

It's Real... And It's Here: AI in Workers' Compensation

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Disclosures

None to disclose.

Learning objectives

- We will learn the definition of what constitutes artificial intelligence (AI), as well as what is its current state.
- We will learn about AI's present role in general health care delivery and in the clinical treatment of WC injuries.
- We will also learn about the role of AI in the WC insurance system, including claims management.

What is artificial intelligence?

AI refers to computer-based systems that can perform tasks commonly associated with human intelligence, including:

- Learning from experience;
- Recognizing patterns;
- Understanding and generating language;
- Solving problems and making decisions.

AI systems continually adapt by processing data and refining decision-making strategies.

The goal of AI applications is to carry out complex tasks effectively, efficiently, and at a greater scale than humans alone could achieve.

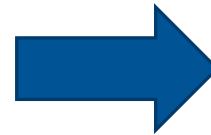


Evolution of AI

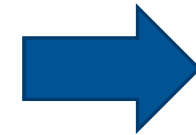
Analytic AI:
Machine learning



Generative AI:
Large language
models that generate
new content from
data



Agentic AI:
Making decisions
and acting
autonomously



Artificial
general
intelligence:
Performing at
human level

Generative AI: ChatGPT, Gemini, etc.

A computer system that learns from large data sets to create new content or data, such as answering questions, composing texts, and generating code.

Deep learning uses artificial neural networks to learn from data. They can be used to solve a variety of problems, including image recognition, natural language processing, and speech recognition.

Large language models focus on language, enabling tasks such as text generation, summarization, and translation.

Examples:

- For adjusters, obtaining information from phone transcripts and text notes to help manage a claim;
- For underwriters, using information from videos and other images to improve assessment of injury risks.



Generative AI for medical providers

ChatGPT: Relies on internet including non-experts with high hallucinatory rate.

- Tendency to provide text that looks plausible and convincing, but may be in error

Open Evidence: Curated with a focus on peer review literature.

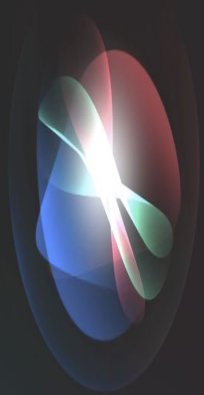
- Low error rate
- Should check references and evaluate how to weigh the value of studies
- Does not replace medical judgment, e.g., taking into account dose-response issues

Generative AI custom created by medical institutions, e.g., Workspace at MGB

- Carefully curated by your institution that provides standardized approaches
- May be tied to your electronic health record system

Current use in our daily lives

**Siri does more than ever.
Even before you ask.**



Analytic AI and generative AI is becoming common in our daily routines of life

- Voice assistants such as Siri and Alexa
- Analytic algorithms provide personal recommendation on platforms like Netflix and Amazon.
- E-commerce websites
- Google maps
- Only 30% of adults recognize that we are using generative AI in our daily lives
- More than 70% of adults believe that these ordinary uses of generative AI are useful to some degree

Use of generative AI by insurers

70-80% of insurers use generative AI in some capacity:

- Support for underwriting, claims processing and customer services to handle routine processes like data entry, invoice processing, and payroll.
- 32% of claims adjustors
- 46% of attorneys in large firms

Workers' compensation system may be slower in this technology adoption because:

- Smaller market share of insurance volume and smaller size of institutions
- Specialized services that differ from mainstream health care delivery, such as disability management
- Regulatory and liability concerns

AI value in claims processing

Enhances speed and accuracy

- Workflow enhancements may include claims monitoring, chatbots, call analysis, adjuster assistant, fraud detection, and data analysis
- Predictions of risk of litigation
- Improve communication

Focus on value-add tasks

- Continued need for human oversight and intervention
- Need for humans to handle complex claims and issues

Improves efficiency

- Automation leads to faster processing of low-complexity claims involving data entry and approval steps

Improving medical management

- Create proposed treatment plans
- Follow medical treatment guidelines

Use of generative AI by medical providers

30% of occupational health medical providers reported using by 2025

The single most important barrier to use:

- 25% Lack of trust
- 25% Lack of integration with electronic health record system
- 17% Inaccuracy of technology
- 13% Inability to access AI applications through organizational computer

Other concerns:

- Need for fact-checking
- Medicolegal risk
- Need to align AI solutions with occupational health medical providers type of practice
- Need for AI professional literacy
- Overreliance on AI and risk of professional deskilling
- Long term job security

AI value in health care delivery

Mainstream health care system is ahead of the workers' compensation system in technology adoption

Generative AI can provide benefits including:

- Summarize records
- Assist in clinical decision making
- Improve communication with patients
- Facilitate interface with insurers



Challenges in adopting AI

Accuracy

Biases and fairness

Data privacy and confidentiality

Perceived lack of empathy

Data ownership and data integration

Change management

Costs of implementation

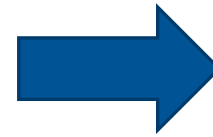
Increased demand for electricity

Evolution of AI

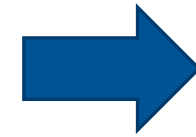
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The future of AI: Agentic and artificial general intelligence

Job substitution risks

Uncertainty of timeline

Need for digital self-sufficiency



Conclusions

- The current state is the recent adoption of generative AI.
- There is already widespread use of AI in clinical care and by insurance companies. Workers' compensation may lag behind the general health care and insurance systems in AI technology adoption.
- State regulation and litigation liability will become increasingly important along with transparency, data usage, potential bias, and environmental harm.
- Digital self-sufficiency will become an increasingly important issue for individuals and institutions

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Thank you!