# The Emerging Role of Technology in Disability Management



Liz R. Scott, Ph.D., M.Eng., M.B.A., M.Sc., B.Sc., RN, COHN-S, CRSP, CDMP

Principal/CEO
Organizational Solutions Inc.
Burlington, Ontario

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# Where Does Technology Fit In?





#### **PEOPLE**

**Expert Recovery Facilitators** with medical backgrounds who closely manage each case with empathy and care



#### **PROCESS**

**Proven processes and procedures** that support fast, safe return-to-work outcomes. KPIs documented and reported

**High-touch, responsive communications** to keep the individual positive and moving forward



#### **TECHNOLOGY**

Robust claims software solution to drive efficiencies

# **Emerging Role of Technology**

- Role in disability management (DM)
- What are the "rules"?
- Don't forget the person!

#### Benefits of AI in DM

Enhanced Efficiency: Al algorithms can automate processes involved in DM, such as data collection, analysis, and report generation. This streamlines workflows and reduces administrative burden

**Improved Accuracy:** Machine learning models can analyze vast amounts of historical data to identify patterns that may not be apparent to human assessors. This enables more accurate predictions regarding claim durations, return-to-work timelines and appropriate interventions

**Personalized Interventions:** Al-powered systems can consider individual employee characteristics along with their specific job requirements when designing rehabilitation plans or accommodations. This personalized approach enhances outcomes for disabled employees

Fraud Detection: By analyzing multiple data points across different claim files simultaneously, AI algorithms can detect suspicious patterns indicative of fraudulent activities or exaggerated claims

**Continuous Improvement:** As machine learning models continuously learn from new data inputs over time, they become increasingly refined at predicting outcomes accurately. This allows for ongoing improvement in DM practices



#### Traditional AI

- Relies on predefined rules and patterns to perform specific tasks
- Largely restricted to an approach based on use cases, optimizing niches of existing operating models rather than fundamentally transforming them
- Designed to fulfil a specific purpose in a defined context and strong reliance exists on labelled data, human-crafted features
- Examples include automated insights, predictive modelling, intelligent alerting and platforms like Google, YouTube, Netflix or Amazon

#### Polling Question: Which Images Are AI-Generated?

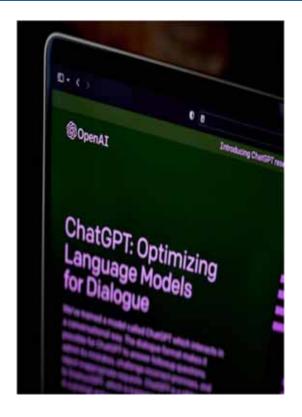








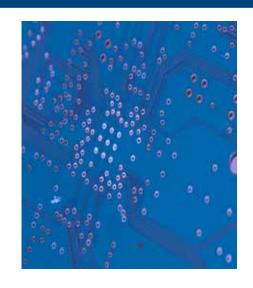
#### **Generative AI**



- Operates through deep learning models and advanced algorithms, often without the need for highly structured data input
- Catalyst for transforming and redesigning end-toend operating models by creating new content based on past inputs
- Examples: Google Bard or ChatGPT
- Future iterations of generative AI are expected to include prescriptive technology that not only predicts outcomes, but also suggests actions to be taken based on the data it analyzes

#### Future of DM: AI and Machine Learning

- Revolutionize DM by the implementation of AI and machine learning technologies
- Advancements will enhance efficiency, accuracy and effectiveness in assessing and managing disabilities





# The Power of Data



#### **Beware of the Shiny Penny**



#### What We Know—Where Claims Go Wrong

- Lack of management support/ unclear policy
- Claim initiation:
  - Wrong Dx
  - Incorrect or insufficient information/decision
  - Not connecting the dots
- Claims management
- Return to work



#### Imagine . . .

- ID missing fields
- ID Dx not matching with drugs
- ID no treatment
- ID mismatch of Dx
- ID lack of progress and potential next steps

# Al More Accurate Than Radiologist at Detecting a Rare Cancer

A study done by Mount Sinai Hospital in New York City demonstrated AI was 20% more effective than radiologist in detecting cancer





#### **Important Considerations**



- Don't use it for the wrong reasons
- Legal
- Privacy (PIPEDA)
- Fairness
- Individuality
- What if we don't want to know?

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#### **Legal Considerations**

- Rigorous process
- Code of conduct
- Data access requires responsibility— Transparency of algorithms

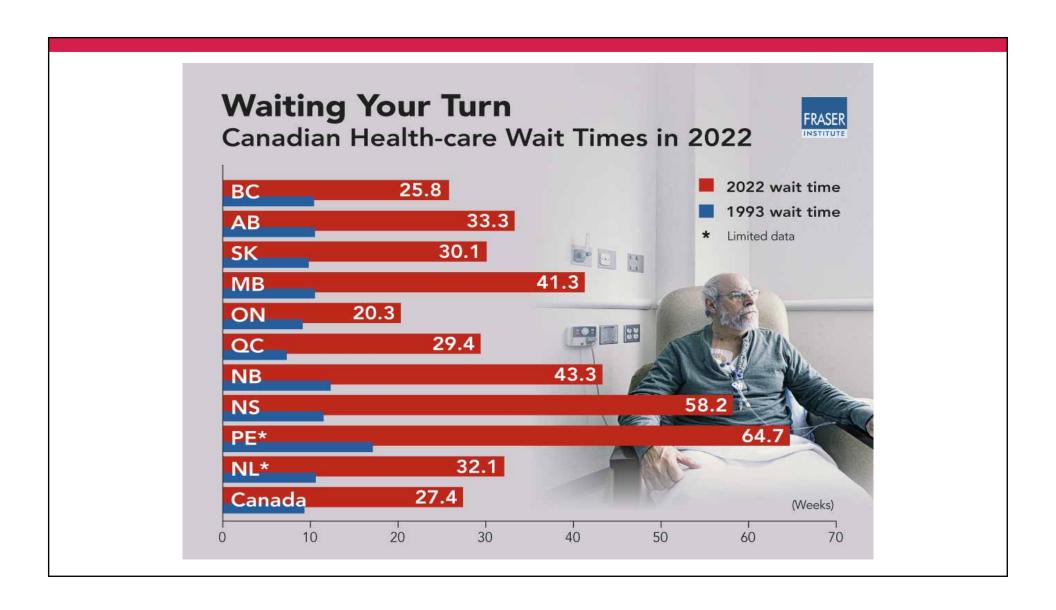
#### Predicting Return to Work

- Can machines accurately predict return-to-work timelines for disabled employees?
  - Machine learning models can analyze historical data—Including factors such as the nature of the disability, treatment plans and individual characteristics—To make accurate predictions regarding return-to-work timelines
- Predictions should be considered along with professional judgment and the "human condition"

#### We Are All Unique

Remember the person and the process

Remember the reality of the Canadian health care system



#### **Treatment Plan**

#### Addresses specific health issues

- Appropriate treatment and care
  - Evidence-based
- Prepare employee to return to work
  - Machine can't replace self-efficacy
- Help employee find new ways of thinking and behaving in the workplace



#### Key Takeaways

- The future of DM is set for transformation with the integration of AI and machine learning technologies
- These advancements offer enhanced efficiency, accuracy, personalized interventions, fraud detection capabilities along with continuous improvement opportunities in assessing disabilities across various jurisdictions within Canada
- Proceed with knowledge and precautions

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