Impacts of Waiting to See a Specialist in Ontario: Are they equitable?

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Research Context

- Wait times are leading barriers to specialist care

- Waiting at least 4 weeks for specialty care
  - U.S.A. – 60%
  - Canada – 57%
  - Australia – 46%
  - United Kingdom – 40%
  - Germany – 23%
  - New Zealand – 22%

- Time spent waiting between referral to consultation has increased by 129% in past two decades
  - 1993 – 3.7 weeks 2012 – 8.5 weeks

Research Context

- 4 broad areas of research on access to specialist care

1. Comparison of wait times to accepted targets
2. Income as a determinant – likelihood of visit specialist and likelihood of finding it difficult to see a specialist
3. Physical access enabling use? (e.g. rural less likely to use services)
4. Determinants of referrals (patient, practitioner, and community-level factors)

- It is also important to consider the impacts of wait times on patients' lives and variations of these among the population

Research objectives

1. Examine the determinants of the likelihood that a patient reports that their life was affected by time spent waiting for a specialist consultation

2. Explore the range of ways in which patients' lives are affected

Theoretical Framework

- Andersen and Newman Framework of Health Services Utilization (1973)

- Access/Use determined by:
  - Predisposing factors
    - (e.g. age, sex, beliefs about health care)
  - Enabling factors
    - (e.g. personal resources, availability of services, geography, transportation)
  - Need factors
    - (e.g. real or perceived health status)

Data

- Canadian Community Health Survey (2010)
- Optional module specific to specialist care
  - Only Ontario opted in in 2010 (n = 21, 536; RR = 70%)
- Sample – all respondents who required a visit to a medical specialist for consultation/diagnosis for a new condition in the past 12 months (n = 2,516)

Methods

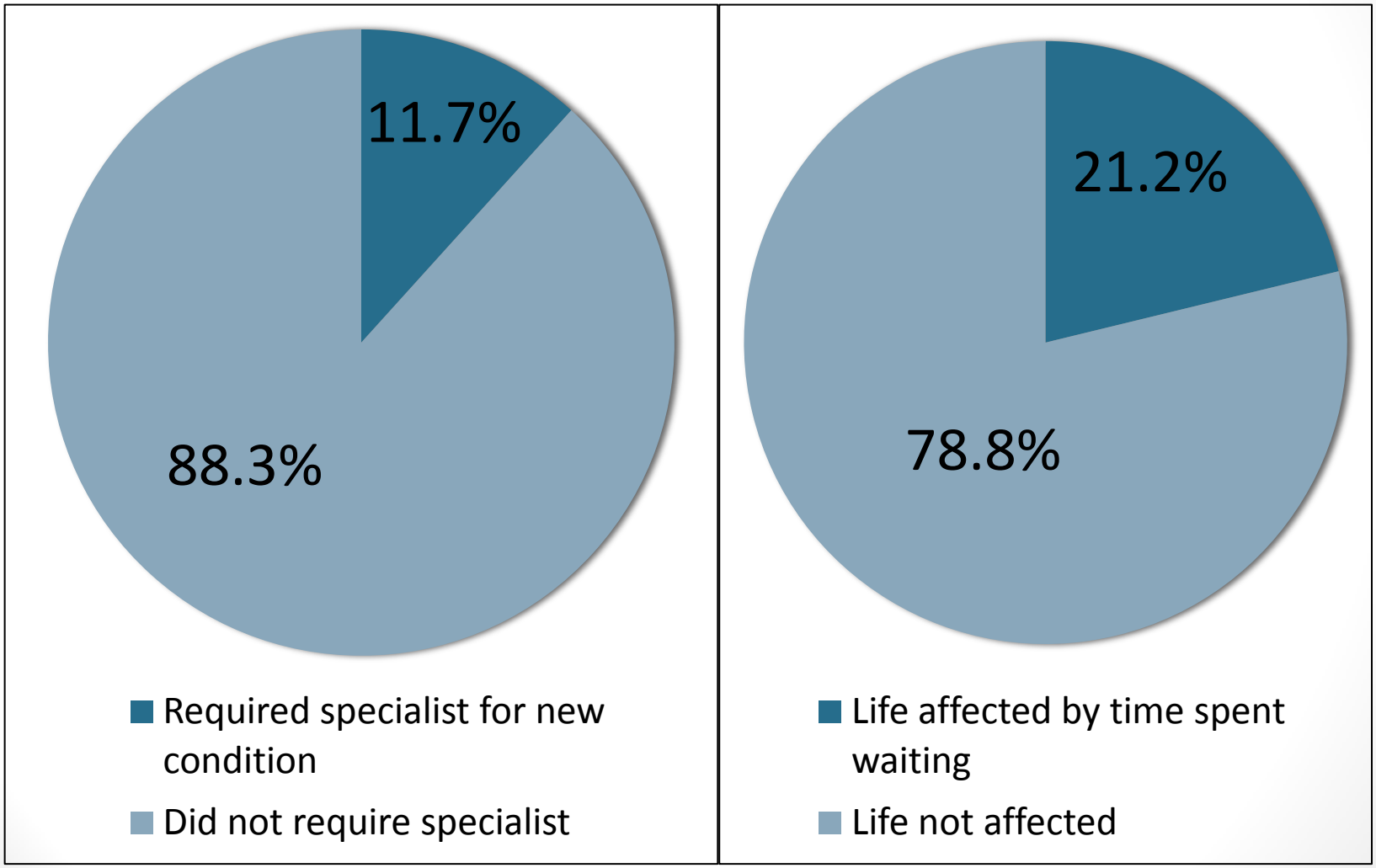
- Population-weighted multivariate logistic regression model
  - **Outcome variable:** “Do you think that your health, or other aspects of your life, have been affected in any way because you had to wait for this visit?”

- **Subsequent univariate analysis:** “How was your life affected as a result of waiting for this visit?”

Independent Variables

Determinant Type	Variable	Coding
Predisposing Factors	Sex	**Female**, Male
	Age	**Under 30**, 30-44, 45-59, 60+
	Marital Status	**No partner**, Partner
	Time since immigration	**Canadian Born**, Less than 10 yrs, More than 10 yrs
Enabling Factors	Education	**Less than high school**, High school
	Income	**Lowest income quintile,** 2nd, 3rd, 4th, 5th
	Visited specialist	**No – still waiting**, Yes
	Time spent waiting	**Less than 1 month,** 1-3, 3-6, 6+
	Opinion of wait time	**Acceptable**, Not acceptable
	Health Region	**City of Toronto**, Urban; Rural
Need Factors	Chronic conditions	**No chronic conditions**, 1+
	Self-rated health	**Good,** Poor

Accessing Specialist Care



Multivariate Logistic Regression – Life affected by WT

Factor	OR	95% CI	Significance
Male	0.74	(0.54, 0.99)	*
30-44 45-59 60+	1.67 1.49 0.91	(1.01, 2.80) (0.91, 2.50) (0.53, 1.58)	* N/S N/S
Partner	1.18	(0.84, 1.65)	N/S
Immigrant (<10 years) Immigrant (10+ years)	1.95 1.27	(1.07, 3.55) (0.90, 1.79)	* N/S
Quintile 2 Quintile 3 Quintile 4 Quintile 5	0.85 0.51 0.53 0.38	(0.53, 1.37) (0.32, 0.82) (0.33, 0.86) (0.23, 0.61)	N/S ** ** ***
High School	2.01	(1.17, 3.56)	*
Urban Rural	0.82 0.91	(0.56, 1.20) (0.56, 1.47)	N/S N/S
Visited specialist	0.24	(0.16, 0.37)	***
WT 1-3 months WT 3-6 months WT 6+ months	1.76 1.92 2.78	(1.21, 2.55) (1.23, 3.00) (1.54, 5.05)	** ** ***
WT – Not acceptable	11.28	*7.95, 16.19)	***
Self-rated health – Poor	1.47	(1.01, 2.13)	*
1+ chronic conditions	2.24	(1.60, 3.17)	***

Significance codes p<0.10='+'; p<0.05='*'; p<0.01='**'; p<0.001='***'

Predisposing factors

Factor	OR	95% CI	Significance
Male	0.74	(0.54, 0.99)	*
30-44	1.67	(1.01, 2.80)	*
45-59	1.49	(0.91, 2.50)	N/S
60+	0.91	(0.53, 1.58)	N/S
Partner	1.18	(0.84, 1.65)	N/S
Immigrant (<10 years)	1.95	(1.07, 3.55)	*
Immigrant (10+ years)	1.27	(0.90, 1.79)	N/S

Significance codes: p<0.05='*'; p<0.01='**'; p<0.001='***'

Enabling Factors

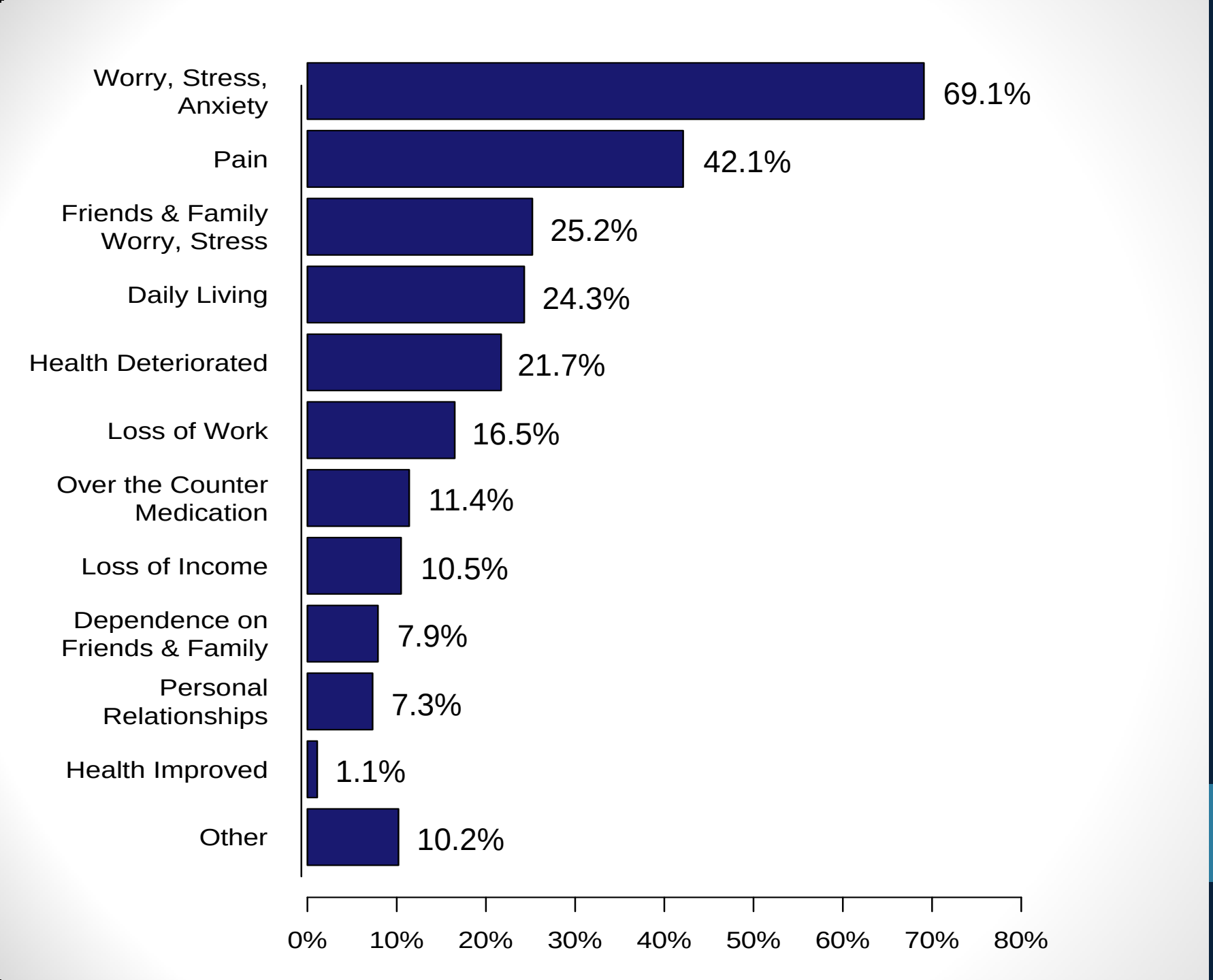
Factor	OR	95% CI	Significance
Income - Quintile 2	0.85	(0.53, 1.37)	N/S
Income - Quintile 3	0.51	(0.32, 0.82)	**
Income - Quintile 4	0.53	(0.33, 0.86)	**
Income - Quintile 5	0.38	(0.23, 0.61)	***
High School	2.01	(1.17, 3.56)	*
Urban	0.82	(0.56, 1.20)	N/S
Rural	0.91	(0.56, 1.47)	N/S
Visited specialist	0.24	(0.16, 0.37)	***
WT 1-3 months	1.76	(1.21, 2.55)	**
WT 3-6 months	1.92	(1.23, 3.00)	**
WT 6+ months	2.78	(1.54, 5.05)	***
WT – Not acceptable	11.28	(7.95, 16.19)	***

Significance codes: p<0.05='*'; p<0.01='**'; p<0.001='***'

Need Factors

Factor	OR	95% CI	Significance
Self-rated health – Poor	1.47	(1.01, 2.13)	*
1+ chronic conditions	2.24	(1.60, 3.17)	***

Significance codes: p<0.05='*'; p<0.01='**'; p<0.001='***'


Worry, Stress, Anxiety
69.1%
Pain
42.1%
Friends & Family Worry, Stress
25.2%
Daily Living
24.3%
Health Deteriorated
21.7%
Loss of Work
16.5%
Over the Counter Medication
11.4%
Loss of Income
10.5%
Dependence on Friends & Family
7.9%
Personal Relationships
7.3%
Health Improved
1.1%
Other
10.2%
0%
10%
20%
30%
40%
50%
60%
70%
80%

Conclusions

- Wait times for specialist care are a policy priority, but the impact of wait time reductions is illusory if inequities underlie their impacts on patients
  - Potential physical, psychosocial and financial consequences in and of themselves
  - Contribute to negative patient experiences with the healthcare system
- Importance of the CCHS for continued routine collection of access data throughout Canada

Future Directions

- Type of specialist
- Unpacking expectations of the health care system
- A problem of supply?
- How do different ***impacts*** vary by subpopulation groups?

Thank You

Questions?

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