

# Computerization of Work as a Factor in Occupational Health

## Presentation

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# Computerization of Work as a Factor in Occupational Health

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# Why is this important?

- High injury and disability rates
- Increasing number of disability claims for mental health issues (depression, stress, burnout)
- Chronic staff shortages
- Significant portion (30%+) of Canadian healthcare workers are aged 50 years or older



# Background

- Computerization in the Canadian healthcare workplace – present and future
- Changes to the nature of healthcare work



# Aims of the study

- To investigate if the implementation of electronic patient records, and other health care technologies, impacts the health of healthcare workers.
- To investigate practical methods to measure and or monitor these impacts.



# Methods

1. Interview frontline healthcare workers and health sector managers

2. Literature review

- Medline, CINAHL, Humanities and Social Sciences Index, ACM, etc.



# Results - Interviews

Interviews of frontline healthcare workers (physicians and nurses) and health sector managers:

- staff shortages and strained budgets make research participation difficult
- desire for alternative methods



# Results - Literature review

- Studies tend to focus on the technology
- Incidental reports of changes to work ecology
- Aside from studies which focus on ergonomic issues and VDT use, few studies set out to determine if there are health effects as a result of technological change in the healthcare workplace.





# Results – Unobtrusive methods

- Review of documents
- Employee health indicators
  - System logs
  - Direct observations
  - Targeted questionnaires & interviews



# Conclusion

- Healthcare systems are already strained and are facing imminent and rapid technological change.
- We find that the health effects of technology and the computerization of healthcare work has not been extensively studied and it is unclear if there are, or are not, occupational health effects.



# Conclusion

We have determined that there are a variety of unobtrusive methods which could be used to measure and monitor the relationship of technological change and occupational health in healthcare environments.

