.

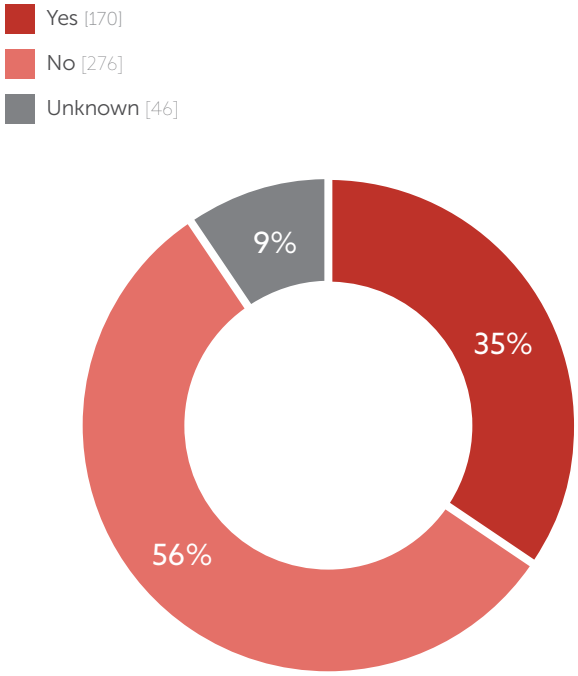
***Predictive Modeling**:*
Identifying high-risk factors is only the first step in delivering value.

Early identification of high-risk claims represents a huge opportunity for claim operations. However, identification is only the first step in delivering value. To ultimately impact claim outcomes requires detailed workflow strategies. According to Midwest Employers Casualty, "It is the combination of claim prediction and intervention that leads to the realization of value and better claims outcomes."[28] Prediction alone won't do it, as predictive analytics must be integrated into claims handling processes and intervention strategies to achieve better outcomes. Analytics will not only be a differentiator, it will also be an essential capability in future claims operations.

Study results reflect that 35 percent of participants use predictive modeling on the claims operations side (see Figure 13). Higher performing organizations are much more likely to use predictive modeling (see Figure 14), and to utilize it throughout the claim lifecycle (see Figure 15 on the following page). The best models are run on every claim, from First Notice of Loss (FNOL) throughout the claim lifecycle with continual updates as new data emerges.

Figures 13 & 14 Survey Question: *Does your organization use predictive modeling on the claims operations side?* [492 Responses]

Overview – All Responses



Responses Segmented by Claims Closure Ratio / Claims Resolution

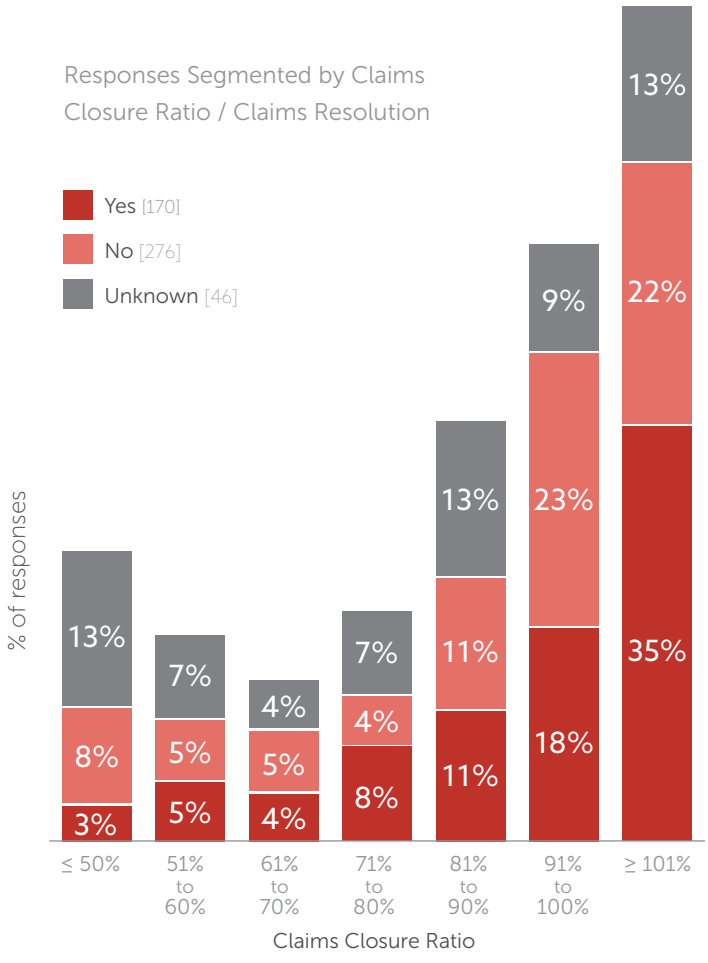
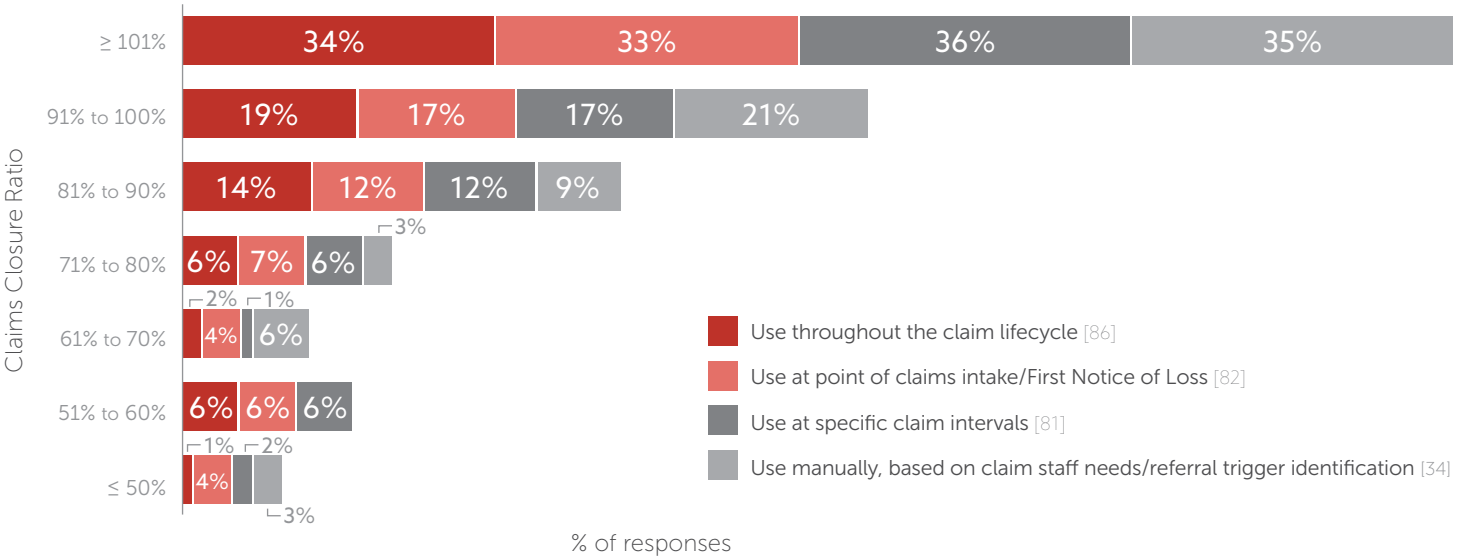


Figure 15 Survey Question: *How is your organization utilizing predictive modeling on the claims operations side? Select all that apply.*
(Conditional question for respondents who answered "Yes" in Figure 13)
[170 Responses]

Responses Segmented by Claims Closure Ratio / Claims Resolution



Note: Participants were able to select more than one answer for this question

Appendix D Index – Impact of Technology & Data

For more information on all survey question results and additional benchmark analyses related this focus area, please refer to the below tables and figures in **Appendix D**.

D 1: Use of Data Sources to Develop Analytics to Improve Claim Operations
Segmented by Organization Type
Segmented by Claims Closure Ratio

D 2: Nature of Analytics Use to Improve Claim Operations
Segmented by Organization Type
Segmented by Claims Closure Ratio

D 3: Use of Predictive Modeling
Segmented by Organization Type
Segmented by Claims Closure Ratio

D 3.1: Nature of Predictive Modeling Use
Segmented by Organization Type

[23] 2015 Workers' Compensation Benchmarking Study. Available: https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

[24] Use of Workers' Compensation Data for Occupational Injury & Illness Prevention. 2010. Available: https://www.cdc.gov/niosh/docs/2010-152/pdfs/2010-152.pdf

[25] Workers' Compensation Scams. Available: http://www.insurancefraud.org/scam-alerts-workers-compensation.htm

[26] Workers' Compensation Benefits, Coverage, and Costs. National Academy of Social Insurance Oct 2016. Available: https://www.nasi.org/research/workers-compensation

[27] Overcoming Workers' Comp Fraud with Detection Technology. 2016. Available: http://www.propertycasualty360.com/2016/04/12/overcoming-workers-comp-fraud-with-detection-techn

[28] Predictive Analytics; A Workers' Compensation Game Changer. 2015. Available: https://www.mwecc.com/Documents/Predictive_Analytics_A_WC_Game_Changer.pdf

Operational Challenge

Medical Performance Management

Provider quality and outcome measures

Health care costs are a serious issue affecting businesses today. It has been characterized not only as a barrier to affordable insurance but also as the preeminent long-term threat to the economy and the competitiveness of American business. This imperative is what is driving the intense focus on health care quality and value-based payment models.

During the 2015 study's focus group research, Industry Executives examined key issues impacting medical performance management, namely how to: measure provider outcomes, utilize value-based payment models, and address the effect of pharmacy on overall medical costs. The 2016 study expands on this qualitative research to assess *how* organizations define and measure provider outcomes, as well as *how* organizations connect provider quality and outcome measures to provider selection and payment strategies.

Key Considerations:

How do we define and measure provider outcomes?

Traditional provider payment strategies in workers' compensation are based on a fee-for-service model with discount methodology. How can we leverage value-based payment models?

Measuring provider quality is a necessary step in the process of improving health care quality and outcomes. According to The New England Journal of Medicine, patients receive the correct diagnosis and care only 55 percent of the time. Wide variations in health care quality, access, and outcomes continue due to chronic underuse, overuse, and misuse of services.[29] Measuring quality aims to empower providers and consumers with information that supports the overall delivery and coordination of care, and ultimately supports payment systems that reward physicians for providing improved care, rather than simply paying based on volume of services.

On the group health side, quality is evaluated by using Clinical Quality Measures (CQMs). CQMs are mechanisms for assessing treatment, processes, experience and outcomes of patient care. According to the Centers for Medicare & Medicaid Services, CQMs assess "the degree to which a provider competently and safely delivers clinical services that are appropriate for the patient in an optimal timeframe."[30] CQMs measure many aspects of patient care including: health outcomes, efficient use of health care resources, care coordination, and adherence to clinical guidelines. Similarly, workers' compensation provider quality measures could include adherence to clinical practice guidelines (i.e. Evidence-Based Medicine) and disability durations, representing a viable option for claims organizations.[31]

Top 3 Provider Quality / Outcome Measures Ranked Most Critical to Claim Outcomes

1. Return-to-Work Outcomes
2. Patient Functional Outcomes
3. Clinical Quality Outcomes

Study results show that participants rank *return-to-work outcomes*, described as measuring provider outcomes against national disability duration guidelines, as the highest priority metric most critical to claim outcomes. Participants also rank *patient functional outcomes* and *clinical quality* metrics as high priority (see Table 15 on the following page). This suggests that the divide between group health and workers' compensation in terms of a "quality focus" is not as wide as previously thought.

See **Appendix E** for all results related to "Medical Performance Management"

Table 15 Survey Question: *Considering the following medical provider quality/outcome measures, please rank in the order of highest priority the measures most critical to claim outcomes, with 1 being the "highest priority" and 10 being the "lower priority."*
[492 Responses]

Answer	Overall Rank	Mean
Return-to-Work Outcomes Measure medical provider disability management outcomes against national benchmark data	1	3.08
Patient Functional Outcomes Evaluate injured workers' health status and function as a result of the care they received	2	4.30
Clinical Quality Measure provider quality by adherence to Evidence-Based Medicine (EBM) Guidelines	3	4.71
Frequency & Duration of Medical Treatment Frequency and duration of treatment by injury / diagnosis compared to peers	4	4.71
Coordination of Care Effective communication / coordination across healthcare system; timely referral / coordination across referral sources	5	4.83
Patient Satisfaction Injured worker satisfaction with their medical care as an indicator of provider quality and outcomes	6	5.52
Total Cost of Care Total claim cost per episode of care / Diagnosis-Related Group (DRG)	7	6.31
Administrative Efficiency Quality of documentation and timely submission of reports	8	6.67
Risk of Harm Intended or unintended physical or psychiatric injury resulting from a pattern(s) of low quality care	9	7.18
Litigation Rate Provider's association with litigated claims compared to peer providers in the same geographic area	10	7.69

Provider quality and outcome measurement execution

Although participants rank return-to-work outcomes as the most critical provider quality measure to claim outcomes, less than 50 percent report *measuring* it. Additionally, less than 30 percent report measuring patient functional outcomes and clinical quality (see Table 16). The 2013/14 studies indicate that many organizations struggle to operationalize provider outcome measures. Therefore, the 2015 study included a detailed guide for implementing provider outcome measures which continues to be a good resource for the industry today.[32]

Table 16 *Provider Outcome Measure Ranking versus Measurement Execution*
[492 Responses]

Answer	Overall Rank	% of Participants that Measure
Return-to-Work Outcomes	1	48%
Patient Functional Outcomes	2	24%
Clinical Quality	3	28%
Frequency & Duration of Medical Treatment	4	44%
Coordination of Care	5	32%
Patient Satisfaction	6	27%
Total Cost of Care	7	39%
Administrative Efficiency	8	26%
Risk of Harm	9	7%
Litigation Rate	10	24%
	None / Not Applicable	32%

Linking provider quality and outcome measures to payment strategies

In today's healthcare system, physicians are increasingly faced with multiple quality measures and reporting demands required by different entities. More physician practices and hospitals include value-based payment factors in provider compensation formulas. Provider compensation is moving away from traditional fee-for-service reimbursement toward value-based payment models, where *value* is a function of both quality and cost. Patients are moving from traditionally passive receivers of care to informed health care consumers with expectations of joint decision making. Stakeholders, including payers, employers, patients and providers are demanding transparency. According to the Medical Group Management Association, payer incentive plans from the physician point of view have not been without problems. The lack of transparency regarding payer methodology has led to suspicions that plans have been one-sided in favor of the payer.[33]

This changing health care environment must evolve to include health care quality measures that are intrinsically linked to payment strategies. The evolution must include the value proposition for all stakeholders and must be transparent. If physicians don't know what they are being measured against and if payers don't consider both risk and reward strategies, as well as outcomes meaningful to consumers, the results will be fractional.

Study results indicate that organizations are more likely to link quality and outcome measures to *provider referrals (channeling)* and *removal from networks* for not meeting metrics. Higher performing organizations are more likely to include quality and outcome measures in *network contracts and/or provider Letters of Agreement (LOAs)*. Very few organizations use monetary rewards, such as a higher reimbursement rate or bonus, for meeting/exceeding quality outcome measures. This represents a significant opportunity for the industry to create a more balanced approach to incentivizing provider behavior (see Table 17).

Table 17 Survey Question: *Indicate if the selected provider quality/outcome measures impact your provider selection, contract arrangements, and/or payment strategies. Select all that apply.*

(Conditional question for those who selected one or more answers for the question: Does your organization utilize any of the following medical provider quality/outcome measures?)

[337 Responses]

Answer	Impacts referrals or patient channeling	Removal from the provider network / panel for not meeting quality / outcome measures	Provider quality / outcome measure included in network contract and/or provider Letter of Agreement (LOA)	Higher reimbursement rate or bonus for meeting / exceeding quality / outcome measures	Lower reimbursement rate for not meeting quality / outcome measures	None / Not Applicable
Return-to-Work Outcomes	29%	25%	21%	3%	2%	18%
Patient Functional Outcomes	15%	14%	9%	1%	2%	8%
Clinical Quality	18%	19%	13%	3%	1%	10%
Frequency & Duration of Medical Treatment	28%	24%	15%	4%	2%	16%
Coordination of Care	19%	17%	14%	3%	2%	11%
Patient Satisfaction	17%	13%	9%	1%	2%	10%
Total Cost of Care	20%	17%	14%	5%	3%	16%
Administrative Efficiency	17%	17%	12%	3%	1%	8%
Risk of Harm	4%	4%	2%	1%	1%	2%
Litigation Rate	11%	8%	6%	2%	1%	12%

Note: Participants were able to select more than one answer for this question

Utilizing value-based payment models

The 2015 focus group research produced strategies for transitioning to value-based payment models in workers' compensation.[34] The 2016 study examines *how* organizations are currently utilizing, or plan to utilize value-based payment models in the future.

Although the cost of health care has led claims organizations to rethink how care is delivered, the use of value-based payment models is still rarely used in workers' compensation. The study results show that only 13 percent have implemented value-based payment strategies (see Table 18). Of the organizations that report utilizing value-based strategies, higher performers are more likely to utilize bundled payment strategies (see Figure 16). Additionally, insurance carriers and self-insured employers are more likely to embrace them.

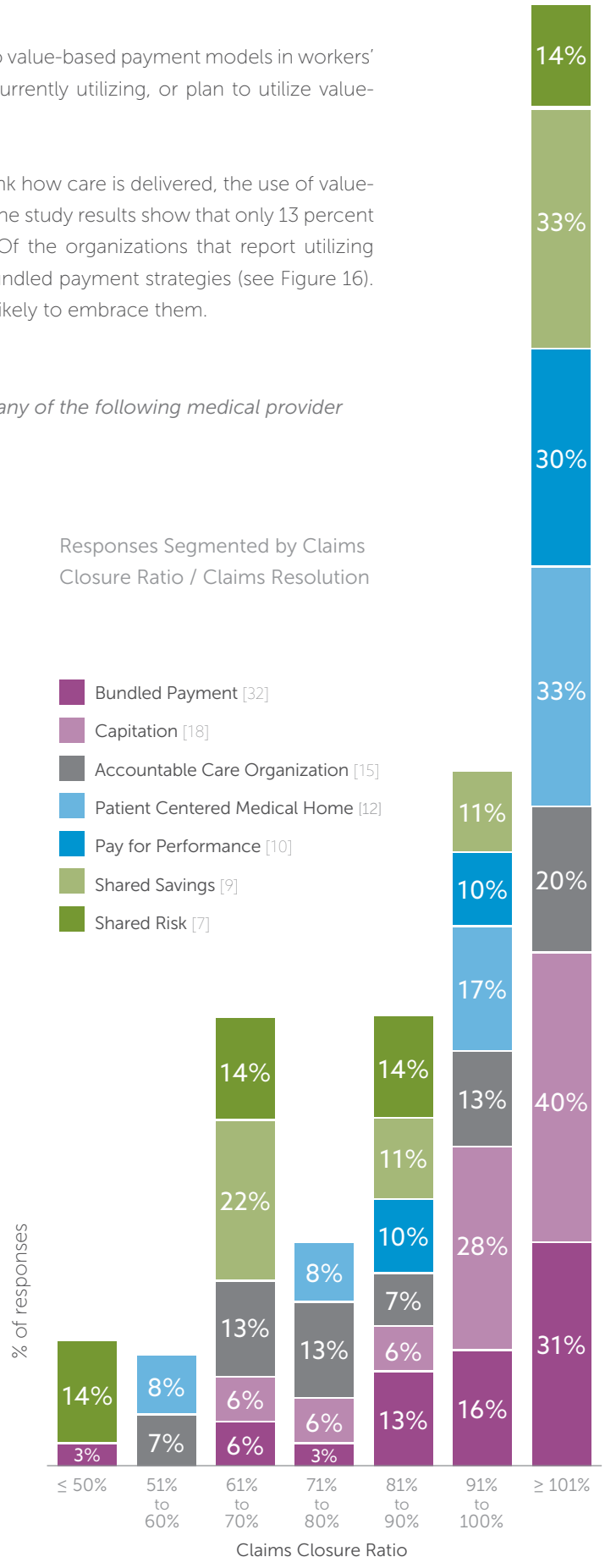
Table 18 & Figure 16 Survey Question: *Has your organization implemented any of the following medical provider value-based payment strategies?* [492 Responses]

Overview – All Responses

Answer	count	%
Bundled Payment Model A single negotiated payment for all services for a specified procedure or episode of care / condition such as knee replacements, spine surgeries, and shoulder arthroscopies	32	7%
Capitation Model Providers agree to a set payment per patient for specified medical services	18	4%
Accountable Care Organization (ACO) Model Care delivery model that ties provider reimbursement to improving overall quality, cost and patient satisfaction	15	3%
Patient Centered Medical Home (PCMH) Model Primary care / occupational medicine-driven initiatives to coordinate patients' care across referrals and the healthcare continuum	12	2%
Pay for Performance (P4P) Model Provider financial incentives or disincentives tied to measured performance	10	2%
Shared Savings Model Reward providers that reduce total healthcare spending for a population of patients or specified episodes of care below an expected level	9	2%
Shared Risk Model Provider performance-based incentives to share cost savings and disincentives to share the excess costs with the payer if medical spend exceeds an agreed budget	7	1%
None / Not Applicable	427	87%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Claims Closure Ratio / Claims Resolution



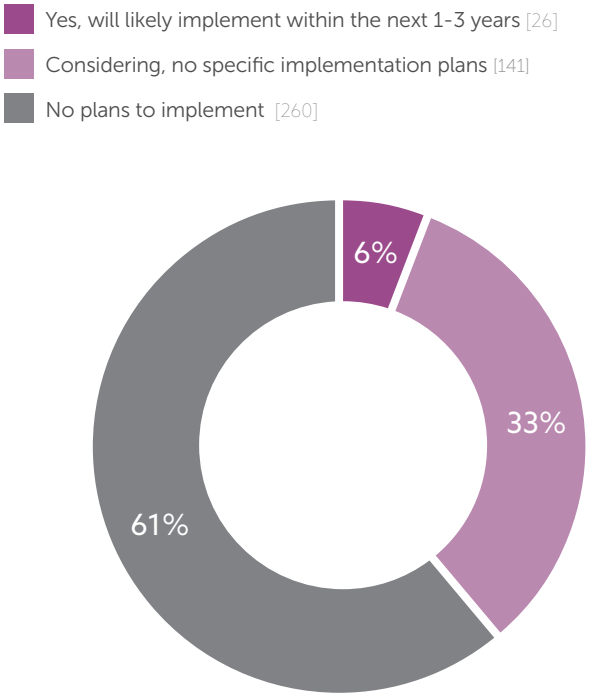
The study also assessed the industry's *future* plans to implement medical provider value-based payment strategies. Results reveal that, overall, claims organizations are in the early stages of adoption with six percent reporting likely implementation within the next one to three years, and 33 percent indicating they are considering implementation (see Figure 17). Higher performing organizations demonstrate greater interest in future implementation (see Figure 18), as do insurance carriers and self-insured employers.

Figures 17 & 18 Survey Question: *Does your organization have future plans to implement medical provider value-based payment strategies?*

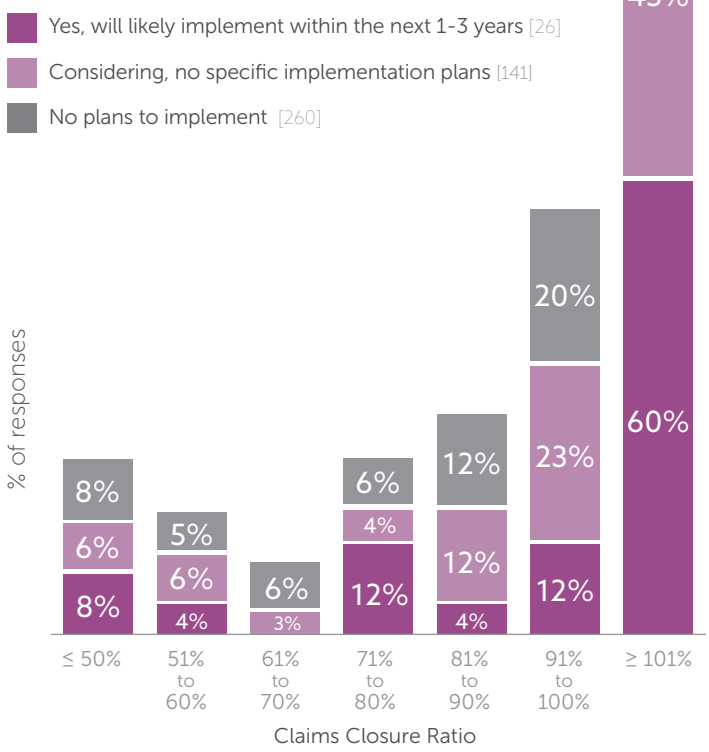
(Conditional question for those who answered "None/Not Applicable" in Table 18)

[427 Responses]

Overview – All Responses



Responses Segmented by Claims Closure Ratio / Claims Resolution



Utilizing pharmacy utilization and management measures to gauge provider quality and outcomes

Prescription drug spending represents a disproportionately high percentage of workers' compensation costs. Research shows that prescription drugs account for one of every six medical dollars paid.[35] Increased costs are attributable to drug overutilization (particularly opioids), fraud, physician dispensing, compound medications, and inconsistent national oversight of providers resulting in duplicate therapies.

NCCI reports that prescription drugs make up 17 percent of total workers' compensation medical costs. Costs are even more significant for older claims, with prescriptions averaging approximately 45 to 50 percent of annual medical costs for claims older than 10 years.[36]

The 2015 study focus group research produced strategies for reducing pharmacy spend, including point-of-sale and clinical management oversight with intensive case management for opioid utilization.[37] The 2016 study expands the focus to include *how* organizations link pharmacy management and utilization metrics to measure provider outcomes, and *if* the metrics impact provider selection and contract strategies.

Overall, results indicate that organizations utilize pharmacy utilization and management metrics more than other provider measures to gauge quality and outcomes. The top three metrics used by over 50 percent of participants include: *formulary compliance, opioid prescribing patterns,* and *utilization review decisions* (see Table 19). Additionally, higher performing organizations are more likely to included provider performance measures such as: *prescribing off-label, non-FDA approved medications, incorporating use of Morphine Equivalent Dose (MED) greater than 80 milligrams daily dosage, provider dispensing*, and *use of compounds* (see Table 20).

Tables 19 & 20 Survey Question: *Does your organization use any of the following pharmacy utilization and management metrics as a measure of provider quality/outcomes? Select all that apply.*
[492 Responses]

Overview – All Responses

Answer	count	%
Formulary compliance / use of generic equivalents	272	55%
Opioid prescribing patterns	268	54%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	260	53%
Provider dispensing	214	43%
Use of compounds	202	41%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	159	32%
Use of opioid and benzodiazepine combination	146	30%
Prescribing of off-label, non-FDA approved pharmaceuticals	140	28%
Provider's assessment of risk and harm of extended opioid use	133	27%
None / Not Applicable	133	27%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Claims Closure Ratio / Claims Resolution

		Claims Closure Ratio						
Answer	count	≤ 50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	≥ 101%
Formulary compliance / use of generic equivalents	272	5%	4%	5%	5%	10%	22%	31%
Opioid prescribing patterns	268	4%	4%	4%	4%	11%	23%	31%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	260	6%	4%	6%	5%	11%	20%	28%
Provider dispensing	214	4%	2%	6%	5%	11%	22%	34%
Use of compounds	202	4%	3%	3%	4%	11%	23%	33%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	159	6%	2%	3%	4%	9%	25%	34%
Use of opioid and benzodiazepine combination	146	5%	2%	4%	5%	10%	20%	36%
Prescribing of off-label, non-FDA approved pharmaceuticals	140	4%	1%	4%	6%	9%	21%	38%
Provider's assessment of risk and harm of extended opioid use	133	7%	4%	3%	5%	13%	17%	32%
None / Not Applicable	133	11%	6%	3%	8%	14%	14%	17%

Linking pharmacy utilization and management measures to provider payment strategies

With the industry's intense focus on opioid prescribing misuse and abuse, it's no surprise that the survey results reflect that *opioid prescribing metrics* are more likely to be included in contract and payment strategies. The results reflect that participants are focused on opioid prescribing patterns as a measure of provider quality and are more likely to remove providers from networks for not meeting opioid prescribing quality and outcome measures.

Study results also indicate that, overall, organizations link pharmacy utilization quality and outcome measures most often to *provider referrals (channeling)* and *removal from networks for not meeting metrics*. Higher performing organizations are more likely to include these measures in *network contracts and/or provider Letters of Agreement (LOAs)*. Very few organizations use monetary rewards, such as a higher reimbursement rate or bonus, for meeting/exceeding pharmacy quality outcome measures (see Table 21). To effectively impact outcomes, contract strategies should include both risk and reward incentives.

Organizations are focused on opioid prescribing patterns as a measure of provider quality and are more likely to remove providers from networks for not meeting opioid prescribing quality and outcome measures.

Table 21 Survey Question: *Indicate if the selected pharmacy utilization and management metrics used to measure provider quality/outcomes impact your provider selection, contract arrangements, and/or payment strategies. Select all that apply.*
(Conditional question for those who selected one or more answers in Table 19)
[359 Responses]

Answer	Impacts referrals or patient channeling	Removal from the provider network / panel for not meeting quality / outcome measures	Provider quality / outcome measure included in network contract and/or provider Letter of Agreement (LOA)	Higher reimbursement rate or bonus for meeting / exceeding quality / outcome measures	Lower reimbursement rate for not meeting quality / outcome measures	None / Not Applicable
Formulary compliance / use of generic equivalents	23%	18%	24%	2%	3%	25%
Opioid prescribing patterns	28%	28%	18%	3%	2%	19%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	23%	21%	22%	2%	3%	21%
Provider dispensing	24%	22%	14%	1%	3%	14%
Use of compounds	19%	18%	14%	2%	2%	16%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	16%	16%	11%	1%	2%	12%
Use of opioid and benzodiazepine combination	16%	15%	11%	1%	1%	10%
Prescribing of off-label, non-FDA approved pharmaceuticals	15%	13%	10%	2%	1%	11%
Provider's assessment of risk and harm of extended opioid use	12%	12%	11%	1%	1%	11%

Note: Participants were able to select more than one answer for this question

Appendix E Index – Medical Performance Management

For more information on all survey question results and additional benchmark analyses related this focus area, please refer to the below tables and figures in **Appendix E**.

E 1: Ranking of Provider Quality / Outcome Measures Most Critical to Claim Outcomes
Rank Detail

E 2: Use of Provider Quality / Outcome Measures
Segmented by Organization Type

E 2.1: Use of Provider Quality / Outcome Measures to Impact Provider Selection, Contracts, or Payment Strategies

E 3: Use of Pharmacy Utilization and Management Metrics as a Measure of Provider Quality / Outcomes
Segmented by Organization Type
Segmented by Claims Closure Ratio

E 3.1: Use of Pharmacy Utilization and Management Metrics to Impact Provider Selection, Contracts, or Payment Strategies

E 4: Use of Provider Value-Based Payment Strategies
Segmented by Organization Type
Segmented by Claims Closure Ratio

E 4.1: Future Plans to Use of Provider Value-Based Payment Strategies
Segmented by Organization Type
Segmented by Claims Closure Ratio

[29] Quality of Health Care Delivered to Adults in the United States. New England Journal of Medicine. Available: http://www.nejm.org/doi/full/10.1056/NEJM200311063491916

[30] CMS Clinical Quality Measures Basics. Available: https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms/clinicalqualitymeasures.html

[31] Impact of Clinical Quality on Employee Choice of Providers for Workers' Compensation-Related Medical Care. Journal of Occupational & Environmental Medicine. Available: https://www.ncbi.nlm.nih.gov/pubmed/25741612

[32] 2015 Workers' Compensation Benchmarking Study; pages, 7, 8, 20. Available: https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

[33] Strategies for Value-Based Physician Compensation, Jeffrey B. Milburn and Mary Maurar. 2013 Medical Group Management Association. Available: http://www.mgma.com/Libraries/Assets/Store/Books/8652-excerpt.pdf

[34] 2015 Workers' Compensation Benchmarking Study; page 18. Available: https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

[35] Prescription Drug Management in Workers Compensation. Joseph Paduda. Available: https://www.ncci.com/Articles/Documents/II_IR2016-Paduda.pdf

[36] NCCI Workers Compensation and Prescription Drugs: 2016 Update. Available: https://www.ncci.com/Articles/Documents/II_AIS-2016-Workers-Comp-prescrip-2016-update.pdf

[37] 2015 Workers' Compensation Benchmarking Study; page 23. Available: https://www.risingms.com/wp-content/uploads/2016/01/2015WorkCompBenchmarkStudy_Rising.pdf

Conclusion

Since its inception, the Workers' Compensation Benchmarking Study has conducted research for, *and with*, claims leaders to provide organizations with a means for evaluating strategic aspects of their claim operations alongside industry peers.

From its initial identification of widespread claims challenges/opportunities in **2013** and **2014**, to the **2015** Study's "solutions roadmap" for future advancement, the annual Report continually reveals the cumulative intelligence of the workers' compensation claims community.

The 2016 study probes deeper into *how* and *to what extent* claims organizations have implemented key strategies highlighted in the 2015 focus group research. This year's results provide unprecedented data differentiating best practices of higher performing claims organizations from industry peers.

The 2016 Report is the fourth Workers' Compensation Benchmarking Study directed and published by Rising Medical Solutions. To learn more or to access the study's online Resource Center, visit: www.risingms.com.

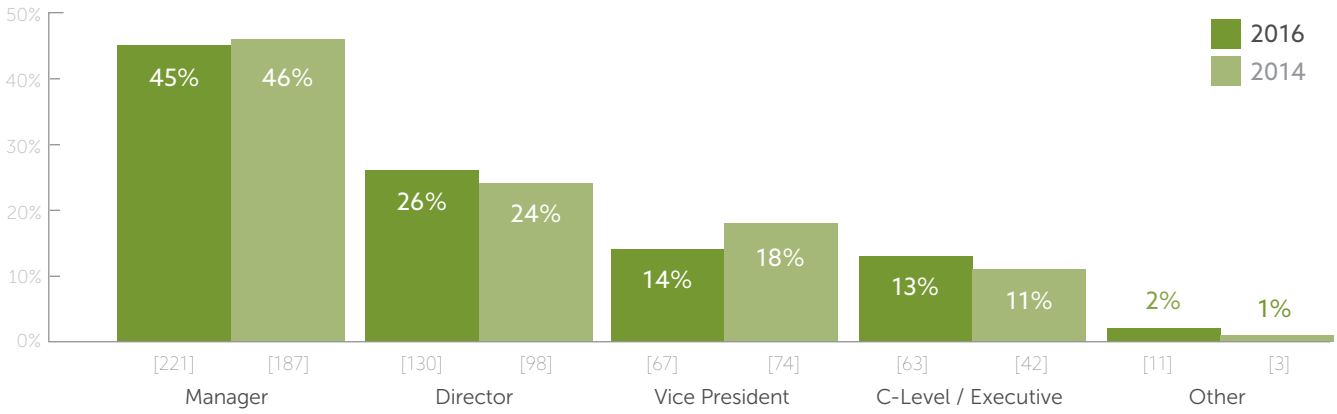
Contact

We welcome your reaction to the 2016 Workers' Compensation Benchmarking Study. Please let us know if you find the study useful, have questions about the research, or would like to participate in future studies by contacting Rachel Fikes, VP & Study Program Director, at Rising Medical Solutions: wcbenchmark@risingms.com.

Appendix A - Survey Participant Demographics

1 Role / Level of Responsibility:

[492 responses]



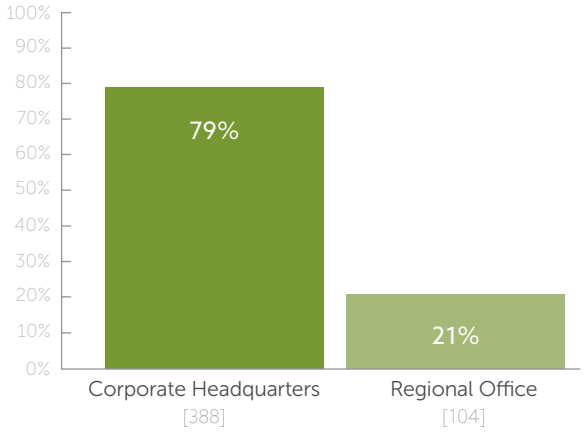
2 Organization Type:

[492 responses]

	2016		2014	
Answer	count	%	count	%
Self-Insured Employer	131	27%	95	24%
Insurance Company	108	22%	92	23%
Third Party Administrator	78	16%	78	19%
Insured Employer	73	15%	63	16%
Governmental Entity	37	8%	29	7%
Other	26	5%	14	3%
Risk Pool	21	4%	22	5%
State Fund / Mutual Fund	12	2%	7	2%
Reinsurance or Excess Insurance Company	6	1%	4	1%

3 Location:

[492 responses]



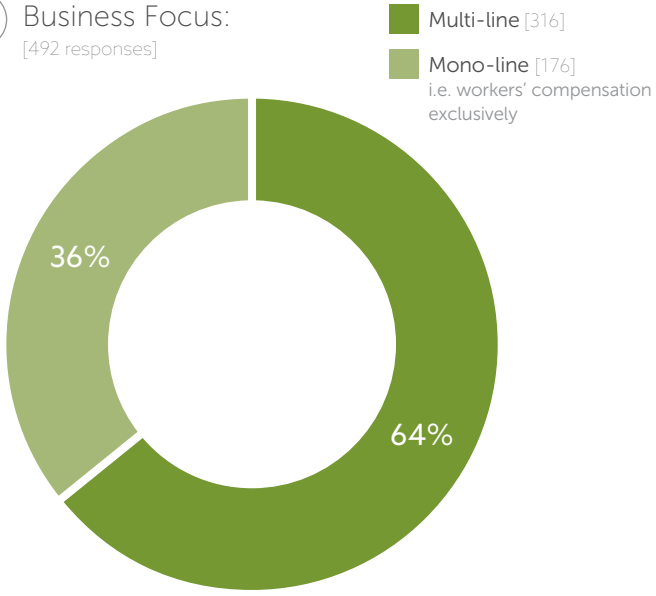
4 My organization's workers' compensation claims are predominately managed by a(n):

[492 responses]

Answer	count	%
Third Party Administrator	219	45%
Insurance Company / State Fund / Mutual Fund	179	36%
Self-Insured / Self-Administered	94	19%

5 Business Focus:

[492 responses]



6 Geographic Focus:

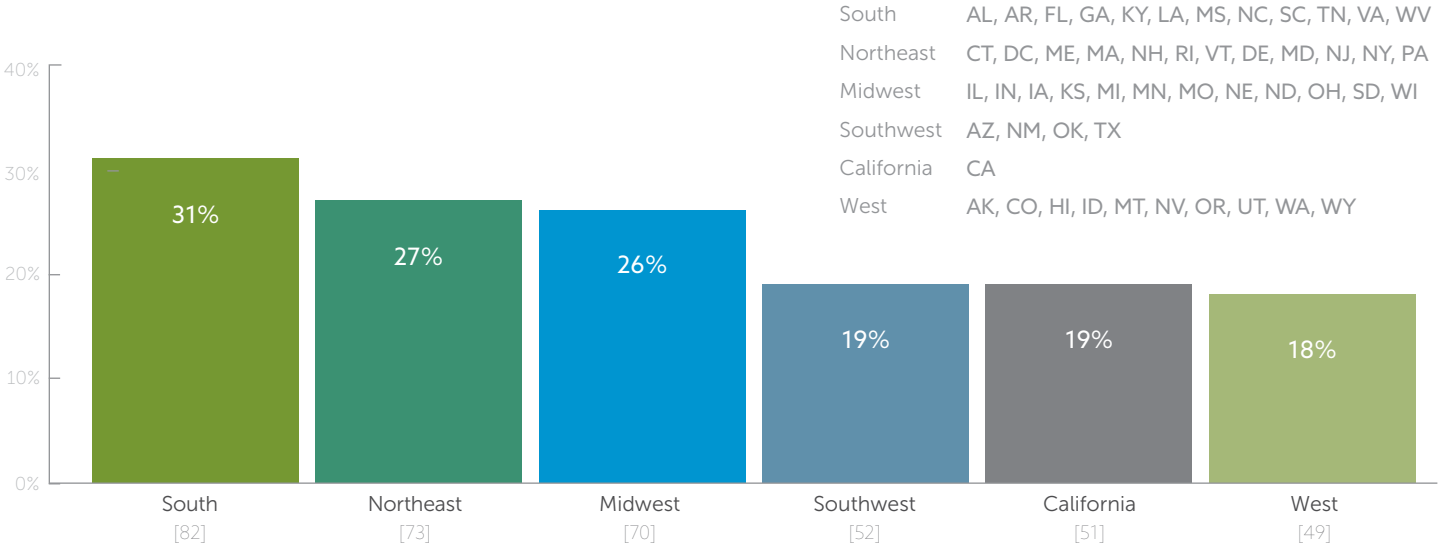
[492 responses]

Answer	count	%
Regional in Scope	267	54%
National in Scope	225	46%

Conditional Question for those who selected "Regional in Scope" in Question 6

6.1 Indicate the Regions where your company currently manages workers' compensation claims. Select all that apply.

[267 responses]



South	AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV
Northeast	CT, DC, ME, MA, NH, RI, VT, DE, MD, NJ, NY, PA
Midwest	IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI
Southwest	AZ, NM, OK, TX
California	CA
West	AK, CO, HI, ID, MT, NV, OR, UT, WA, WY

Note: Participants were able to select more than one answer for this question

7 Organizational Size - Total Annual Claims Dollars Paid:

(if unknown, select "Unknown")
[492 responses]

Overview - All Responses

Answer	count	%
< $25 Million	169	34%
>$25 Million to $100 Million	74	15%
> $100 Million to $350 Million	61	13%
> $350 Million to $750 Million	33	7%
> $750 Million	50	10%
Unknown	105	21%

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
< $25 Million	9%	-	13%	51%	53%	48%	17%	68%	23%
>$25 Million to $100 Million	16%	-	17%	17%	7%	33%	17%	16%	8%
> $100 Million to $350 Million	22%	33%	13%	9%	12%	14%	8%	-	-
> $350 Million to $750 Million	15%	-	5%	5%	4%	5%	8%	-	4%
> $750 Million	10%	-	14%	9%	10%	-	33%	5%	15%
Unknown	28%	67%	38%	9%	14%	-	17%	11%	50%

8 Organization Size - Total Annual Premium:

(if not applicable or unknown, select "Not Applicable" or "Unknown")
[492 responses]

Overview - All Responses

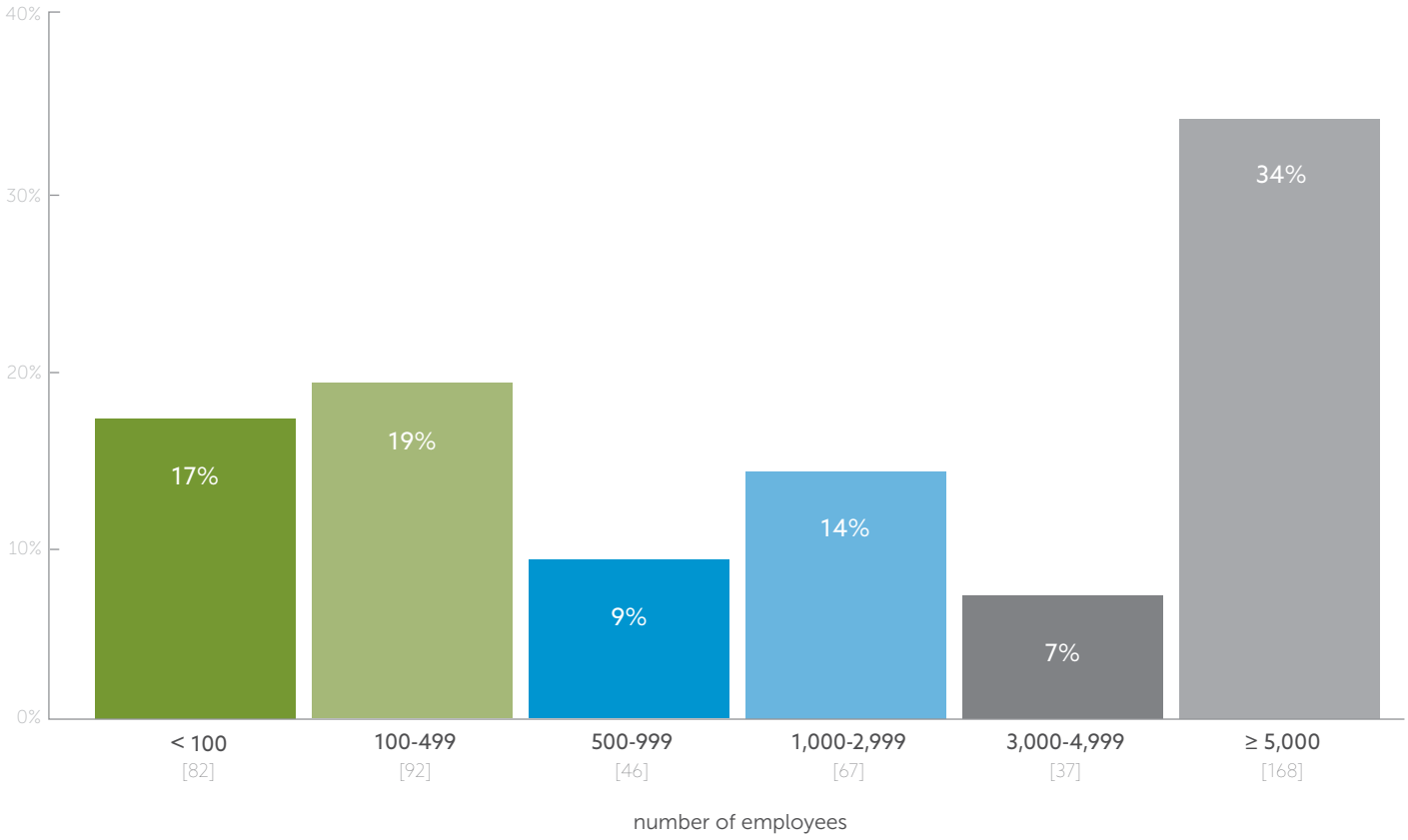
Answer	count	%
< $25 Million	118	24%
>$25 Million to $100 Million	41	8%
> $100 Million to $350 Million	42	9%
> $350 Million to $750 Million	19	4%
> $750 Million	63	13%
Unknown	95	19%
Not Applicable	114	23%

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
< $25 Million	5%	-	8%	33%	53%	24%	8%	40%	15%
>$25 Million to $100 Million	13%	-	4%	5%	8%	38%	8%	3%	4%
> $100 Million to $350 Million	21%	17%	4%	2%	6%	19%	25%	-	4%
> $350 Million to $750 Million	8%	-	1%	3%	4%	-	8%	3%	-
> $750 Million	33%	33%	5%	7%	6%	-	34%	-	15%
Unknown	18%	50%	24%	19%	22%	14%	-	3%	39%
Not Applicable	2%	-	54%	31%	1%	5%	17%	51%	23%

9 Organization Size - Total Employee Headcount:

[492 responses]



10 What is your organization's average Lost Time caseload per Lost Time Claims Examiner?

(if unknown, select "Unknown")
[492 responses]

Overview - All Responses

Answer (# of cases)	count	%
< 80	96	20%
80 to 100	63	13%
100 to 125	96	20%
125 to 150	115	23%
150 to 175	42	8%
175 to 200	7	1%
200 to 225	3	1%
225 to 250	1	< 1%
250 to 275	1	< 1%
275 to 300	2	< 1%
> 300	3	1%
Unknown	63	13%

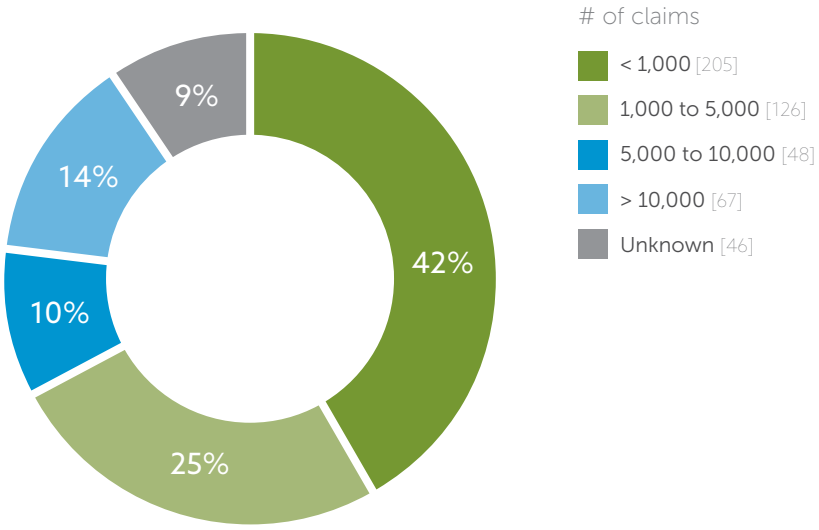
Responses Segmented by Organization Type

Answer (# of cases)	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
< 80	12%	-	4%	28%	38%	5%	8%	24%	15%
80 to 100	22%	-	9%	14%	6%	14%	17%	11%	-
100 to 125	31%	-	10%	18%	18%	48%	17%	16%	4%
125 to 150	20%	-	49%	22%	11%	14%	8%	19%	27%
150 to 175	6%	-	18%	7%	5%	5%	17%	11%	4%
175 to 200	3%	-	1%	-	-	9%	-	-	4%
200 to 225	-	17%	-	-	1%	-	-	3%	-
225 to 250	-	-	-	1%	-	-	-	-	-
250 to 275	-	-	1%	-	-	-	-	-	-
275 to 300	-	-	-	1%	-	-	8%	-	-
> 300	-	17%	-	1%	-	-	8%	-	-
Unknown	6%	66%	8%	8%	21%	5%	17%	16%	46%

11 What is your organization's current total number of all open workers' compensation claims? Include all claim types (i.e. medical only, lost time, permanent disability, future medical).

(if unknown, select "Unknown")

[492 responses]



12 Tail Claims - What percentage of your claims inventory has been open for more than five years?

(if unknown or not applicable, select "Unknown/Not Applicable")

[492 responses]

Answer	count	%
1 to 5%	141	29%
6 to 10%	74	15%
11 to 15%	51	10%
16 to 20%	35	7%
21 to 25%	21	4%
26 to 30%	18	4%
31 to 35%	8	2%
36 to 40%	16	3%
41 to 45%	8	2%
46 to 50%	9	2%
≥ 51%	16	3%
Unknown / Not Applicable	95	19%

13 Claims Resolution - What is your overall claims closure ratio for calendar year 2015? (Claims closure ratio is defined as the number of claims closed divided by the number of claims received during a calendar year period.)
(if unknown, select "Unknown")
[492 responses]

Overview - All Responses

Answer	count	%
≤ 50%	34	7%
51 to 60%	25	5%
61 to 70%	24	5%
71 to 80%	26	5%
81 to 90%	56	11%
91 to 100%	97	20%
101 to 110%	107	22%
111 to 120%	11	2%
121 to 130%	4	1%
131 to 140%	-	-
141 to 150%	-	-
≥ 151%	3	1%
Unknown	105	21%

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
≤ 50%	1%	17%	4%	8%	14%	-	25%	8%	12%
51 to 60%	2%	-	2%	9%	6%	5%	-	8%	3%
61 to 70%	4%	-	1%	8%	7%	-	-	5%	3%
71 to 80%	3%	-	3%	8%	7%	-	-	8%	8%
81 to 90%	7%	-	9%	14%	16%	14%	9%	14%	8%
91 to 100%	27%	33%	29%	13%	19%	24%	8%	11%	8%
101 to 110%	29%	-	33%	20%	11%	43%	17%	11%	-
111 to 120%	4%	-	3%	2%	1%	-	-	3%	-
121 to 130%	1%	-	3%	1%	-	-	-	-	-
131 to 140%	-	-	-	-	-	-	-	-	-
141 to 150%	-	-	-	-	-	-	-	-	-
≥ 151%	1%	-	-	1%	-	-	8%	-	-
Unknown	21%	50%	13%	16%	19%	14%	33%	32%	58%

Appendix B - Prioritizing Core Competencies

1 How do you define a good claims outcome?

Please rank in the order of importance, with 1 being the "most important" and 5 being of "lower importance."

[492 responses]

Overview - All Responses

Answer	Overall Rank	Mean
Employee return to the same or better pre-injury functional capabilities	1	2.14
Return-to-Work (RTW) at or below industry benchmarks	2	2.51
Claims closure / resolution at or below expected average benchmark	3	3.00
Maximum Medical Improvement (MMI) achieved at or below Evidence-Based Medicine (EBM) Guidelines expectations	4	3.32
Lack of litigation	5	4.03

Rank Distribution by Response Count

		Ranking				
		Most Important				Lower Importance
Answer	Mean	1	2	3	4	5
Employee return to the same or better pre-injury functional capabilities	2.14	230	91	80	52	39
Return-to-Work (RTW) at or below industry benchmarks	2.51	82	204	111	65	30
Claims closure / resolution at or below expected average benchmark	3.00	122	58	99	125	88
Maximum Medical Improvement (MMI) achieved at or below Evidence-Based Medicine (EBM) Guidelines expectations	3.32	35	94	126	153	84
Lack of litigation	4.03	23	45	76	97	251

2 What are the greatest obstacles to achieving desired claim outcomes?

Please rank in the order of the greatest impediment, with 1 being the "greatest obstacle" and 10 being the "lower obstacle."
[492 responses]

Overview - All Responses

Answer	Overall Rank	Mean
Psychosocial / co-morbidities	1	4.08
Lack of RTW option / accommodation	2	4.64
Litigation	3	4.79
Employee / employer relationship	4	5.04
Late injury / claim reporting	5	5.20
Proactive / timely communication with stakeholders (i.e. employee, employer, providers)	6	5.57
Legalese statutory requirements / communication	7	5.63
Employee doesn't understand the workers' comp system	8	5.81
Jurisdiction / geographic differences	9	6.74
Access to care	10	7.50

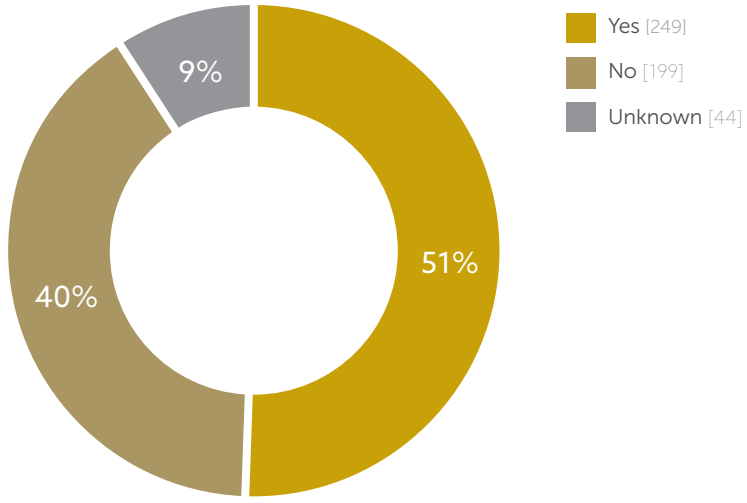
Rank Distribution by Response Count

		Ranking									
		Greatest Obstacle									Lower Obstacle
Answer	Mean	1	2	3	4	5	6	7	8	9	10
Psychosocia l / co-morbidities	4.08	107	64	65	65	44	47	36	27	24	13
Lack of RTW option / accommodation	4.64	69	71	68	61	48	38	32	44	29	32
Litigation	4.79	76	60	52	47	49	57	57	35	38	21
Employee / employer relationship	5.04	51	53	59	64	57	49	41	58	39	21
Late injury / claim reporting	5.20	53	55	54	50	50	58	48	49	44	31
Proactive / timely communication with stakeholders (i.e. employee, employer, providers)	5.57	35	48	49	51	53	59	67	43	45	42
Legalese statutory requirements / communication	5.63	39	40	49	42	64	58	54	61	47	38
Employee doesn't understand the workers' comp system	5.81	26	39	43	59	58	53	64	61	44	45
Jurisdiction / geographic differences	6.74	29	38	33	26	32	40	48	59	71	116
Access to care	7.50	7	24	20	27	37	33	45	55	111	133

3 Does your organization link any claim performance measures (i.e. KPIs) to desired outcomes?

[492 responses]

Overview - All Responses



Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤ 50%	51% to 60%	61 % to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥ 151%	Unknown
Yes	249	6%	5%	2%	5%	12%	23%	28%	3%	1%	-	-	-	15%
No	199	9%	5%	9%	6%	12%	18%	17%	2%	1%	-	-	1%	20%
Unknown	44	7%	5%	5%	5%	7%	9%	7%	-	-	-	-	2%	53%

Conditional Question for those who answered "No" in Question 3

3.1 What are the major obstacles to linking claims performance measures to desired outcomes? Select all that apply.

[199 responses]

Overview - All Responses

Answer	count	%
Not a business priority	85	43%
Existing policies / procedures and business processes	80	40%
Incentives are not tied to the desired outcomes	70	35%
Information technology capabilities	66	33%
Lack of consistency in data definitions	61	31%
Disconnect between core competencies and key performance metrics	57	29%
Other	12	6%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	31	2	27	53	40	11	5	19	11
Not a business priority	39%	-	37%	42%	50%	36%	40%	58%	36%
Existing policies / procedures and business processes	39%	50%	33%	30%	43%	45%	40%	68%	45%
Incentives are not tied to the desired outcomes	32%	50%	33%	32%	45%	27%	20%	37%	36%
Information technology capabilities	48%	100%	44%	28%	18%	45%	40%	16%	45%
Lack of consistency in data definitions	35%	100%	44%	23%	28%	55%	-	11%	45%
Disconnect between core competencies and key performance metrics	39%	100%	33%	25%	18%	27%	20%	26%	45%
Other	3%	-	4%	11%	8%	-	-	5%	-

Note: Participants were able to select more than one answer for this question

4 Does your organization utilize claims decision support tools to augment strategic claims decisions / management? Using the drop down list, indicate if / how your organization is utilizing any of the following claims decision support tools.
(if no, select "No/Not Applicable")
[492 responses]

Overview - All Responses

Answer	Use at point of claims intake / initial setup	Use at specific intervals	Use throughout the claim lifecycle	Use manually, based on claim staff	Other	No / Not Applicable
Workflow automation	15%	14%	28%	8%	1%	34%
Business process management	6%	12%	32%	9%	3%	38%
Push technology (information pushed to the injured worker / key stakeholders)	10%	14%	17%	11%	2%	46%
Predictive modeling (process used to create a statistical model of future probability of claim development)	9%	14%	18%	9%	3%	47%
Prescriptive analytics (analytics used to determine the best solutions / activities to achieve outcomes among various choices, given the known risk factors)	4%	14%	16%	12%	1%	53%
Auto adjudication	8%	8%	6%	5%	2%	71%

Appendix C - Talent Development & Retention

1 Has your organization considered implementing / adopting an advocacy-based claims model?

[492 responses]

Overview - All Responses

Answer	count	%
Yes, already implemented	154	31%
Yes, will likely implement within the next 1-3 years	40	8%
Considering, no specific implementation plans	111	23%
No, not considering	118	24%
Unknown	69	14%

Survey participants were provided with the following description of an **advocacy-based claims model** prior to answering this question:

"An area of interest to the workers' compensation industry is an 'advocacy-based claims model,' described as an employee-centric, customer service claims model that focuses on employee engagement during the injury recovery process; removes adversarial obstacles; makes access to benefits simple; builds trust; and holds the organization accountable to metrics that go beyond cost containment."

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Yes, already implemented	24%	17%	30%	44%	33%	24%	17%	19%	35%
Yes, will likely implement within the next 1-3 years	8%	-	13%	8%	5%	5%	-	14%	-
Considering, no specific implementation plans	27%	17%	24%	21%	15%	28%	33%	24%	19%
No, not considering	25%	33%	14%	21%	36%	19%	33%	27%	23%
Unknown	16%	33%	19%	6%	11%	24%	17%	16%	23%

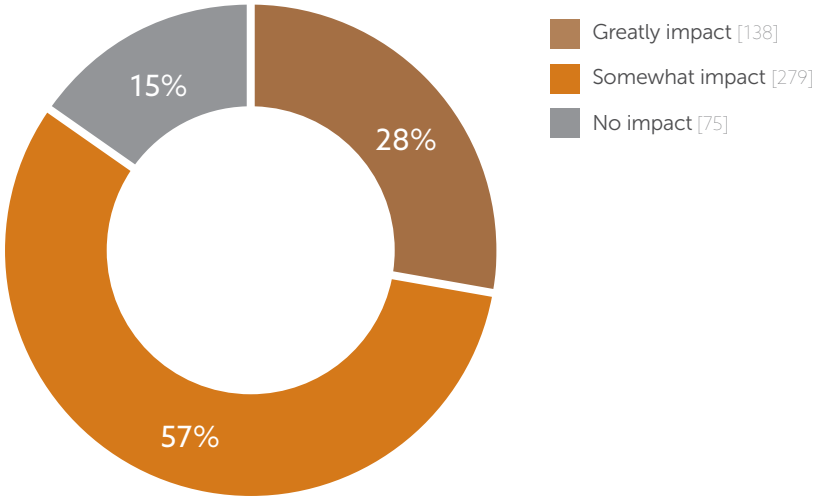
Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Yes, already implemented	154	7%	6%	5%	10%	10%	19%	20%	5%	1%	-	-	1%	16%
Yes, will likely implement within the next 1-3 years	40	8%	5%	-	8%	8%	23%	30%	3%	-	-	-	-	15%
Considering, no specific implementation plans	111	5%	5%	6%	2%	15%	19%	27%	2%	3%	-	-	-	16%
No, not considering	118	8%	4%	8%	3%	15%	19%	17%	1%	-	-	-	1%	24%
Unknown	69	6%	6%	1%	3%	4%	23%	20%	-	-	-	-	-	37%

2 In your opinion, will an advocacy-based claims model impact claims talent development and retention strategies?

[492 responses]

Overview - All Responses



Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Greatly impact	28%	50%	19%	34%	27%	14%	8%	19%	54%
Somewhat impact	60%	33%	68%	53%	41%	72%	92%	65%	38%
No impact	12%	17%	13%	13%	32%	14%	-	16%	8%

Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Un-known
Greatly impact	138	9%	6%	2%	9%	9%	17%	21%	2%	1%	-	-	1%	23%
Somewhat impact	279	6%	5%	5%	4%	10%	21%	23%	3%	1%	-	-	-	22%
No impact	75	8%	5%	8%	5%	19%	21%	17%	1%	-	-	-	1%	15%

3 Considering an advocacy-based claims model, how could it most impact claims talent development and retention strategies?

Please rank in the order of greatest potential impact, with 1 being the "greatest impact" and 5 being the "lower impact."

[492 responses]

Overview - All Responses

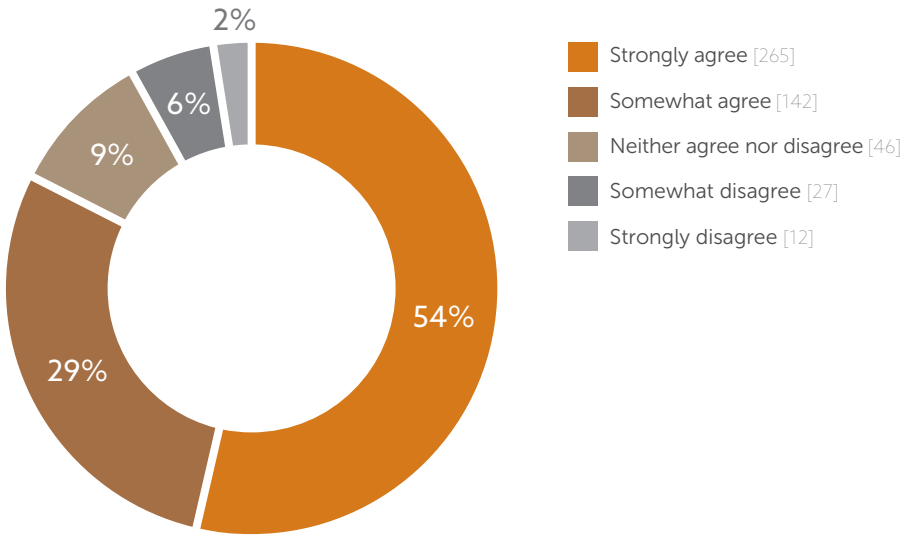
Answer	Overall Rank	Mean
Employee engagement	1	2.39
Transform the image of the claims profession, from "adjuster" to "advocate"	2	2.85
Connect claims talent strategy to organizational mission / customer service model and employee service model	3	2.87
Improve organizational reputation / social image	4	3.41
Elevate the social factors, meaningful work of claims professionals	5	3.48

Rank Distribution by Response Count

		Ranking				
		Greatest Impact				Lower Impact
Answer	Mean	1	2	3	4	5
Employee engagement	2.39	184	100	84	80	44
Transform the image of the claims profession, from "adjuster" to "advocate"	2.85	109	114	98	86	85
Connect claims talent strategy to organizational mission / customer service model and employee service model	2.87	108	109	96	96	83
Improve organizational reputation / social image	3.41	55	86	99	106	146
Elevate the social factors, meaningful work of claims professionals	3.48	36	83	115	124	134

4 Claims professionals (including those in an outsourced model) are appropriately valued as key to your organization's operational and financial success.

[492 responses]



5 Does your organization include any of the following skills and abilities testing / training for frontline claims professionals? Select all that apply.

(if no, select "None/Not Applicable")
[492 responses]

Overview - All Responses

Answer	count	%
Customer service skills	282	57%
Communication skills	265	54%
Critical thinking	214	43%
Active listening skills	194	39%
Empathy	143	29%
Aptitude testing *	110	22%
None / Not Applicable	170	35%

Note: Participants were able to select more than one answer for this question

* test designed to determine a person's ability in a particular skill or field of knowledge

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Customer service skills	69%	33%	71%	54%	30%	76%	67%	59%	46%
Communication skills	70%	67%	65%	45%	27%	76%	50%	59%	42%
Critical thinking	63%	67%	41%	40%	23%	43%	50%	41%	38%
Active listening skills	50%	50%	45%	31%	27%	52%	58%	43%	31%
Empathy	43%	-	28%	27%	12%	43%	33%	30%	23%
Aptitude testing	31%	50%	35%	11%	11%	29%	25%	19%	27%
None / Not Applicable	19%	33%	19%	42%	66%	19%	17%	35%	42%

Note: Participants were able to select more than one answer for this question

6 What knowledge transfer initiatives has your organization implemented? Select all that apply.

(if none, select "None/Not Applicable")
[492 responses]

Overview - All Responses

Answer	count	%
Formal learning / training / development program	247	50%
Identify positions / employees with specific experience and knowledge that others do not have	226	46%
Document knowledge that can be transferred through processes, procedures, and/or written documentation	217	44%
Develop formal mentoring programs	153	31%
Formalize content management repositories	119	24%
Utilize retirees and/or senior level claims staff as trainers / coaches	95	19%
Other	10	2%
Unknown	29	6%
None / Not Applicable	114	23%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Formal learning / training / development program	68%	67%	68%	42%	27%	57%	42%	43%	35%
Identify positions / employees with specific experience and knowledge that others do not have	65%	50%	60%	37%	25%	52%	50%	35%	38%
Document knowledge that can be transferred through processes, procedures, and/or written documentation	54%	67%	45%	42%	27%	57%	58%	35%	50%
Develop formal mentoring programs	51%	33%	37%	23%	14%	33%	50%	19%	27%
Formalize content management repositories	41%	67%	29%	18%	11%	19%	25%	11%	19%
Utilize retirees and/or senior level claims staff as trainers / coaches	29%	-	28%	15%	4%	29%	42%	14%	12%
Other	3%	-	1%	3%	-	-	17%	-	-
Unknown	1%	-	5%	8%	11%	5%	-	11%	4%
None / Not Applicable	10%	17%	12%	27%	48%	19%	8%	24%	31%

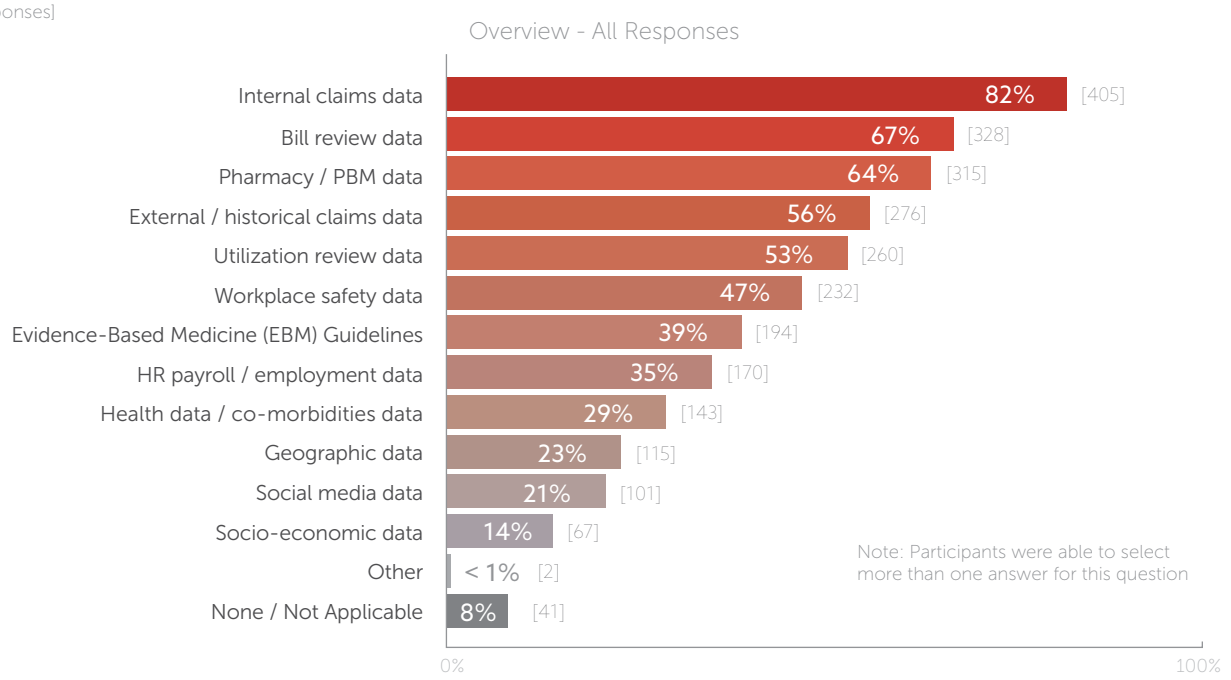
Note: Participants were able to select more than one answer for this question

Appendix D - Impact of Technology & Data

1 What data sources does your organization use to develop analytics to improve claim operations? Select all that apply.

(if none, select "None/Not Applicable")

[492 responses]



Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Internal claims data	91%	67%	83%	84%	73%	95%	100%	76%	58%
Bill review data	82%	33%	83%	63%	44%	76%	83%	51%	46%
Pharmacy / PBM data	82%	50%	78%	58%	40%	76%	75%	49%	54%
External / historical claims data	53%	33%	56%	65%	68%	43%	17%	41%	46%
Utilization review data	61%	33%	60%	52%	40%	48%	67%	49%	46%
Workplace safety data	35%	17%	26%	63%	59%	52%	33%	59%	42%
Evidence-Based Medicine (EBM) Guidelines	58%	33%	46%	36%	18%	33%	50%	24%	42%
HR payroll / employment data	18%	17%	24%	50%	53%	29%	17%	35%	23%
Health data / co-morbidities data	39%	33%	38%	24%	18%	43%	33%	11%	27%
Geographic data	34%	33%	23%	20%	23%	29%	17%	5%	19%
Social media data	28%	17%	18%	18%	21%	24%	17%	8%	27%
Socio-economic data	25%	17%	19%	7%	7%	24%	-	3%	15%
Other	2%	-	-	-	-	-	-	-	-
None / Not Applicable	1%	33%	8%	5%	16%	-	-	11%	35%

Note: Participants were able to select more than one answer for this question

[1 cont'd] What data sources does your organization use to develop analytics to improve claim operations? Select all that apply.

Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Internal claims data	405	7%	5%	4%	5%	12%	20%	24%	3%	1%	-	-	-	19%
Bill review data	328	5%	3%	4%	4%	12%	22%	27%	3%	1%	-	-	1%	18%
Pharmacy / PBM data	315	4%	4%	4%	5%	11%	23%	28%	2%	1%	-	-	1%	17%
External / historical claims data	276	7%	5%	4%	7%	13%	20%	22%	2%	1%	-	-	-	19%
Utilization review data	260	7%	4%	5%	5%	11%	21%	26%	2%	1%	-	-	-	18%
Workplace safety data	232	6%	6%	5%	7%	15%	17%	22%	2%	1%	-	-	-	19%
Evidence-Based Medicine (EBM) Guidelines	194	5%	3%	4%	7%	10%	19%	29%	2%	1%	-	-	1%	19%
HR payroll / employment data	170	5%	5%	5%	8%	15%	15%	26%	2%	1%	-	-	1%	17%
Health data / co-morbidities data	143	6%	1%	3%	8%	10%	21%	25%	3%	1%	-	-	1%	21%
Geographic data	115	5%	3%	3%	7%	11%	19%	28%	2%	1%	-	-	1%	20%
Social media data	101	5%	4%	6%	7%	14%	20%	24%	2%	2%	-	-	-	16%
Socio-economic data	67	4%	4%	1%	6%	7%	24%	25%	1%	1%	-	-	-	27%
Other	2	-	-	-	-	-	50%	50%	-	-	-	-	-	-
None/Not Applicable	41	7%	5%	5%	5%	10%	20%	7%	-	-	-	-	-	41%

Note: Participants were able to select more than one answer for this question

2 How does your organization use analytics to improve claim operations? Select all that apply.

(if none, select "None/Not Applicable")
[492 responses]

Overview - All Responses

Answer	count	%
Fraud detection	249	51%
Predict / detect claims severity	236	48%
Pre-loss and post-loss safety oversight and management	208	42%
Identify medical treatment / utilization outside of Evidence-Based Medicine (EBM) Guidelines	186	38%
Prescribe optimal activities / interventions in a claim to achieve desired outcomes	169	34%
Identify disability durations outside of EBM	153	31%
Predict / detect creeping catastrophic losses	148	30%
Predict / detect litigation	114	23%
Other	8	2%
None / Not Applicable	77	16%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Fraud detection	65%	33%	59%	44%	33%	43%	75%	46%	58%
Predict / detect claims severity	56%	33%	53%	41%	49%	48%	50%	32%	54%
Pre-loss and post-loss safety oversight and management	39%	17%	24%	51%	51%	67%	-	38%	54%
Identify medical treatment / utilization outside of Evidence-Based Medicine (EBM) Guidelines	53%	-	46%	37%	18%	33%	42%	24%	42%
Prescribe optimal activities / interventions in a claim to achieve desired outcomes	43%	33%	36%	31%	26%	29%	25%	35%	42%
Identify disability durations outside of EBM	42%	33%	44%	31%	11%	14%	33%	16%	38%
Predict / detect creeping catastrophic losses	37%	50%	32%	23%	26%	33%	33%	32%	31%
Predict / detect litigation	24%	-	27%	24%	21%	19%	8%	19%	31%
Other	-	-	3%	2%	-	14%	-	-	4%
None / Not Applicable	7%	33%	10%	16%	29%	5%	17%	27%	15%

Note: Participants were able to select more than one answer for this question

[2 cont'd] How does your organization use analytics to improve claim operations? Select all that apply.

Responses Segmented by Claims Closure Ratio / Claims Resolution

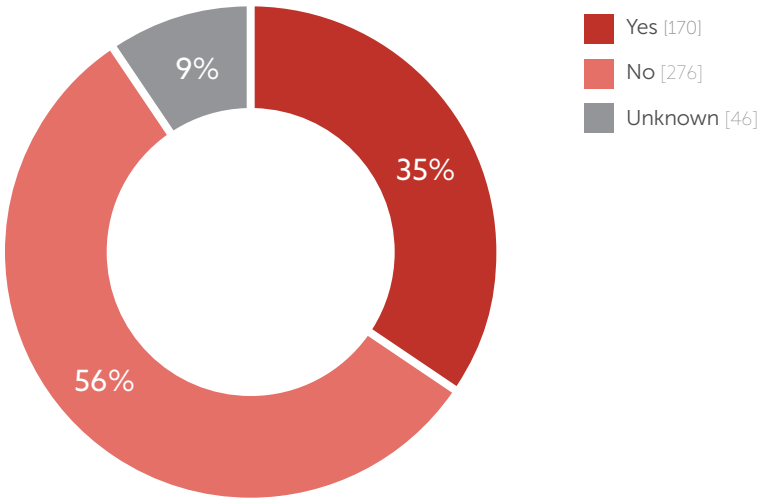
Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Fraud detection	249	5%	5%	6%	6%	11%	20%	22%	3%	1%	-	-	-	21%
Predict / detect claims severity	236	6%	3%	4%	7%	11%	21%	23%	3%	1%	-	-	1%	20%
Pre-loss and post-loss safety oversight and management	208	5%	4%	5%	7%	13%	23%	22%	2%	1%	-	-	-	18%
Identify medical treatment / utilization outside of Evidence-Based Medicine (EBM) Guidelines	186	5%	4%	3%	6%	9%	22%	26%	3%	1%	-	-	-	21%
Prescribe optimal activities / interventions in a claim to achieve desired outcomes	169	7%	5%	3%	8%	10%	22%	21%	4%	1%	-	-	1%	18%
Identify disability durations outside of EBM	153	5%	5%	3%	8%	8%	23%	24%	5%	1%	-	-	1%	17%
Predict / detect creeping catastrophic losses	148	8%	4%	5%	9%	9%	20%	21%	3%	1%	-	-	-	20%
Predict / detect litigation	114	8%	5%	5%	10%	12%	18%	16%	2%	3%	-	-	1%	20%
Other	8	-	-	-	13%	13%	38%	25%	-	-	-	-	-	11%
None / Not Applicable	77	9%	10%	6%	4%	10%	16%	12%	-	-	-	-	1%	32%

Note: Participants were able to select more than one answer for this question

3 Does your organization use predictive modeling on the claims operations side?

[492 responses]

Overview - All Responses



Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Yes	44%	33%	44%	34%	26%	24%	42%	14%	35%
No	50%	50%	46%	60%	63%	62%	50%	70%	50%
Unknown	6%	17%	10%	6%	11%	14%	8%	16%	15%

Responses Segmented by Claims Closure Ratio / Claims Resolution

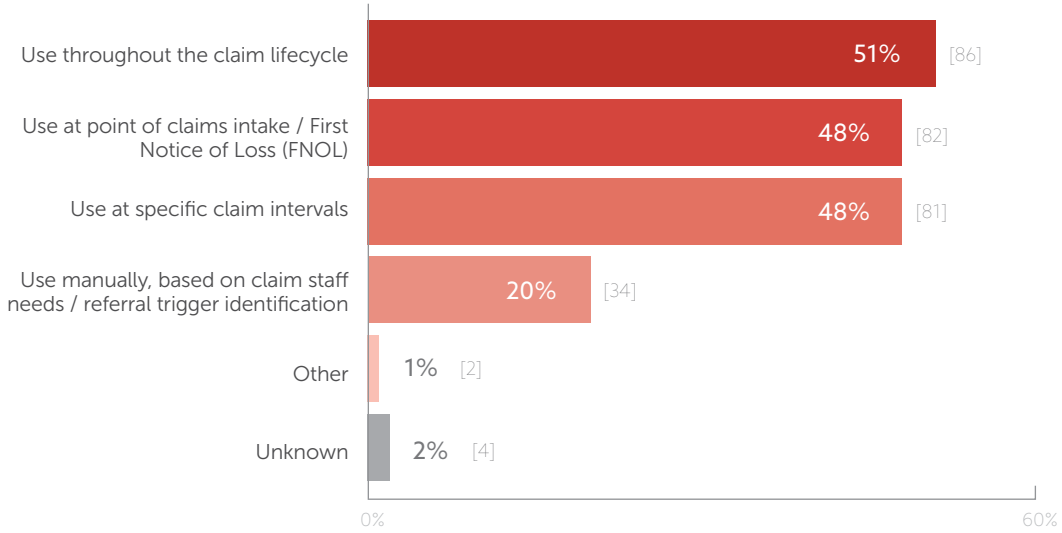
Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Yes	170	3%	5%	4%	8%	11%	18%	28%	4%	2%	-	-	1%	16%
No	276	8%	5%	5%	4%	11%	23%	20%	1%	-	-	-	1%	22%
Unknown	46	13%	7%	4%	7%	13%	9%	11%	2%	-	-	-	-	34%

Conditional Question for those who selected "Yes" in Question 3

3.1 How is your organization utilizing predictive modeling on the claims operations side? Select all that apply.

(if unknown, select "Unknown")
[170 responses]

Overview - All Responses



Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	47	2	34	44	19	5	5	5	9
Use throughout the claim lifecycle	45%	50%	62%	55%	32%	40%	20%	60%	78%
Use at point of claims intake / First Notice of Loss (FNOL)	57%	100%	53%	41%	26%	80%	60%	40%	33%
Use at specific claim intervals	53%	50%	44%	50%	47%	20%	80%	20%	33%
Use manually, based on claim staff needs / referral trigger identification	23%	50%	12%	20%	16%	40%	-	20%	33%
Other	-	-	3%	2%	-	-	-	-	-
Unknown	4%	-	-	2%	-	-	-	20%	-

Note: Participants were able to select more than one answer for this question

Appendix E - Medical Performance Management

1 Considering the following medical provider quality / outcome measures, please rank in the order of highest priority the measures most critical to claim outcomes, with 1 being the "highest priority" and 10 being the "lower priority."
[492 responses]

Overview - All Responses

Answer	Overall Rank	Mean
Return-to-Work Outcomes Measure medical provider disability management outcomes against national benchmark data	1	3.08
Patient Functional Outcomes Evaluate injured workers' health status and function as a result of the care they received	2	4.30
Clinical Quality Measure provider quality by adherence to Evidence-Based Medicine (EBM) Guidelines	3	4.71
Frequency & Duration of Medical Treatment Frequency and duration of treatment by injury / diagnosis compared to peers	4	4.71
Coordination of Care Effective communication / coordination across healthcare system; timely referral / coordination across referral sources	5	4.83
Patient Satisfaction Injured worker satisfaction with their medical care as an indicator of provider quality and outcomes	6	5.52
Total Cost of Care Total claim cost per episode of care / Diagnosis-Related Group (DRG)	7	6.31
Administrative Efficiency Quality of documentation and timely submission of reports	8	6.67
Risk of Harm Intended or unintended physical or psychiatric injury resulting from a pattern(s) of low quality care	9	7.18
Litigation Rate Provider's association with litigated claims compared to peer providers in the same geographic area	10	7.69

Rank Distribution by Response Count

		Rankings									
		Highest Priority									Lower Priority
Answer	Mean	1	2	3	4	5	6	7	8	9	10
Return-to-Work Outcomes	3.08	146	110	75	52	40	18	20	16	9	6
Patient Functional Outcomes	4.30	85	69	68	57	51	53	36	34	27	12
Clinical Quality	4.71	67	55	54	65	68	54	40	43	28	18
Frequency & Duration of Medical Treatment	4.71	41	69	74	57	64	58	59	37	20	13
Coordination of Care	4.83	43	56	60	85	63	55	46	37	30	17
Patient Satisfaction	5.52	34	46	52	55	54	59	62	48	47	35
Total Cost of Care	6.31	35	31	42	33	34	57	51	70	71	68
Administrative Efficiency	6.67	10	23	30	41	52	53	66	84	70	63
Risk of Harm	7.18	21	17	23	21	35	48	63	63	95	106
Litigation Rate	7.69	10	16	14	26	31	37	49	60	95	154

2 Does your organization utilize any of the following medical provider quality / outcome measures? Select all that apply.

(if no, select "None/Not Applicable")
[492 responses]

Overview - All Responses

Answer	count	%
Return-to-Work Outcomes Measure medical provider disability management outcomes against national benchmark data	237	48%
Frequency & Duration of Medical Treatment Frequency and duration of treatment by injury / diagnosis compared to peers	216	44%
Total Cost of Care Total claim cost per episode of care / Diagnosis-Related Group (DRG)	191	39%
Coordination of Care Effective communication / coordination across healthcare system; timely referral / coordination across referral sources	156	32%
Clinical Quality Measure provider quality by adherence to Evidence-Based Medicine (EBM) Guidelines	138	28%
Patient Satisfaction Injured worker satisfaction with their medical care as an indicator of provider quality and outcomes	131	27%
Administrative Efficiency Quality of documentation and timely submission of reports	130	26%
Patient Functional Outcomes Evaluate injured workers' health status and function as a result of the care they received	116	24%
Litigation Rate Provider's association with litigated claims compared to peer providers in the same geographic area	116	24%
Risk of Harm Intended or unintended physical or psychiatric injury resulting from a pattern(s) of low quality care	35	7%
None / Not Applicable	155	32%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Return-to-Work Outcomes	42%	-	51%	56%	48%	43%	42%	38%	58%
Frequency & Duration of Medical Treatment	39%	-	46%	44%	48%	43%	42%	49%	50%
Total Cost of Care	35%	-	47%	39%	33%	29%	83%	35%	46%
Coordination of Care	27%	17%	32%	35%	37%	19%	33%	30%	35%
Clinical Quality	26%	-	35%	28%	26%	33%	33%	22%	31%
Patient Satisfaction	17%	-	26%	32%	32%	24%	33%	27%	35%
Administrative Efficiency	20%	17%	28%	29%	33%	19%	42%	27%	15%
Patient Functional Outcomes	22%	17%	18%	24%	25%	29%	25%	30%	31%
Litigation Rate	26%	-	26%	25%	22%	19%	17%	14%	31%
Risk of Harm	5%	17%	5%	8%	8%	5%	8%	8%	15%
None / Not Applicable	42%	83%	29%	22%	26%	43%	17%	35%	38%

Note: Participants were able to select more than one answer for this question

Conditional Question for those who selected one or more "Provider Quality / Outcome Measures" from Question 2

2.1 Indicate if the selected provider quality / outcome measures impact your provider selection, contract arrangements, and/or payment strategies. Select all that apply.
(if no, select "None/Not Applicable")
[337 responses]

Overview - All Responses

Answer	Provider quality / outcome measure included in network contract and/or provider Letter of Agreement (LOA)	Higher reimbursement rate or bonus for meeting / exceeding quality / outcome measures	Lower reimbursement rate for not meeting quality / outcome measures	Removal from the provider network / panel for not meeting quality / outcome measures	Impacts referrals or patient channeling	Other	None / Not Applicable
Return-to-Work Outcomes Measure medical provider disability management outcomes against national benchmark data	21%	3%	2%	25%	29%	1%	18%
Frequency & Duration of Medical Treatment Frequency and duration of treatment by injury / diagnosis compared to peers	15%	4%	2%	24%	28%	3%	16%
Total Cost of Care Total claim cost per episode of care / Diagnosis-Related Group (DRG)	14%	5%	3%	17%	20%	3%	16%
Coordination of Care Coordination across the healthcare system; timely referral / coordination across referral sources	14%	3%	2%	17%	19%	1%	11%
Clinical Quality Measure provider quality by adherence to Evidence-Based Medicine (EBM) Guidelines	13%	3%	1%	19%	18%	1%	10%
Patient Satisfaction Injured worker satisfaction with their medical care as an indicator of provider quality and outcomes	9%	1%	2%	13%	17%	3%	10%
Administrative Efficiency Quality of documentation and timely submission of reports	12%	3%	1%	17%	17%	1%	8%
Patient Functional Outcomes Evaluate injured workers' health status and function as a result of the care they received	9%	1%	2%	14%	15%	2%	8%
Litigation Rate Provider's association with litigated claims compared to peer providers in the same geographic area	6%	2%	1%	8%	11%	2%	12%
Risk of Harm Intended or unintended physical or psychiatric injury resulting from a pattern(s) of low quality care	2%	1%	1%	4%	4%	1%	2%

Note: Participants were able to select more than one answer for this question

3 Does your organization use any of the following pharmacy utilization and management metrics as a measure of provider quality / outcomes? Select all that apply.

(if no, select "None/Not Applicable")

[492 responses]

Overview - All Responses

Answer	count	%
Formulary compliance / use of generic equivalents	272	55%
Opioid prescribing patterns	268	54%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	260	53%
Provider dispensing	214	43%
Use of compounds	202	41%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	159	32%
Use of opioid and benzodiazepine combination	146	30%
Prescribing of off-label, non-FDA approved pharmaceuticals	140	28%
Provider's assessment of risk and harm of extended opioid use	133	27%
None / Not Applicable	133	27%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Formulary compliance / use of generic equivalents	71%	33%	68%	53%	29%	71%	58%	51%	35%
Opioid prescribing patterns	68%	50%	60%	55%	33%	67%	50%	43%	50%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	59%	33%	59%	56%	34%	52%	58%	51%	46%
Provider dispensing	58%	50%	54%	40%	23%	38%	33%	41%	35%
Use of compounds	60%	50%	55%	31%	19%	57%	33%	35%	27%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	47%	50%	40%	22%	18%	48%	42%	24%	31%
Use of opioid and benzodiazepine combination	44%	33%	37%	21%	16%	38%	33%	22%	31%
Prescribing of off-label, non-FDA approved pharmaceuticals	48%	50%	33%	22%	12%	24%	33%	16%	23%
Provider's assessment of risk and harm of extended opioid use	35%	17%	32%	22%	15%	29%	33%	32%	27%
None / Not Applicable	17%	50%	21%	24%	49%	14%	25%	30%	46%

Note: Participants were able to select more than one answer for this question

[3 cont'd] Does your organization use any of the following pharmacy utilization and management metrics as a measure of provider quality / outcomes? Select all that apply.

Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Formulary compliance / use of generic equivalents	272	5%	4%	5%	5%	10%	22%	27%	3%	1%	-	-	-	18%
Opioid prescribing patterns	268	4%	4%	4%	4%	11%	23%	26%	3%	1%	-	-	1%	19%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	260	6%	4%	6%	5%	11%	20%	24%	3%	-	-	-	1%	20%
Provider dispensing	214	4%	2%	6%	5%	11%	22%	29%	2%	2%	-	-	1%	16%
Use of compounds	202	4%	3%	3%	4%	11%	23%	30%	2%	1%	-	-	-	19%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	159	6%	2%	3%	4%	9%	25%	30%	2%	1%	-	-	1%	17%
Use of opioid and benzodiazepine combination	146	5%	2%	4%	5%	10%	20%	29%	3%	3%	-	-	1%	18%
Prescribing of off-label, non-FDA approved pharmaceuticals	140	4%	1%	4%	6%	9%	21%	32%	4%	1%	-	-	1%	17%
Provider's assessment of risk and harm of extended opioid use	133	7%	4%	3%	5%	13%	17%	26%	2%	2%	-	-	2%	19%
None / Not Applicable	133	11%	6%	3%	8%	14%	14%	15%	2%	-	-	-	-	27%

Note: Participants were able to select more than one answer for this question

Conditional Question for those who selected one or more "Pharmacy Utilization and Management Metrics" from Question 3

3.1 Indicate if the selected pharmacy utilization and management metrics used to measure provider quality / outcomes impact your provider selection, contract arrangements, and/or payment strategies. Select all that apply.
(if no, select "None/Not Applicable")
[359 responses]

Overview - All Responses

Answer	Provider quality / outcome measure included in network contract and/or provider Letter of Agreement (LOA)	Higher reimbursement rate or bonus for meeting / exceeding quality / outcome measures	Lower reimbursement rate for not meeting quality / outcome measures	Removal from the provider network / panel for not meeting quality / outcome measures	Impacts referrals or patient channeling	Other	None / Not Applicable
Formulary compliance / use of generic equivalents	24%	2%	3%	18%	23%	4%	25%
Opioid prescribing patterns	18%	3%	2%	28%	28%	6%	19%
Utilization Review (UR) decisions; i.e. percentage of prescribed medications approved / denied by UR	22%	2%	3%	21%	23%	4%	21%
Provider dispensing	14%	1%	3%	22%	24%	4%	14%
Use of compounds	14%	2%	2%	18%	19%	5%	16%
Use of Morphine Equivalent Dose (MED) greater than 80 mg daily dosage	11%	1%	2%	16%	16%	4%	12%
Use of opioid and benzodiazepine combination	11%	1%	1%	15%	16%	4%	10%
Prescribing of off-label, non-FDA approved pharmaceuticals	10%	2%	1%	13%	15%	2%	11%
Provider's assessment of risk and harm of extended opioid use	11%	1%	1%	12%	12%	3%	11%

Note: Participants were able to select more than one answer for this question

4 Has your organization implemented any of the following medical provider value-based payment strategies? Select all that apply.

(if no, select "None/Not Applicable")
[492 responses]

Overview - All Responses

Answer	count	%
Bundled Payment Model A single negotiated payment for all services for a specified procedure or episode of care / condition such as knee replacements, spine surgeries, and shoulder arthroscopies	32	7%
Capitation Model Providers agree to a set payment per patient for specified medical services	18	4%
Accountable Care Organization (ACO) Model Care delivery model that ties provider reimbursement to improving overall quality, cost and patient satisfaction	15	3%
Patient Centered Medical Home (PCMH) Model Primary care / occupational medicine-driven initiatives to coordinate patients' care across referrals and the healthcare continuum	12	2%
Pay for Performance (P4P) Model Provider financial incentives or disincentives tied to measured performance	10	2%
Shared Savings Model Reward providers that reduce total healthcare spending for a population of patients or specified episodes of care below an expected level	9	2%
Shared Risk Model Provider performance-based incentives to share cost savings and disincentives to share the excess costs with the payer if medical spend exceeds an agreed budget	7	1%
None / Not Applicable	427	87%

Note: Participants were able to select more than one answer for this question

Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	108	6	78	131	73	21	12	37	26
Bundled Payment Model	12%	-	5%	5%	7%	-	17%	3%	-
Capitation Model	6%	-	5%	2%	-	-	8%	8%	-
Accountable Care Organization (ACO) Model	5%	-	-	4%	1%	-	8%	8%	-
Patient Centered Medical Home (PCMH) Model	4%	-	1%	4%	-	-	8%	3%	-
Pay for Performance (P4P) Model	3%	-	1%	2%	1%	-	17%	-	4%
Shared Savings Model	1%	-	3%	1%	4%	-	-	3%	4%
Shared Risk Model	2%	-	-	2%	1%	-	-	-	4%
None / Not Applicable	81%	100%	90%	85%	90%	100%	75%	81%	96%

Note: Participants were able to select more than one answer for this question

[4 cont'd] Has your organization implemented any of the following medical provider value-based payment strategies? Select all that apply.

Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101 % to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Bundled Payment Model A single negotiated payment for all services for a specified procedure or episode of care / condition such as knee replacements, spine surgeries, and shoulder arthroscopies	32	3%	-	6%	3%	13%	16%	25%	-	3%	-	-	3%	28%
Capitation Model Providers agree to a set payment per patient for specified medical services	18	-	-	6%	6%	6%	28%	22%	6%	6%	-	-	6%	14%
Accountable Care Organization (ACO) Model Care delivery model that ties provider reimbursement to improving overall quality, cost and patient satisfaction	15	-	7%	13%	13%	7%	13%	20%	-	-	-	-	-	27%
Patient Centered Medical Home (PCMH) Model Primary care / occupational medicine-driven initiatives to coordinate patients' care across referrals and the healthcare continuum	12	-	8%	-	8%	-	17%	25%	8%	-	-	-	-	34%
Pay for Performance (P4P) Model Provider financial incentives or disincentives tied to measured performance	10	-	-	-	-	10%	10%	20%	-	-	-	-	10%	50%
Shared Savings Model Reward providers that reduce total healthcare spending for a population of patients or specified episodes of care below an expected level	9	-	-	22%	-	11%	11%	22%	11%	-	-	-	-	23%
Shared Risk Model Provider performance-based incentives to share cost savings and disincentives to share the excess costs with the payer if medical spend exceeds an agreed budget	7	14%	-	14%	-	14%	-	14%	-	-	-	-	-	44%
None / Not Applicable	427	7%	6%	5%	5%	12%	20%	21%	2%	1%	-	-	-	21%

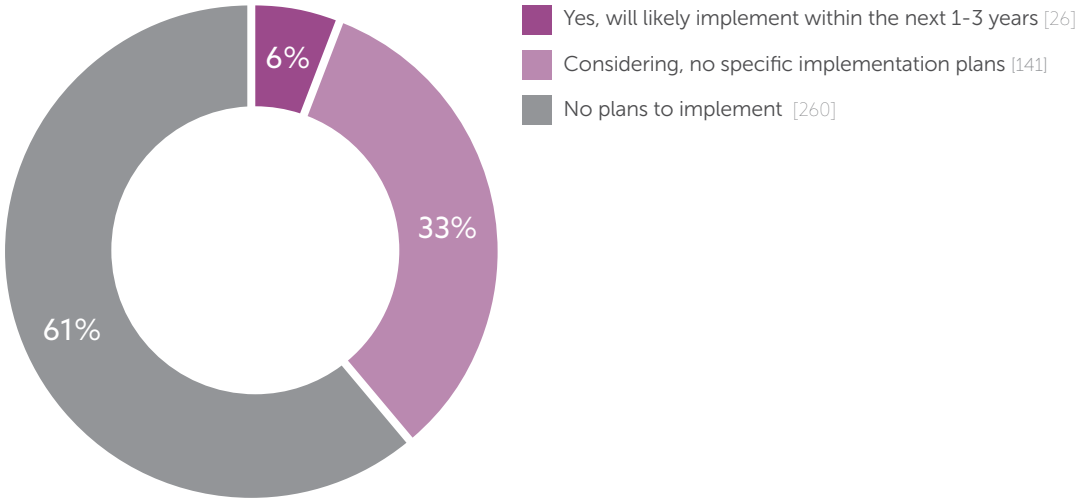
Note: Participants were able to select more than one answer for this question

Conditional Question for those who selected "None / Not Applicable" for Question 4

4.1 Does your organization have future plans to implement medical provider value-based payment strategies?

[427 responses]

Overview - All Responses



Responses Segmented by Organization Type

Answer	Insurance Company	Reinsurance or Excess Insurance Company	Third Party Administrator	Self-Insured Employer	Insured Employer	Risk Pool	State Fund / Mutual Fund	Gov't Entity	Other
respondent # by organization type	88	6	70	112	66	21	9	30	25
Yes, will likely implement within the next 1-3 years	6%	-	6%	7%	2%	-	22%	10%	8%
Considering, no specific implementation plans	38%	-	41%	29%	36%	43%	33%	13%	24%
No plans to implement	56%	100%	53%	64%	62%	57%	45%	77%	68%

Responses Segmented by Claims Closure Ratio / Claims Resolution

Answer	count	≤50%	51% to 60%	61% to 70%	71% to 80%	81% to 90%	91% to 100%	101% to 110%	111% to 120%	121% to 130%	131% to 140%	141% to 150%	≥151%	Unknown
Yes, will likely implement within the next 1-3 years	26	8%	4%	-	12%	4%	12%	31%	-	-	-	-	-	29%
Considering, no specific implementation plans	141	6%	6%	3%	4%	12%	23%	26%	4%	2%	-	-	-	14%
No plans to implement	260	8%	5%	6%	6%	12%	20%	18%	2%	-	-	-	1%	22%

2016 WORKERS' COMPENSATION BENCHMARKING STUDY

CLAIMS MANAGEMENT OPERATIONAL STUDY

Rising Medical Solutions
325 North LaSalle Street, Suite 600
Chicago, IL 60654

toll free: 866.274.7464

www.risingms.com
wcbenchmark@risingms.com

RISING