

Out-of-pocket expenditure and foregoing healthcare among people with chronic conditions

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Context

The Bureau of Health Information in NSW

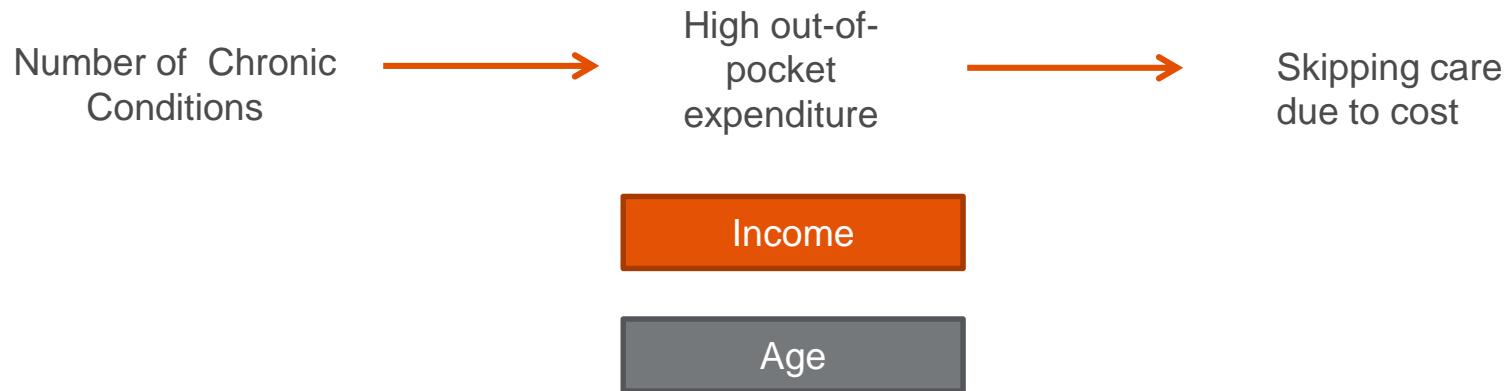
- core function to benchmark healthcare performance of NSW with comparable health systems
- partner on the Commonwealth Fund International Health Policy Survey
 - secondary analysis was conducted to explore out-of-pocket costs for Australians with chronic conditions, and whether cost acts as a barrier to care
- Upcoming in the Australian Journal of Primary Health: *Out-of-pocket healthcare expenditure and chronic disease – do Australians forgo care due to the cost?*

Questions

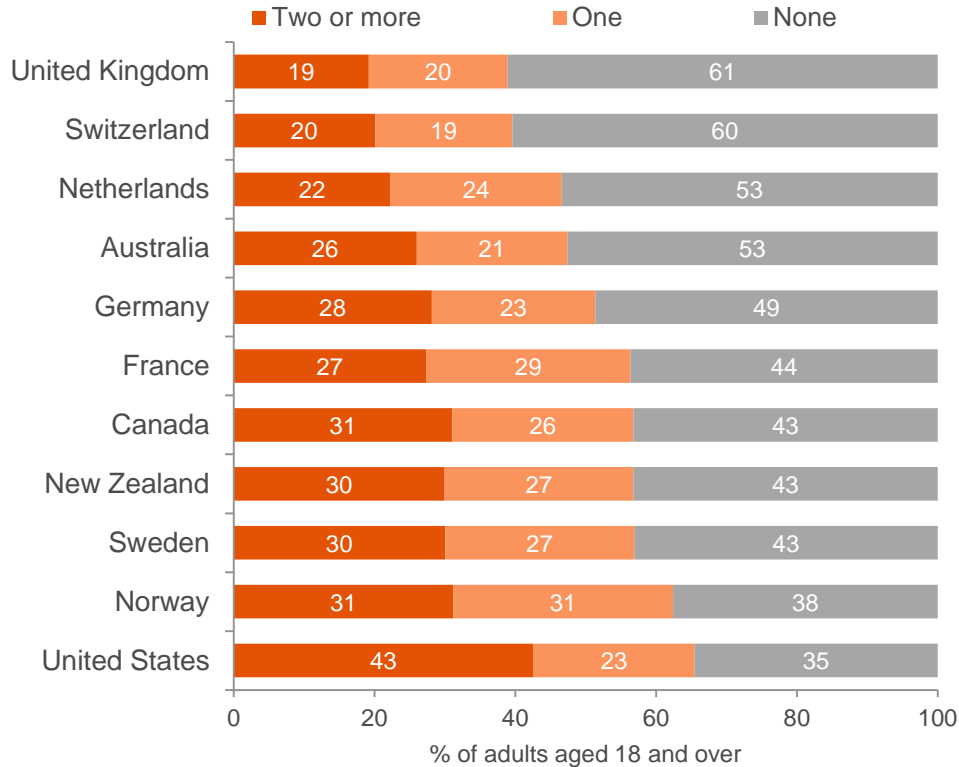
- Are people with more chronic conditions more likely to have high out-of-pocket healthcare expenditure?
- Are both higher expenditure and chronic conditions associated with skipping care due to cost?
- How do results compare internationally?

Data Sources and Methods

- 2013 Commonwealth Fund International Health Policy Survey of Adults
 - 1000 to ~5000 respondents across countries
 - response rates from 11 - 33%
- Cross sectional analysis: 2 sets of logistic regression models within countries



Chronic conditions

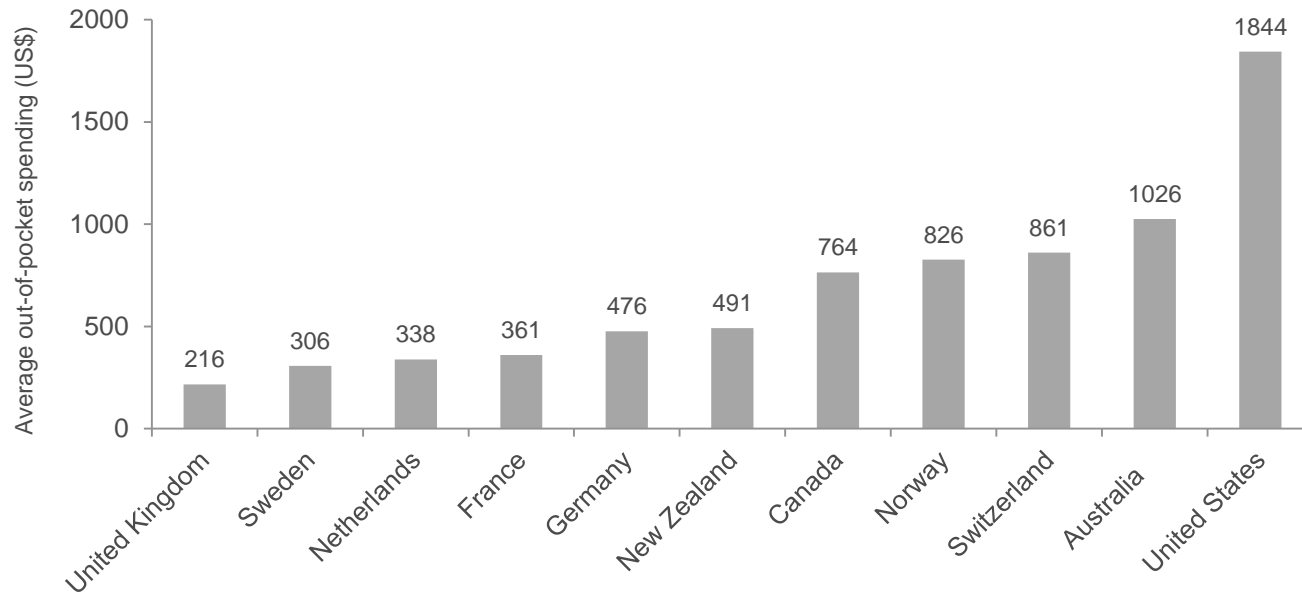


Have you ever been told by a doctor you have :

1. Hypertension or high blood pressure
2. Heart disease, including heart attack
3. Diabetes
4. Asthma or chronic lung disease such as bronchitis, emphysema or COPD
5. Depression, anxiety or other mental health problems
6. Cancer
7. Joint pain or arthritis
8. High cholesterol

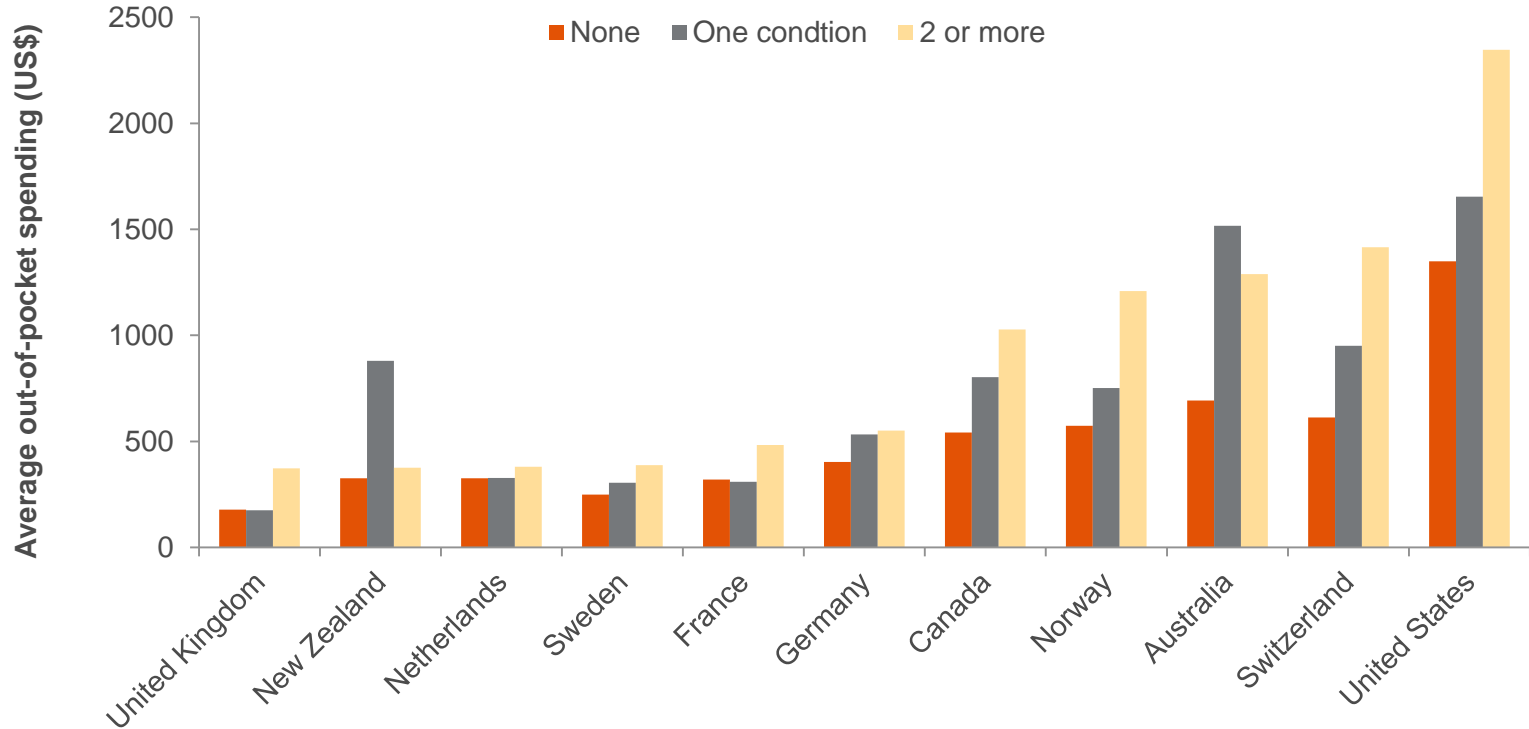
Out-of-pocket spending on healthcare

In the past 12 months, about how much have you and your family spent out-of-pocket for medical treatments or services that were not covered by Medicare or private insurance?



Notes: Estimates are subject to recall error, and do not include costs of insurance. Analysis based on simplifying assumption attributing spending to individuals. For most countries these estimates align well with OECD administrative data estimates (Mossialos et al. International Profiles of Health Care Systems, 2014 where estimate for average cost per capita in Canada was \$690 US adjusted for costs of living). Canadian estimates based on the survey of household spending show higher out-of-pocket costs that also include the cost of insurance (Sanmartin et al. 2014)

More chronic conditions, higher out-of-pocket expenditure?



Note: Sample size in all groups ~200 or more, in Canada ~1,300+.

Chronic conditions and high out-of-pocket expenditure

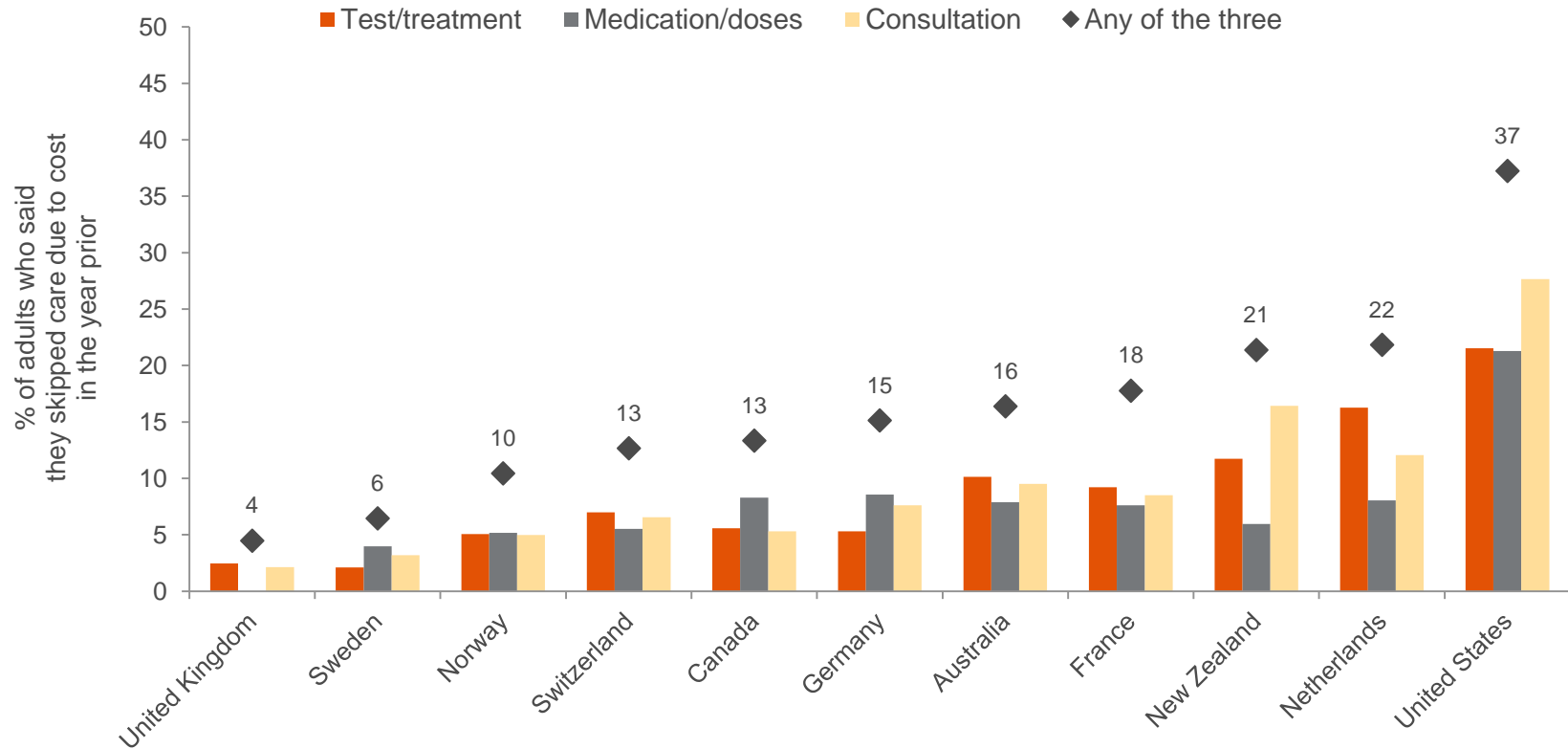
- People with chronic conditions are significantly more likely to report \$1,000+ (US) in expenditure before and after adjusting for income and age
- Age and income associations depend on the country of analysis

		Australia (n=1,988)	Canada (n=5,257)	United States (n=1,944)	Switzerland (n=1,254)
Adjusted odds of spending \$1000 or more out-of-pocket on healthcare	Compared to people aged 18 to 45				
	46 to 64	1.97*	1.19	1.55*	1.23
	65+	1.30	1.06	1.01	0.88
	Compared to above-average income				
	Average	0.36*	0.67*	0.40*	0.94
	Below-average	0.36*	0.82	0.43*	0.83
Compared to people with no conditions					
One condition	3.91*	1.43*	1.35	1.35	
2 or more	3.27*	1.98*	1.84*	3.04*	

*p<0.05

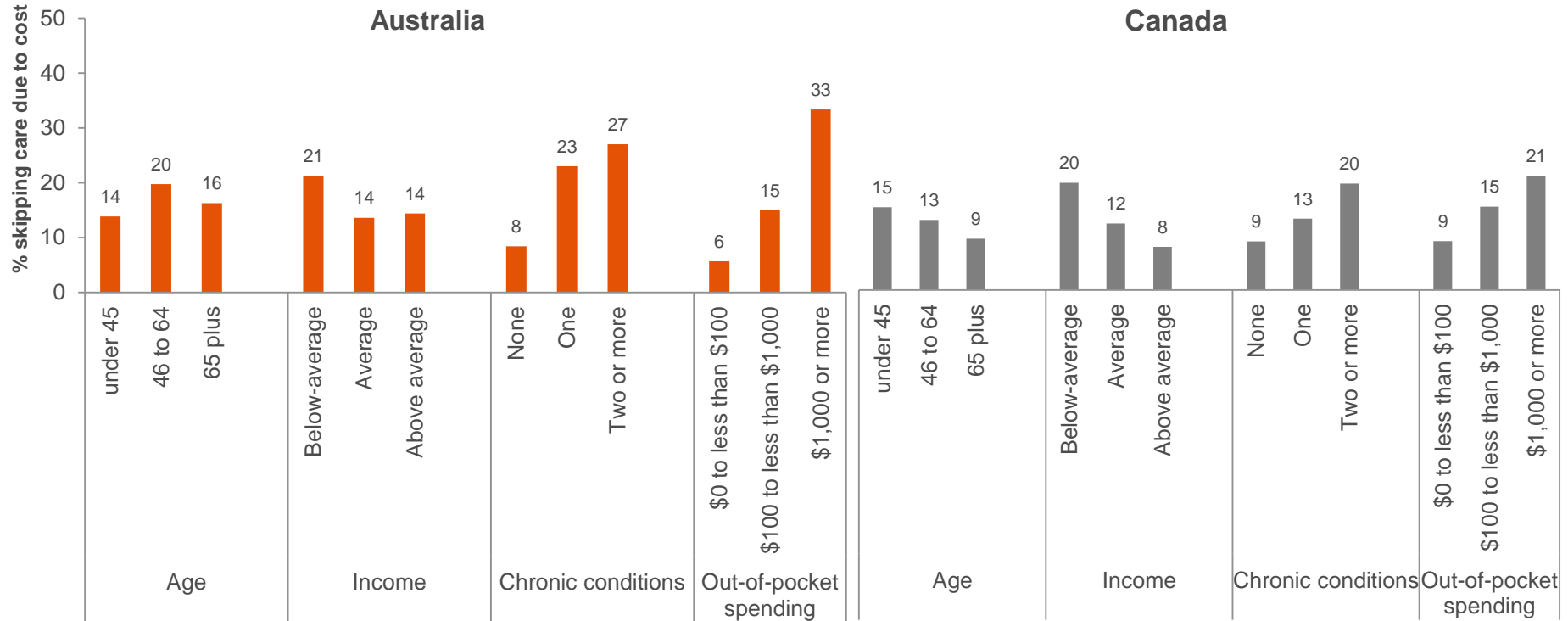
Missing values for out-of-pocket costs excluded (2-3% in Canada and the US, 11% and 16% in Australia and Switzerland)

Foregoing care due to cost



Question wording: *During the past 12 months, was there a time when you: i) did not fill a prescription for medicine, or you skipped doses ii) had a medical problem but did not visit a doctor iii) skipped a medical test, treatment, or follow-up recommended by a doctor because of the cost?*

Factors associated with foregoing care due to cost



Factors associated with skipping care due to cost

- The presence of chronic conditions and spending of \$1000+ appear to be significantly associated with foregoing care due to cost regardless of income
 - relationships differ by country
- People 65+ are less likely to skip care due to cost across all available countries

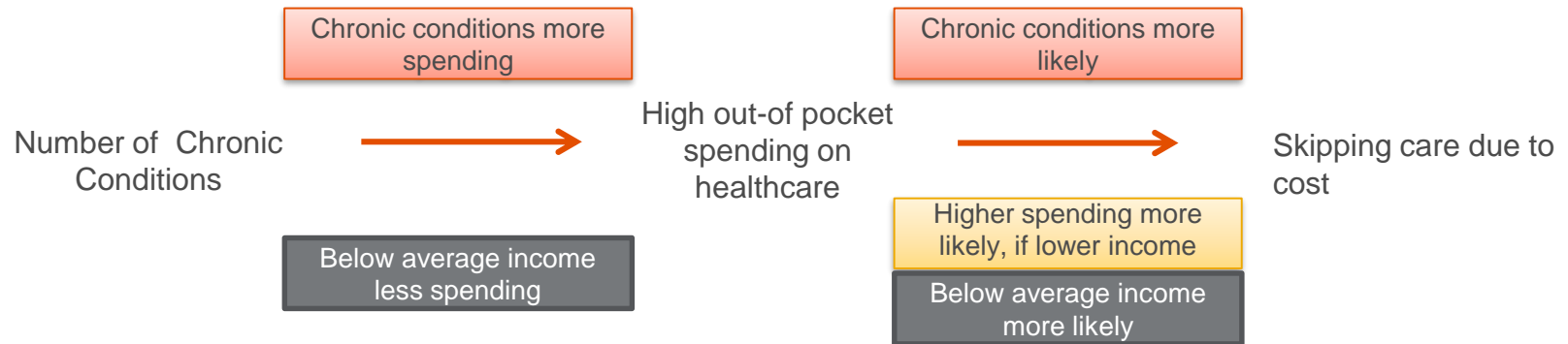
Adjusted odds of skipping care due to cost

		Australia (n=1,988)	Canada (n=5,257)	United States (n=1,944)	Switzerland (n=1,254)
Compared to people aged 18-45	46 to 64	0.66*	0.53*	0.63*	0.42*
	65+	0.40*	0.25*	0.17*	0.23*
Compared to above-average income	Average	1.65*	1.69*	2.20*	0.95
	Below-average	2.18*	2.90*	3.55*	2.61*
Compared to people with no conditions	One condition	2.38*	1.70*	1.84*	2.34*
	2 or more	3.50*	3.28*	2.65*	2.19
Compared to people spending \$0-\$100	\$100 to \$1,000	2.65*	1.81*	2.21*	0.94
	\$1000+	7.33*	2.52*	3.32*	1.17

*p<0.05. Note: (Ronksley et al 2012) provide comprehensive analysis on the relationship between chronic conditions and unmet need from large national survey in Canada.

Conclusion

- Chronic conditions and higher out-of-pocket expenditure, which people with conditions are more likely to have, are associated with skipping care due to cost



- The impact of increased out-of-pocket costs both in terms of foregone care and on the disposable income of people chronic conditions with lower incomes is of relevance to policy and program planning
- Further analysis needed to understand causal pathways, interactions with other factors (income and age), and the impact of skipping care on both the patient's health and the health system use

Thank you