

Orchestrating Workers' Compensation in the AI Era

How insurers are using AI and new technologies to accelerate and modernize workers' compensation, and why orchestration is emerging as the real competitive advantage.

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I The Modernization Imperative

Workers' compensation has long been one of the most operationally complex lines in the property and casualty insurance industry. What appears to be a straightforward claims process is, in reality, a highly interconnected ecosystem involving injured workers, employers, insurers, medical providers, regulators, legal stakeholders, and a growing network of technology and service providers.

Today, workers' compensation represents an approximately \$50–60 billion insurance line and a broader \$100+ billion economic system when medical care, wage replacement, administration, and self-insured costs are considered. At the same time, carriers face rising medical severity, workforce changes, legal exposure, increasing consumer expectations for digital experiences, and pressure to improve return-to-work (RTW) outcomes while controlling claim costs.

According to the National Council on Compensation Insurance (NCCI), workers' compensation lost-time claim frequency declined by approximately 5% in 2024, while medical and indemnity severity both increased by roughly 6%. The trend reinforces the need for earlier intervention, better claims coordination, and greater operational efficiency across the claim lifecycle.

In response, insurers are investing heavily in AI, analytics, automation, digital engagement, and specialized Insurtech solutions to modernize workers' compensation operations. AI is increasingly helping carriers accelerate documentation-heavy tasks, improve triage and decision support, surface insights earlier in the claims process, and embed intelligence directly into adjuster workflows.

But technology innovation alone is not enough.

Workers' compensation has evolved into a coordinated operational ecosystem that must connect claims, medical management, payments, communication, legal oversight, analytics, AI-driven insights, and return-to-work coordination across multiple stakeholders and systems. Increasingly, carriers are discovering that competitive advantage comes not from AI or isolated technologies alone, but from the ability to orchestrate workflows, systems, data, and operational decision-making into a connected framework that improves outcomes across the full claim lifecycle.



NCCI in their Annual Insights Report (AIS) 2026 data shows that workers' compensation medical claim severity continues to rise, reinforcing the need for more intelligent claims coordination, earlier intervention, and operational efficiency across the claim lifecycle.

I The Real Challenge: Fragmentation Across the System

Over the past decade, many workers' compensation carriers have invested heavily in modernization initiatives, including new claims systems, digital intake tools, analytics platforms, medical management solutions, fraud detection technologies, and automation capabilities. Yet despite these investments, operational friction often remains deeply embedded within the claims' lifecycle.

The issue is not necessarily a lack of technology; in many cases, insurers already possess substantial technological capabilities. The challenge is that these systems, vendors, and workflows frequently operate independently rather than as part of a coordinated operational framework.

Claims still move through fragmented processes that involve multiple handoffs among adjusters, nurse case managers, medical providers, bill review vendors, legal teams, payment systems, and external service providers. Communication gaps, inconsistent workflows, and limited visibility across the lifecycle can introduce delays and inefficiencies, ultimately increasing costs and worsening outcomes.

Many claims break down at familiar operational choke points:

- delays in First Reports of Injury (FROI)
- medical authorization bottlenecks
- fragmented communication
- disputes over compensability
- return-to-work coordination failures
- delays tied to Independent Medical Exams (IMEs) or utilization review processes

These operational breakdowns are not merely administrative problems. They directly affect claim duration, litigation rates, reserving accuracy, worker satisfaction, and overall claim cost.

NCCI research has shown that delayed injury reporting can significantly increase workers' compensation claim costs and litigation rates. Claims reported more than four weeks after injury were associated with attorney involvement rates of approximately 32%, compared to 13% for claims reported immediately, reinforcing the importance of early reporting, faster triage, and more coordinated claims workflows.

The industry is not lacking technology; it is struggling to connect it.

What Fragmentation Costs

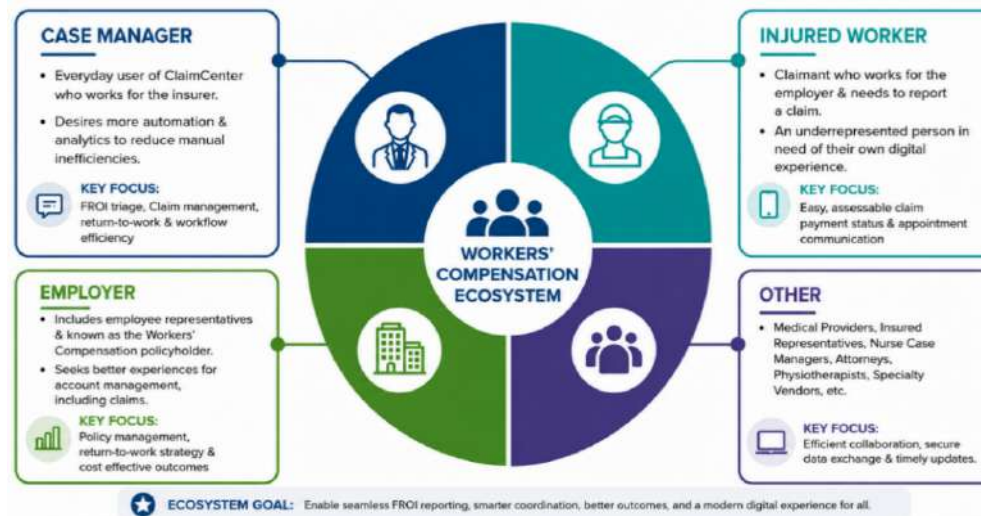
- Claims stall at manual handoff points between systems
- Severity signals appear in one system but fail to trigger action in another
- Case Managers context-switch across platforms instead of managing the claim
- Reserves reflect uncertainty, not actual exposure
- GenAI outputs sit in dashboards, disconnected from the workflow

What Orchestration Delivers

- Dynamic triage routes claim to be the right resource at FROI
- Event-driven automation fires medical referrals and escalations on trigger
- AI scores and recommendations surface inside the adjuster's ClaimCenter workflow
- Continuous monitoring adjusts reserves and strategy in real time
- RTW coordination begins earlier, reducing claim duration

The industry is not lacking technology. It is struggling to connect it and AI's potential will remain unrealized until the orchestration layer is in place.

I Workers' Compensation as a System of Systems



Modern workers' compensation no longer operates as a single platform or linear process. Instead, it increasingly functions as a "system of systems" composed of core claims platforms, specialized Insurtech solutions, medical vendors, payment providers, analytics engines, AI-driven capabilities, and external data sources. No single system owns the entire process. Success depends on how effectively these components work together.

Increasingly, carriers recognize that effective orchestration requires more than implementing disconnected technologies or deploying AI independently. It requires a centralized operational framework capable of coordinating workflows, data, vendor interactions, operational decision-making, and AI-driven insights across the full claim lifecycle. Platforms such as Guidewire ClaimCenter are increasingly serving as orchestration frameworks that help carriers unify claims operations while integrating specialized Insurtech and AI capabilities into more connected workflows. Leading insurers are moving away from static workflows and reactive claims handling toward more dynamic models that support intelligent triage, workflow segmentation, continuous monitoring, and coordinated intervention. This reflects a broader industry realization: not all claims should be handled the same way.

A straightforward medical-only claim requires a very different operational pathway than a high-severity claim involving litigation risk, psychosocial factors, comorbidities, or prolonged disability exposure. As a result, many insurers now use predictive triage and workflow segmentation to identify complexity earlier and route claims more effectively to the appropriate case management resources.

Generative AI-driven claims intelligence platforms such as CLARA Analytics are helping carriers operationalize these models by identifying high-risk claims earlier, surfacing escalation indicators, and supporting more proactive intervention strategies. Some carriers now use complexity scoring models that evaluate factors such as injury characteristics, jurisdictional exposure, attorney involvement, provider behavior, prior claims history, and return-to-work risk indicators.

An effective workers' compensation environment must orchestrate work differently based on claim complexity while ensuring that claims professionals, medical stakeholders, vendors, AI-driven insights, and operational workflows remain connected within a coordinated framework.

WORKERS' COMPENSATION LIFE CYCLE



Guidewire ClaimCenter provides the cloud-native operational foundation that helps make orchestration possible. As both the system of record and workflow coordination platform for workers' compensation claims, ClaimCenter helps carriers connect claims data, adjuster workflows, AI-driven insights, vendor integrations, and operational decision-making within a more unified environment. Several capabilities support this orchestration model:

Unified operational visibility: ClaimCenter provides a centralized claim view that allows internal teams, external partners, and connected systems to operate from a more consistent source of information, helping reduce fragmentation and workflow breakdowns.

Workflow coordination and automation: Rules-based routing, automated task generation, escalation management, reserving triggers, and workflow segmentation can be configured within the platform to support more adaptive claims operations.

Connected ecosystem integration: Through API-driven connectivity and the Guidewire Marketplace ecosystem, carriers can integrate medical management, predictive analytics, fraud detection, pharmacy, bill review, return-to-work solutions, and emerging AI-driven tools into coordinated workflows rather than isolated point solutions.

Guidewire Cloud further supports this model by enabling carriers to continuously adopt workflow enhancements, ecosystem integrations, regulatory updates, and emerging AI capabilities without relying on extended legacy upgrade cycles.

In practical terms, orchestration involves more than integrating systems. It requires coordinating workflows, operational decisions, communications, and interventions across the full lifecycle of a claim. With a modern workers' compensation environment, insurers can integrate digital FROI intake, predictive triage, automated assignment routing, compensability review, medical management coordination, fraud detection, payment workflows, communication management, and return-to-work monitoring into a connected operational model.

This approach allows insurers to move from reactive claims handling toward more proactive coordination. Claims can be segmented earlier, specialists engaged faster, and intervention points identified before costs escalate. The business impact can include:

- shorter claim duration
- lower litigation rates
- improved reserving stability
- faster return-to-work outcomes
- reduced overall claim costs

More importantly, orchestration helps create greater consistency across the claim lifecycle, reducing the fragmentation that has historically existed across workers' compensation systems and workflows.

I The Cost of Misclassification and Workflow Failure

One of the most significant operational risks in workers' compensation occurs when complex claims are initially treated as routine files. What begins as a manageable claim can evolve into what some carriers describe as a "creeping catastrophe," where delayed intervention, poor communication, or inadequate routing leads to escalating medical costs, litigation, and prolonged disability.

Misclassification creates consequences that compound over time. Early warning signs may be missed, specialists may not be assigned quickly enough, and workers who feel unsupported may seek legal representation simply to obtain answers about the process.

Research from organizations including NCCI, WCRI, and CLARA Analytics has shown that attorney involvement in workers' compensation claims is associated with higher claim costs, longer duration, increased medical utilization, and delayed return-to-work outcomes. In one CLARA Analytics study of more than 50,000 workers' compensation claims, litigated claims averaged 901 days in duration versus 305 days for non-litigated claims, while average total claim costs increased from approximately \$15,900 to more than \$77,000.

Once litigation begins, friction costs increase significantly. Claim duration grows, communication becomes more adversarial, medical approvals slow, and reserving volatility increases. Operationally, these failures can create:

- reserve leakage and reserve shock
- delayed return-to-work outcomes
- prolonged medical treatment cycles
- inaccurate predictive modeling
- downstream actuarial distortion
- higher reinsurance costs tied to adverse development

AI-driven claims analysis is increasingly helping carriers identify operational inefficiencies earlier in the claim lifecycle. In one published case study, CLARA Analytics identified approximately 15% of open claims as candidates for closure, while nearly half triggered meaningful reserve adjustments, contributing to a reported 13.2x ROI.

Many insurers now recognize that a claim's trajectory is often shaped in the earliest days following injury. Early interactions, routing decisions, and communication patterns frequently determine whether a claim progresses efficiently or deteriorates into a prolonged, high-cost dispute.

This is why orchestration matters.

I Orchestrating the Workers' Compensation Ecosystem

As workers' compensation ecosystems become more interconnected, the role of core platforms becomes increasingly important.

Guidewire Cloud provides the operational foundation for modern workers' compensation by connecting core systems, workflows, and data while enabling integration across a broader ecosystem of specialized capabilities. Carriers are integrating a growing range of technologies spanning claims intake, medical management, fraud detection, analytics, payment processing, and digital engagement, creating significant operational complexity.

But orchestration is not simply a technology challenge. Long communication delays, fragmented workflows, inconsistent updates, and poor coordination among stakeholders can erode worker trust and increase the likelihood of litigation, prolonged disability, and escalating claim costs.

From the injured worker's perspective, the claims process can often feel opaque and fragmented, particularly when communication is delayed or inconsistent.

Confusion around benefits, return-to-work expectations, and coordination among providers, employers, and insurers can quickly create frustration and distrust. Increasingly, carriers recognize that better coordination and communication are operational factors that directly influence litigation rates, claim duration, reserve stability, and return-to-work outcomes.

NCCI has similarly emphasized that successful return-to-work outcomes depend heavily on early coordination, proactive communication, and continuous engagement throughout the claims process.

This is where implementation and orchestration partners play a critical role.

Sollers Consulting helps insurers modernize workers' compensation operations by orchestrating systems, workflows, and integrations while supporting cloud migration, operating model redesign, and ecosystem implementation strategies. The challenge is not simply selecting the right technologies but ensuring they function together effectively across real-world operational environments.

The workers' compensation lifecycle processes with marketplace integrations and specialized tools. A strong orchestration strategy builds on existing carrier investments while integrating new capabilities.

I Sollers: Focused Expertise on Guidewire ClaimCenter

Sollers Consulting is a specialized technology and management consulting firm focused on modernizing workers' compensation operations on Guidewire ClaimCenter across carrier environments in the U.S. and Europe.

Sollers' workers' compensation practice brings experience spanning ecosystem integration, workflow orchestration, cloud transformation, and operating model modernization, helping carriers manage increasingly complex claims environments more effectively.

The practice leverages prebuilt integration frameworks, implementation accelerators, and workflow modernization expertise to help insurers reduce integration risk, accelerate implementation timelines, and operationalize AI, automation, and connected claims workflows.

Sollers works with quality partners like CLARA Analytics to ensure solutions address specific lines of business needs like Workers' Compensation and are always looking to apply Agentic AI tools that augment that human approach.

Before beginning a transformation initiative, Sollers evaluates the carrier's existing technology and vendor landscape to identify opportunities for integration, reuse, operational alignment, and modernization planning.

I AI Within the Orchestration Model

Artificial intelligence (AI) is increasingly embedded throughout the workers' compensation ecosystem, helping carriers improve operational efficiency, accelerate decision-making, and support more proactive claims management.

Today, insurers are using AI and advanced analytics to support predictive triage, severity scoring, fraud detection, workflow prioritization, actuarial modeling, and operational decision-making. Emerging generative and agentic AI capabilities are also helping carriers synthesize claim information, streamline documentation, improve knowledge retrieval, automate portions of administrative coordination, and support adjusters with next-best-action recommendations.

Emerging AI copilots are helping claims professionals summarize medical documentation, surface escalation indicators, and prioritize workflow actions more efficiently within the claims process.

AI delivers the greatest value when embedded within coordinated operational workflows rather than deployed as disconnected tools or isolated point solutions.

As carriers continue modernizing workers' compensation operations, orchestration increasingly becomes the framework that allows AI-driven insights, workflows, systems, and stakeholders to operate together more effectively across the claims lifecycle.

Platforms such as Guidewire ClaimCenter, combined with implementation and orchestration expertise from partners such as Sollers Consulting, help provide the operational framework needed to connect AI capabilities, ecosystem integrations, claims workflows, and operational decision-making into a more unified environment.

In workers' compensation, AI works best as an operational enhancer, supporting human expertise, judgment, communication, and coordination rather than replacing them. Ultimately, AI enhances orchestration; it does not replace it.

CEO Voices: AI and the Human Impact

In Sollers' [AI and the Human Impact](#) Report

I Jeanette Ward, CPCU, CEO of Texas Mutual Insurance Company, emphasized the importance of balancing AI-driven efficiency with human expertise:

Artificial intelligence presents tremendous opportunity when applied thoughtfully. I see its greatest value in synthesizing complex claim information like medical records, claims history, and disability guidelines to guiding human decision makers rather than replacing them. Claims in the workers' compensation line, especially, will always require human judgment and empathy, but AI can remove administrative burden and highlight where expertise is most needed.

I Brenda Gibson, CEO of Red River Mutual (Canada), similarly emphasized that AI should strengthen rather than replace human-centered insurance operations:

AI can enhance internal processes, freeing our staff to focus on interactions where human empathy and judgment are essential – particularly in claims or complex policy decisions. The challenge will be integrating these technologies in ways that complement human expertise rather than replace it. Success will come from integrating technology, human insight, and collaboration to meet customer needs, manage risk, and uphold the mutual model's enduring values of community and long-term relationships.

AI-Driven Claims Intelligence in Practice

- [A multi-state workers' compensation carrier](#) implemented CLARA Analytics' AI platform to support predictive triage, reserve guidance, and workflow prioritization. Eastern Alliance stated the platform was selected to help claims professionals identify higher risk claims earlier, improve reserve accuracy, reduce administrative burden, and support faster operational decision-making across the claims lifecycle.
- [MEMIC](#) adopted AI-driven medical document intelligence and claims summarization capabilities designed to help identify escalation risks and improve workflow efficiency across workers' compensation operations.
- These emerging AI capabilities are helping insurers identify escalation indicators earlier, streamline documentation-heavy processes, improve workflow coordination, and support more proactive intervention strategies across the claims lifecycle.

I The Path Forward

3. *Identify high-value AI use cases within workers' compensation workflows, including predictive triage, workflow prioritization, return-to-work prediction, and decision support.*
4. *Evaluate whether AI-driven insights are embedded directly into operational workflows or functioning as disconnected tools outside the claims process*

I The Future: From Systems to Outcomes

The future of workers' compensation will be defined less by individual technologies and more by how effectively insurers coordinate workflows, systems, data, and decision-making across the claims lifecycle.

As AI and connected ecosystems become more deeply embedded in claims operations, orchestration is emerging as a central competitive advantage. Platforms, analytics, AI, and ecosystem integrations deliver the greatest value when operating within a coordinated operational framework.

Ultimately, the future of workers' compensation will not be defined by how many technologies insurers deploy, but by how effectively they orchestrate

1. *Establish an orchestration framework capable of connecting claims operations, AI-driven capabilities, workflow automation, ecosystem integrations, and operational decision-making across the full claim lifecycle.*
2. *Choose implementation and orchestration partners with deep workers' compensation and ecosystem integration expertise.*

I The Future: From Systems to Outcomes



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Sollers Consulting assists insurance companies in developing industry-leading operations. Its international teams, comprising business and IT experts from 42 nations, work out of sixteen offices across Europe, North America, and Asia-Pacific. Since its inception in 2000, Sollers has partnered with over 150 organizations globally, implementing both core and front-end systems.

Guidewire Software (GWRE) is the platform P&C insurers trust to engage, innovate, and grow efficiently. Guidewire combines core operations, data, analytics, digital capabilities, and marketplace solutions to deliver the industry's leading cloud platform for P&C insurers.

CLARA Analytics is the leading AI as a service ("AlaaS") provider focused on improving casualty claims outcomes for insurers, MGAs, reinsurers, and self-insured organizations. Its CLARAty.ai platform uses predictive and generative AI to help claims professionals reduce costs, improve efficiency, and optimize claim outcomes through advanced analysis of claims and medical data.

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