



Absenteeism and Presenteeism Associated With Chronic Conditions in a Canadian Working Population

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Introduction

Cost-effectiveness guidelines recommend including work productivity losses in economic evaluations conducted from a **societal perspective**.¹

Comprehensive productivity loss estimates are currently **lacking** for a general working population. This **limits the ability** of researchers and decision makers to evaluate the incremental costs of health conditions and potential benefits of intervention, and **to allocate funds efficiently** to optimize population health.

Objectives

To generate population norms by estimating absenteeism and presenteeism associated with chronic conditions among a representative sample of the Canadian workforce.

Methods

Questions regarding work productivity loss were added to the **2022 Canadian Community Health Survey (CCHS)**.

Final study sample were:

1. Aged 15-75 years,
2. Working at a job or business as their main activity in the past 12 months,
3. Not “permanently unable to work”,
4. Having worked at a job or business in the past 3 months.

Work productivity loss outcomes measured in the 2022 CCHS:

Work Productivity Loss Outcome	Measurement Method	Recall Period
Absenteeism	1) Days absent from work	<ul style="list-style-type: none">• Past 7 days• Past 3 months
Presenteeism	1) Days worked while experiencing health problems	<ul style="list-style-type: none">• Past 7 days• Past 3 months
	2) 0-10 scale 3) Hours method (% of hour loss)	<ul style="list-style-type: none">• Past 7 days

A1) Days absent from work:

- In the [past 7 days], how many days in total have you been absent from work because of your own physical, mental or emotional health?

P1) Days worked while experiencing problems:

- In the [past 7 days], how many days did you work while experiencing any health problems?

P2) 0-10 scale method:

- Using a scale of 0 to 10, where 0 means “No effect on my work”, and 10 means “Not able to work”, how much did your health problems affect your work productivity...?

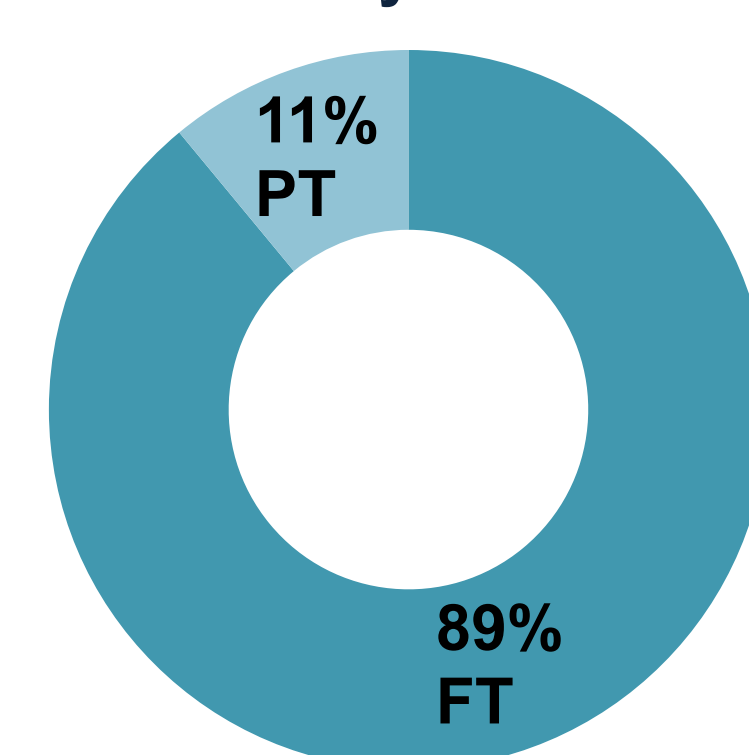
P3) Hours method:

- Over the past 7 days, how many hours did you work in total?
- How many hours would you have taken to complete the same work on the past 7 days if you had not experienced any health problems?

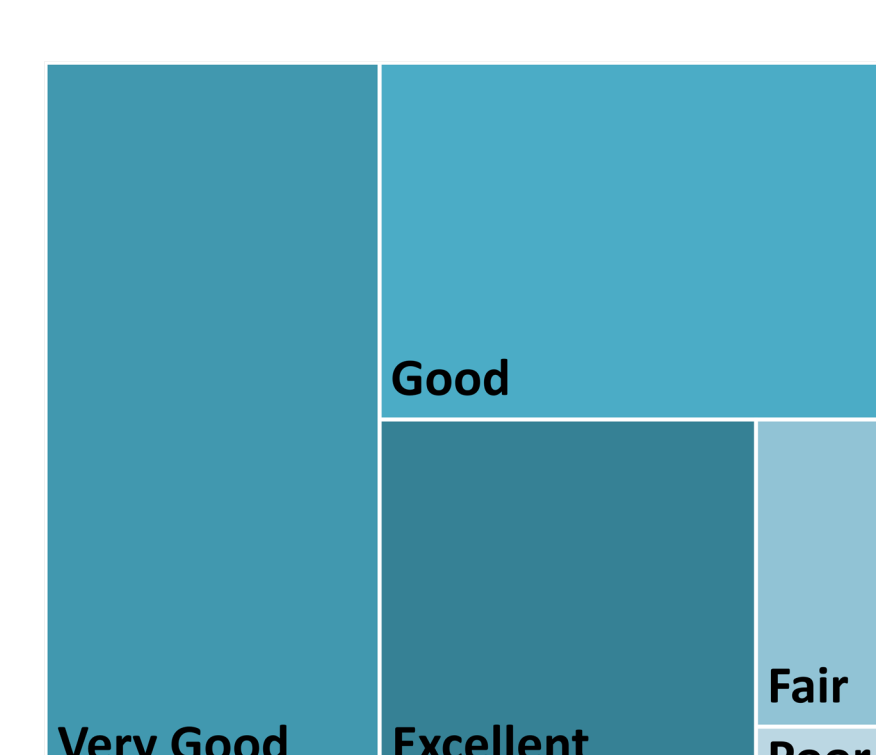
Results

A total of 9,148 respondents were included in the analysis.

Usual Weekly Work Hours



General Health Status



30-44

15-29



Females reported higher absenteeism and presenteeism than males

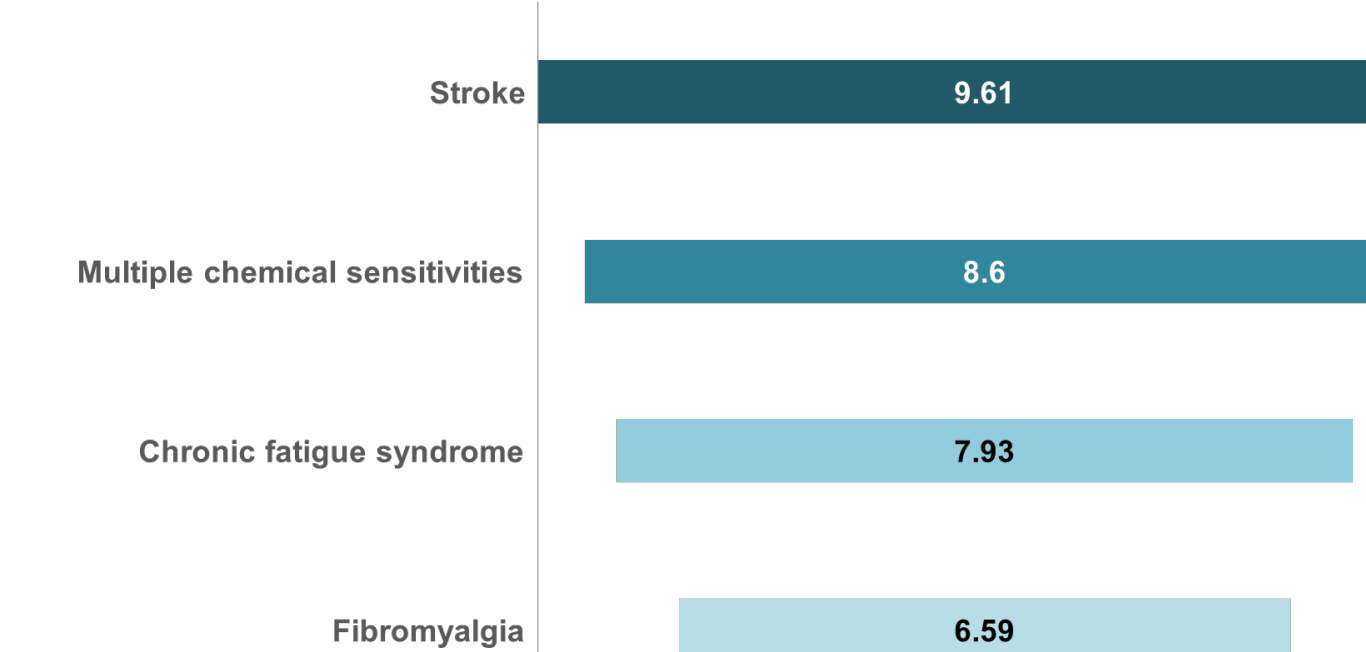
Highest presenteeism (0-10 **scale**)

Highest presenteeism (**Hours** method)

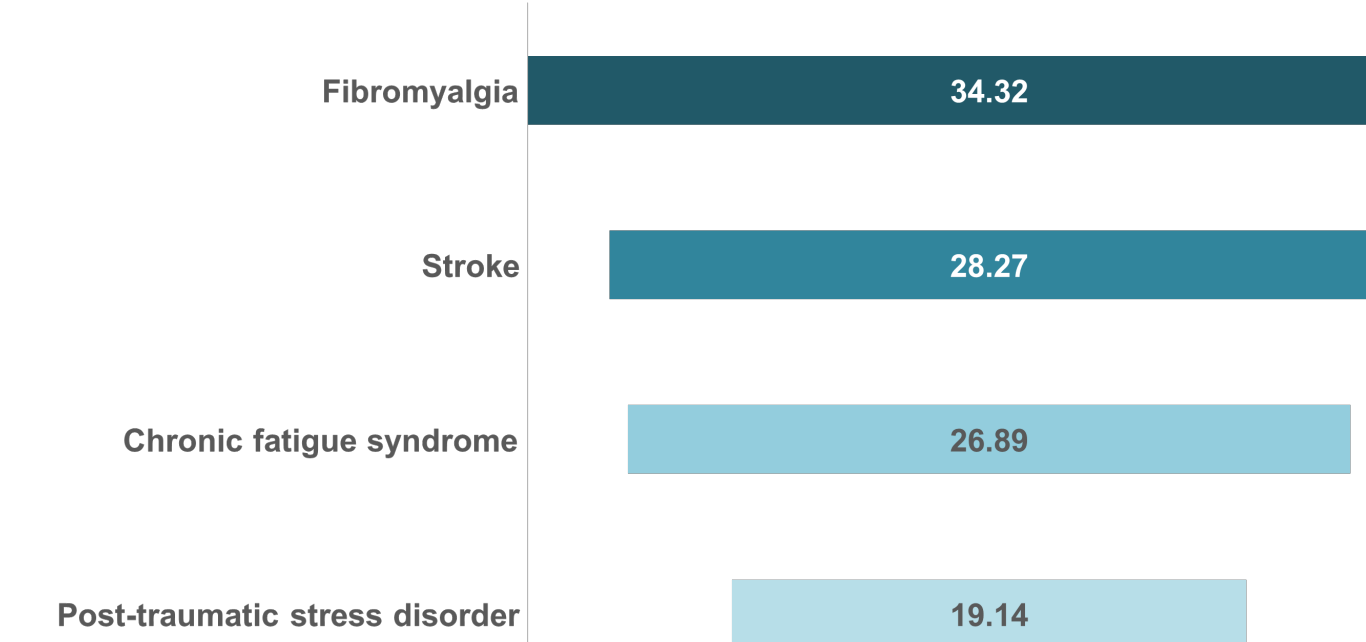
Stroke patients reported the highest absenteeism

Chronic fatigue syndrome patients reported the highest presenteeism (scale/hours method)

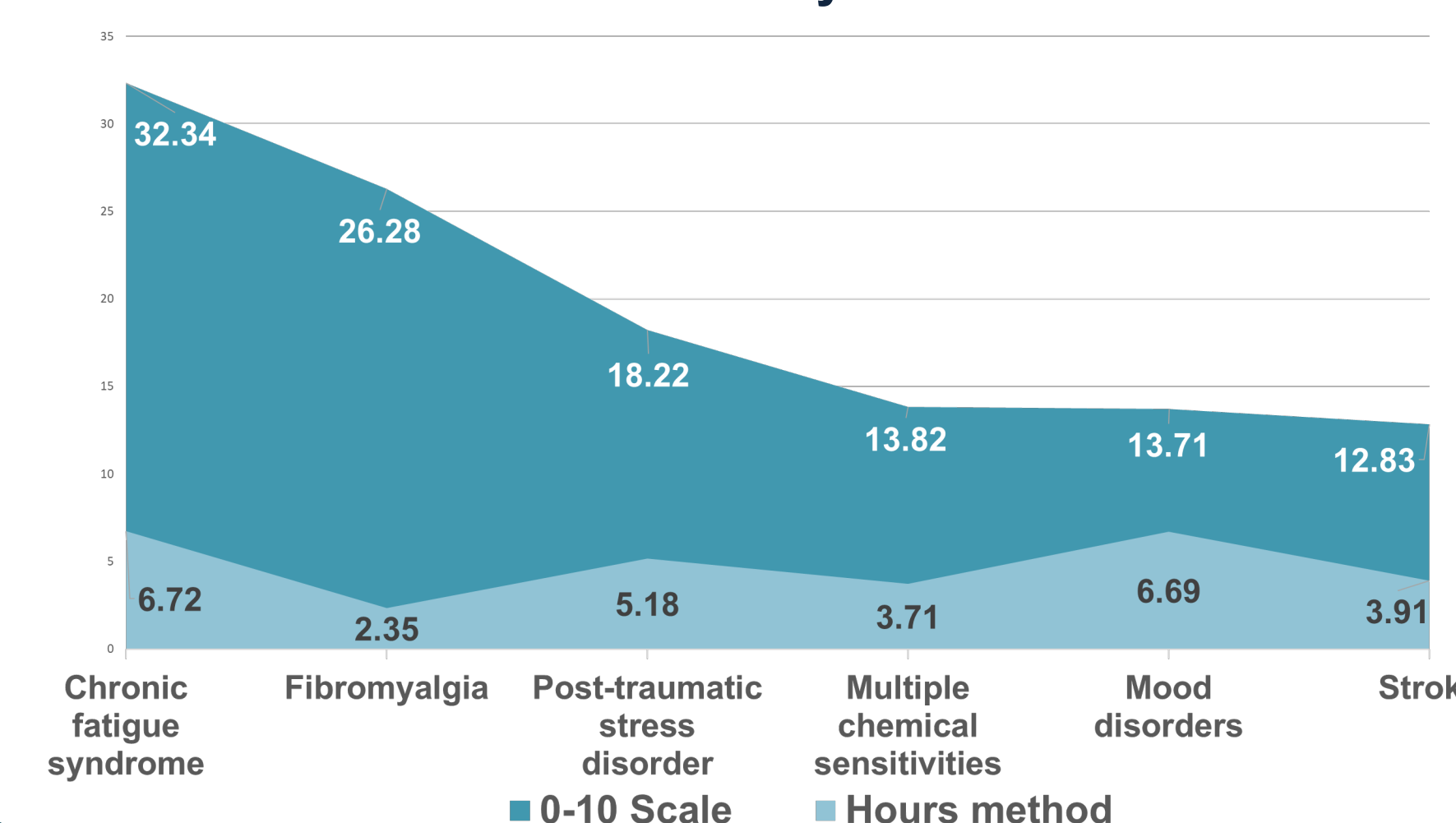
Highest absenteeism Past 3 months



Highest presenteeism Past 3 months



Past 7 days



Implications

1. Work productivity loss measured using different methods and recall periods can lead to **inconsistent results and interpretations**.
2. **Mapping** between presenteeism methods is needed.
3. Population norms for work productivity loss can **serve as benchmarks** for the outcomes of specific individuals against those of the general population.

Limitations

Our estimates could be influenced by:

- COVID-19 pandemic
- Reporting multiple conditions at once
- Self-reported measures vs. objective measures

Conclusions

Our **generated population norms** for work productivity loss can be used to **comprehensively** evaluate the costs of health conditions and benefits of care interventions. Our research **supports societal perspectives** in economic evaluations.

References

1. Second Panel on Cost-Effectiveness in Health and Medicine, in *Cost-Effectiveness in Health and Medicine* (eds. Neumann, P. J., Ganiats, T. G., Russell, L. B., Sanders, G. D. & Siegel, J. E.) 0 (Oxford University Press, 2016). doi:10.1093/acprof:oso/9780190492939.002.0007.

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