

AI In Workers Compensation

NCOIL Annual Meeting, Atlanta

Workers' Compensation Insurance Committee

November 13, 2025

About WCRI



Independent, not-for-profit research organization providing high-quality, objective information about public policy issues involving workers' compensation systems



Serve as a resource for public officials and stakeholders, but we do not make recommendations or take positions



Studies are peer-reviewed with a focus on benefit delivery



Diverse membership support, including gov't agencies, employers, insurers, labor unions, service providers, etc.

WCRI's Approach: Stakeholder Interviews



AI could change the industry by streamlining management and processing of claims



Conducted semi-structured interviews with 34 WC stakeholders

Employers, insurers, medical providers, worker advocates, regulators



We examined:

1. What type of AI?
2. Value of AI tools
3. Challenges when adopting AI
4. Best practices and regulations

What Type of Artificial Intelligence?

Evolution of AI Technologies

AI Before ChatGPT

Analytic AI
focused on machine
learning.



Generative AI

Large language models
that can generate new
content from data.

Agentic AI

AI that can make
decisions and act
autonomously.



Artificial General Intelligence

AI that can perform
intellectual tasks at
human level.

What Type of Artificial Intelligence? → Generative AI

Evolution of AI Technologies

AI Before ChatGPT

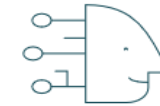
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The Value of Generative AI Tools

Select Promises of AI in Workers' Compensation



Optimizing Claims Processes

Enhancing speed and efficiency in claims handling

Optimizing Medical Treatment

Improving early intervention and recovery predictions

Legal and Regulatory Compliance

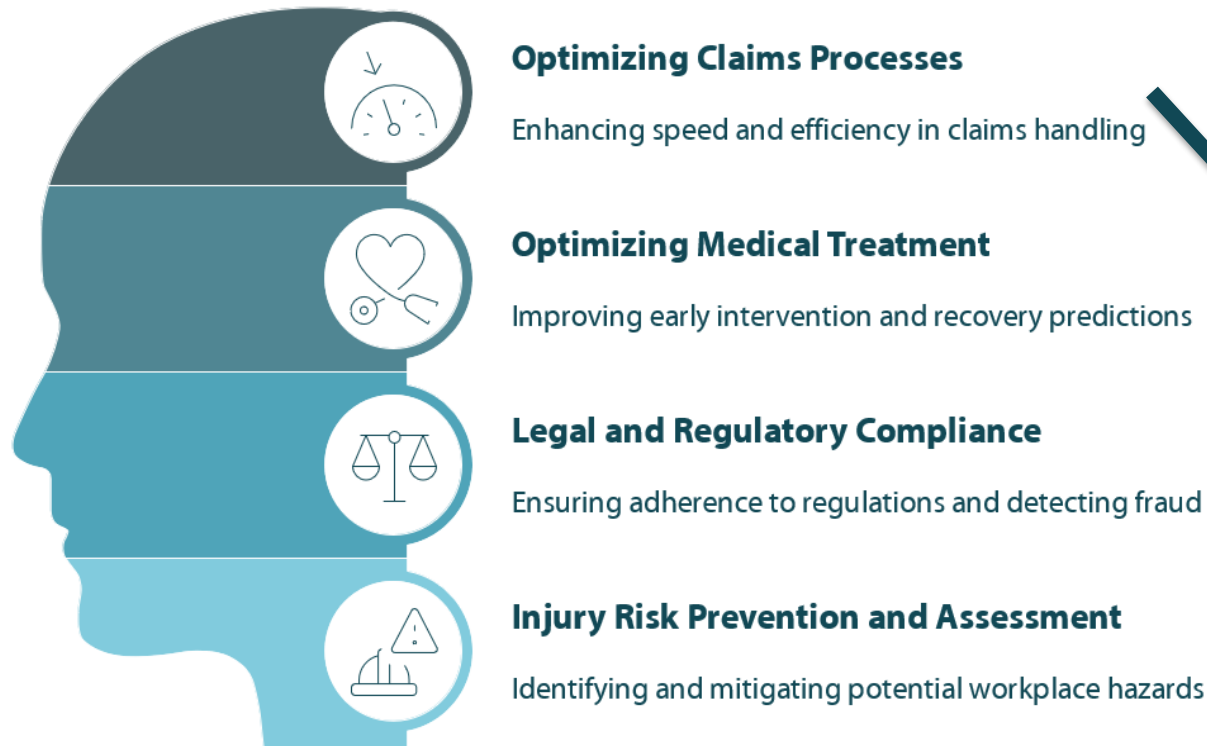
Ensuring adherence to regulations and detecting fraud

Injury Risk Prevention and Assessment

Identifying and mitigating potential workplace hazards

The Value of Generative AI Tools

Select Promises of AI in Workers' Compensation



- Expedites processing of structured and unstructured data
- Eliminates fax and mail communication
- Summarizes mountains of documents
- Automates repetitive tasks

The Value of Generative AI Tools

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Examples of Workflow Enhancements Using AI



Claims Monitoring

AI systems track claims and flag deviations



Chatbots

AI handles inquiries and provides updates



Call Analysis

AI transcribes and analyzes calls in real time



Adjuster Assistant

AI ensures best practices in interactions



Fraud Detection

AI identifies inconsistencies and suspicious activities

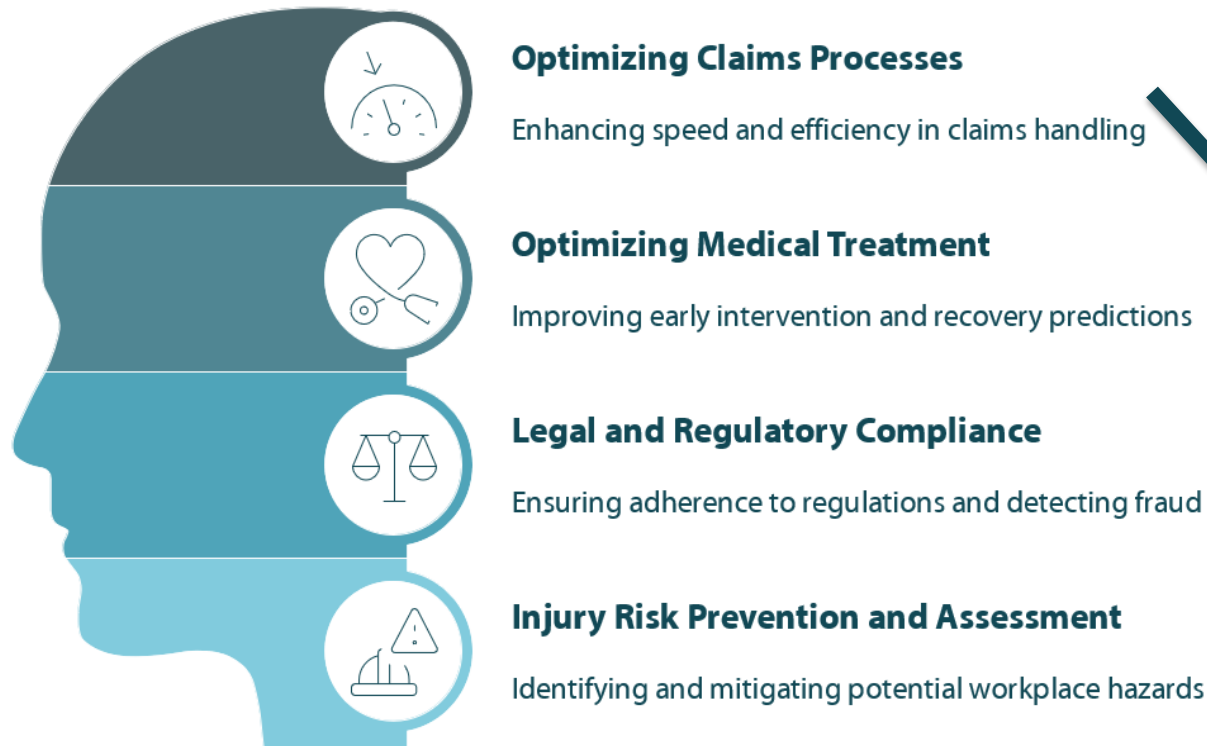


Data Analysis

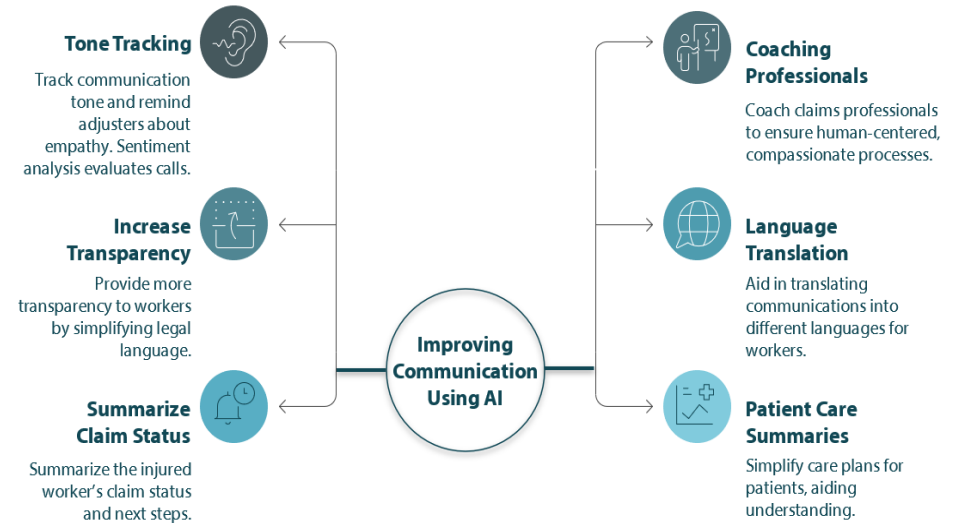
AI clusters data and identifies outliers

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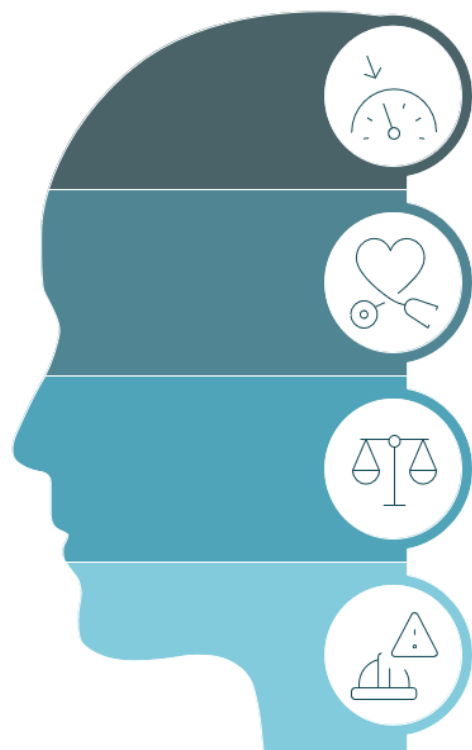


Examples of Communication Improvements Using AI



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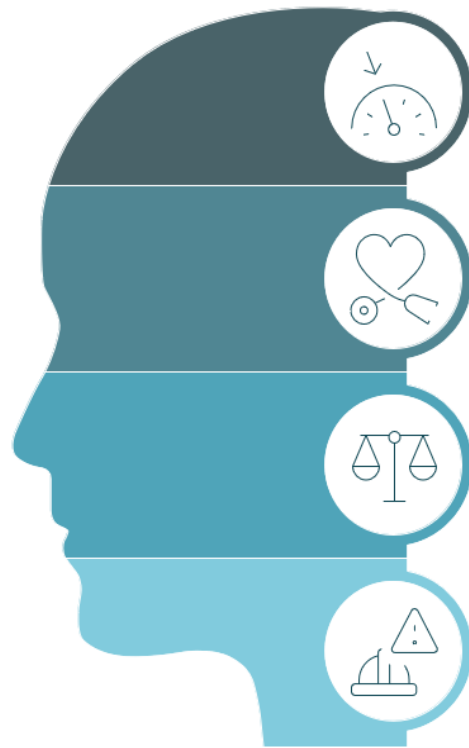
Identifying and mitigating potential workplace hazards



- Identifying necessary medical interventions earlier
- Predicting recovery trajectory
- Reducing burden on medical providers

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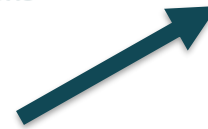
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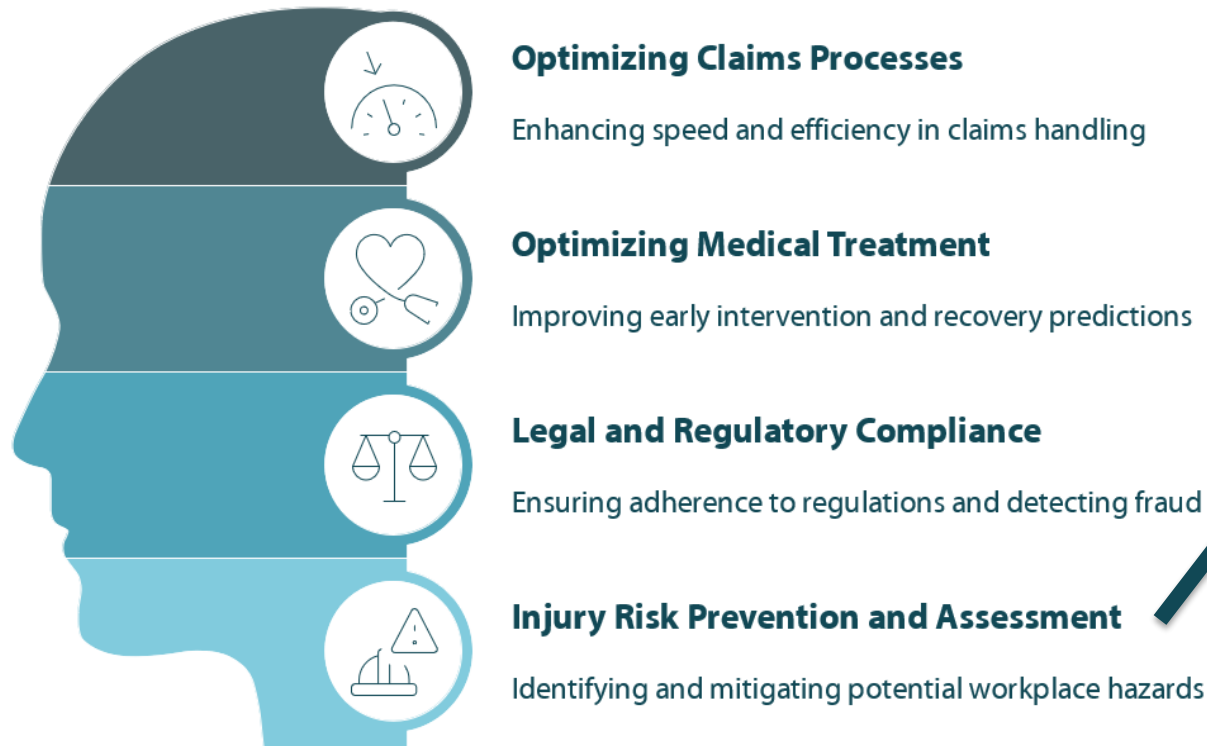
Identifying and mitigating potential workplace hazards



- AI helps insurers, regulators, attorneys
- Ensuring compliance with each state's required forms, notices, and deadlines
- WC boards and commissions can better monitor trends or compliance issues
- Aiding with legal reasoning and research

The Value of Generative AI Tools

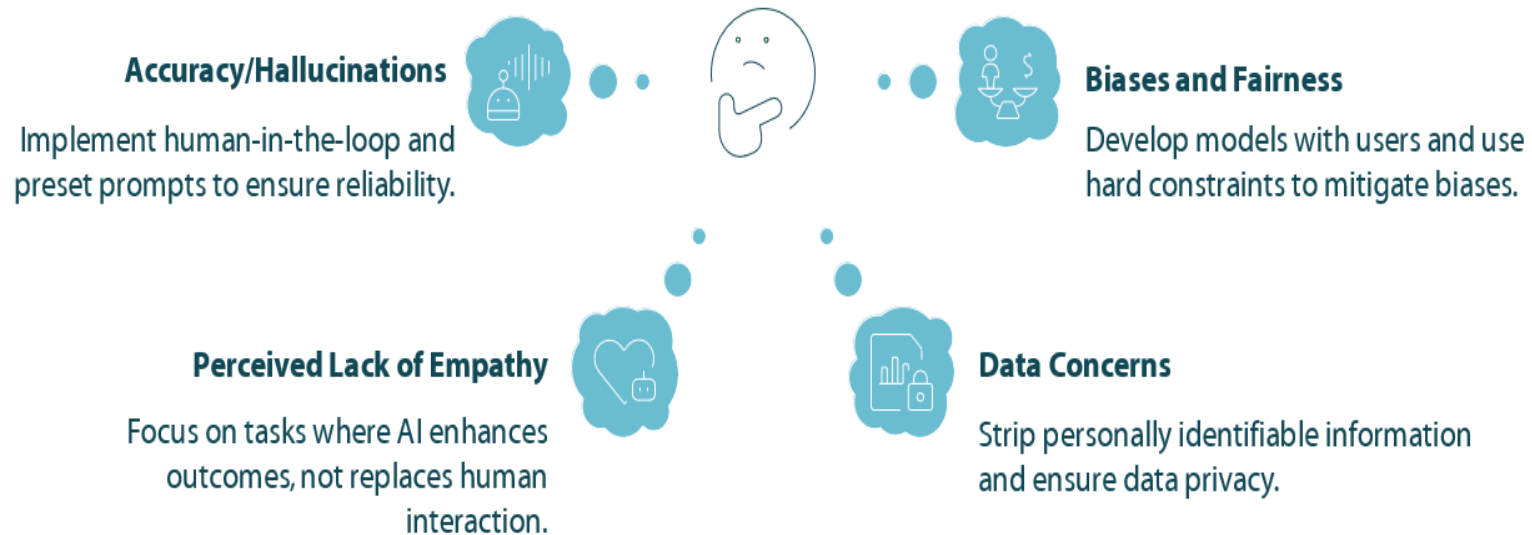
Select Promises of AI in Workers' Compensation



- AI tools can identify risk factors and recommend preventive measures
 - analyzing data on work conditions and behavior
- Employers and insurers can use AI insights to better address safety
- Better assess worker fitness and return-to-work readiness

Addressing Challenges of AI Adoption

How to Address Challenges in AI Implementation?



Guidance and Best Practices Regarding AI Use



Many states follow guidance of National Association of Insurance Commissioners (NAIC)

In 2020, the NAIC adopted a set of principles, emphasizing fairness, accountability, compliance, transparency, and safety in AI applications



In 2023 NAIC approved a model bulletin on AI use:

As of March 3, 2025, 25 states had adopted the model bulletin, and 4 other states had issued insurance-specific regulations



Stakeholders formed internal committees to ensure they adhere to principles of transparent and customer-centric AI

E.g., legal, compliance, data scientists, business leaders, third-party auditors

Emerging Regulations

Florida's SB794 (2025) mandates that AI-generated claim denials be reviewed by a qualified human professional

Colorado SB24-205 (as of Feb. 1, 2026): AI developers should protect consumers from risks of algorithmic discrimination

NY State Insurance Circular Letter No. 7 (2024): insurers should perform regular bias audits, submit transparency reports, and notify consumers when AI influences underwriting or claims decisions

Virginia's Exec. Order 30: Standards & guidelines to safeguard citizen data, conducting AI pilots in a controlled way, and training state employees on AI

California's SB53: Safety and transparency requirements

- * AI developers required to have mandatory risk frameworks
- * Whistleblower protections

Washington and Texas: measures focusing on audits and accountability

What Might Lie Ahead for AI Regulations?



While AI is evolving, stakeholders suggested closely watching litigation trends as AI use expands



Court decisions are likely to shape the boundaries of AI use

Several lawsuits on use of AI in insurance or care denials (outside WC)



One hurdle: the “black box” nature of many advanced AI models

Systems are often not easily interpretable, making it difficult to trace the root cause of an error or malfunction



Broader societal concerns about fairness and equity

If AI systems disproportionately affect certain groups, the liability system may not be adequately prepared to handle these nuanced ethical and social issues

Key Findings From Stakeholder Interviews



Generative AI: leading form of AI in WC



AI can lead to faster claim resolutions, and improved worker outcomes:

- Fast processing of structured and unstructured data
- Improved claim workflow and approval for care
- Better prediction of claim outcomes
- Improved identification of additional or early intervention



AI enables more focus on claims requiring more empathy and expertise



Challenges in terms of implementation, infrastructure, model fairness, legal framework

Thank You

- Questions about the findings, e-mail us at wcri@wcrinet.org
- The study discussed today is available for download on our website at www.wcrinet.org
- For information about membership, visit www.wcrinet.org/membership
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