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Contrasting Inequalities: Comparing Correlates of Health in Canada and the United States

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Contrasting Inequalities: Comparing Correlates of Health in Canada and the United States

by

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Abstract

Comparative health studies consistently find that Canadians on average are healthier than Americans. Comparing health status within and between Canada and the United States provides key insights into the distribution of inequalities in these two countries. Canada's universal health care insurance system contrasts with the mixed system of the United States: universal care for seniors, private health care insurance for many, and no or intermittent coverage for others. These countries are also notably different in the extent of income and racial/ethnic inequalities. It is within this context that this study compares the relative strength of the relationships between social, economic, and demographic factors (sex, age, marital status, income, education, country of birth, and race/ethnicity) and health status in Canada and the United States. Evidence drawn from the 2002-2003 Joint Canada/United States Survey of Health reveals that the correlations between these factors, above all country of birth and race/ethnicity, and health are relatively stronger in the United States, reflecting differences in health care access and racial/ethnic-based inequalities between the countries. The study findings are suggestive of the effects of universal access to health care and more equitable distribution of other social resources in protecting the health of the general population.

JEL Classification: I11; I18

Key Words: Self-reported health; United States; Canada; Health insurance; Income; Race/ethnicity; Age; Sex.

Résumé:

Les études comparatives sur la santé révèlent de manière consistante que les Canadiens sont en moyenne en meilleure santé que les Américains. Comparer l'état de santé de la population générale au sein du Canada et entre le Canada et les Etats-Unis nous fournit des éléments clés permettant de mieux comprendre la distribution des inégalités dans ces deux pays. Le système universel d'assurance de santé du Canada diffère du système hybride des Etats-Unis : soin universel pour les seniors, assurance de santé privée pour un grand nombre d'individus, et absence de couverture ou couverture irrégulière pour d'autres. Ces deux pays sont également notablement différents concernant les inégalités liées au revenu et à l'appartenance ethno raciale. C'est dans ce contexte que cette étude compare l'importance relative des rapports entre les facteurs sociaux, économiques, et démographiques (sexe, âge, état civil, revenu, éducation, pays de naissance, et appartenance ethno raciale) et la santé des individus au Canada et aux Etats-Unis. Les analyses basées sur l'Enquête conjointe Canada/États-Unis sur la santé, 2002-2003, révèlent que les corrélations entre ces facteurs, en particulier le pays de naissance et l'appartenance ethno raciale, et la santé sont relativement plus fortes aux Etats-Unis, reflétant les différences à l'accès aux soins de santé et les inégalités ethno raciales entre ces deux pays. Les résultats de cette étude renforcent l'idée que l'accès universel aux soins de santé ainsi qu'une distribution plus équitable des autres ressources sociales protègent la santé de la population générale.

Introduction

Canada and the United States share much in common. They also differ in some important ways. Comparative health studies consistently find that Canadians on average are healthier than Americans (Evans and Roos 1999). They are advantaged in rates of mortality (Boyle Torrey and Haub 2004, Kunitz and Pesis-Katz 2005, Manuel and Mao 2002), cancer survival (Gorey et al. 2000, Gorey et al. 1997), mobility limitations (Sanmartin et al. 2004, Sanmartin et al. 2006), and obesity, diabetes, hypertension, and respiratory disease (Lasser et al. 2006), and are more likely to both receive when needed and utilize health care services (DeCoster et al. 1997, Katz et al. 1996, Sanmartin et al. 2006). Differences in health-related experiences between Canadians and Americans are largely attributed to health care access and levels of social inequalities, namely income and race/ethnic-based disparities (Boyle Torrey and Haub 2004, Evans and Roos 1999, Kunitz and Pesis-Katz 2005).

Canada's publicly funded health care system provides universal coverage for almost all medically necessary services provided in hospitals and by physicians. These services are paid for by “single-payer” provincial and territorial insurance schemes without cost to the individual at the point of service. By contrast, an estimated 15.7 per cent of the U.S. population (or 45.8 million individuals) had no health insurance coverage (i.e., those without at least partial hospital and doctor insurance) in 2004 (PNHP 2005, citing US Census Bureau data). Some of the uninsured do receive limited “uncompensated” health services, especially when they appear at hospital emergency departments. Most of the rest (or about 63% of the U.S. population) are covered by

private, usually employer-based, insurance. The remainder is covered primarily by Medicare, a program largely financed from the public purse for the elderly and the severely disabled, or by another public program, Medicaid, which is for the poor. (See the Appendix for more information).

The United States also has a more unequal distribution of income. The authors' calculations from the Joint Canada/United States Survey of Health (JCUSH) show a Gini coefficient for annual household income (adjusted for household size) of 0.34 in Canada as against 0.41 in the United States.[1] Differences in the distribution of income have been linked to the overall poorer health of Americans relative to Canadians (Ross et al. 2000, Sanmartin et al. 2003). This health disadvantage also reflects the distribution of health by race and ethnicity. Research shows that whereas visible minorities tend to have health outcomes that are similar to, or even better than, the general population in Canada (Prus and Lin 2005, Wu et al. 2003), minorities have much poorer health in the United States. Much of the U.S. research has centered on differences between white and Black/African Americans. Black/African Americans have higher rates of morbidity, disability, and mortality compared to white and most other racial groups in the United States (Feagin and McKinney 2003, Ferraro and Farmer 1996, Kunitz and Pesis-Katz 2005). SES, cultural, and behavioural factors, as well as access to and use of health care services, are often used to explain these racial/ethnic differences (Hummer 1996).

Objectives

It is within the context of contrasting health insurance coverage and inequality levels that this study compares the relative strength of the relationships between key social, economic, and demographic factors -- sex, age, marital status, income, education,

country of birth, and race/ethnicity -- and health status in Canada and the United States. We also examine the extent to which access to health care affects health status in the United States. It is projected that these relationships will be relatively weaker in Canada given its more equitable distribution of social resources.

Methods

Data

U.S.-Canada comparative research on health systems, health care, and health status has often encountered problems because of the lack of comparable data. The Joint Canada/United States Survey of Health (JCUSH) was conducted in 2002-2003 to facilitate such comparative research. Based on a stratified multi-stage probability sampling design, the JCUSH collected information on health and illness, use of health services, correlates of health, and demographic and economic characteristics of 8,688 individuals aged 18 years or older living in private residences in the ten Canadian provinces and the 50 U.S. states and the District of Columbia. Sample weights were used in all analyses. More information on the methodology of the JCUSH is provided in the Appendix.

Measures

Table 1 provides an overview of the study variables. Self-reported health (SRH) provides the measure of health status. It is based on the question: “In general, would you say your health is: excellent, very good, good, fair, or poor?” SRH is dichotomized here into “positive” health perception (good, very good, or excellent) and “negative” health perception (poor or fair). (See the Appendix for more information).

Table 1 about here

Marital status is collapsed into married (including common-law/partner) and other. Age is divided into three groups: 18-44, 45-64, and 65+. In addition to examining their effects on health, age and sex are used as stratifying variables in the analysis. This approach allows us to detect age and sex stratum-specific effects of the other variables used in the study while avoiding multi-collinearity problems associated with modeling statistical interactions using multiplicative terms.

Income is defined as total annual household income before taxes and deductions. We operationalize income in three ways. First, equivalized household income (divided by the square root of household size) was collapsed into age- and sex-specific quintiles for each country.[2] Second, we calculated poverty rates, defined as the proportion of the sample with less than one-half median equivalized household income. Both quintile and poverty indexes provide a relative measure of income. Third, we compute an absolute measure of income based on equivalized household income of each respondent in U.S. dollars using 2002 U.S.-Canada purchasing power parity. These data are grouped as follows: <$20,000, $20,000-39,999, and $40,000+. A category for missing income data was created for each country and used in the analyses.

The JCUSH measures education by asking respondents about their highest level of school completed or degree received, and is grouped into three categories: 1) less than high school, 2) high school diploma (or equivalent), trades certificate, vocational school, apprenticeship training, community college diploma, and 3) bachelor's degree (including associates degree) or higher.

Country of birth is dichotomized into: foreign- or native- (Canada or U.S.) born. The data as released do not permit a detailed analysis of race and ethnicity in Canada

(white and other) but do provide some detail for the United States: American Indian or Alaska Native, Asian, Black/African American, Hispanic or Latino, other (including Native Hawaiian or Pacific Islander and multiple race), and white.

We measure health care access as having health insurance or health care plan coverage to help pay for hospital and doctor services. This item applies only to U.S. respondents under the age of 65 since U.S. seniors and Canadians have universal coverage. It is divided into two categories: those who had coverage at the time of the interview and the 13.3 per cent of Americans ages 18-64 who did not have coverage at the time of the interview.

Results

Sex, Age, and Marital Status

The effect of sex on self-reported health is stronger in the United States (Table 2). Canadian women, especially those who are married, also report lower rates of poor health compared to their American counterparts. Youth provides a safe-guard against poor health in both countries, however rates of negative health are lower among Canadians during early and middle adulthood. The fact that health status convergences in old age is suggestive of the protective effects of universal health care coverage.

Table 2 about here

Income and Education

There is a strong relationship between income and health in both countries (Tables 3 and 4). The lowest income seniors have the poorest health, especially so in the United States. It is also evident that ill health sets in among low income young and middle aged adults in the United States. Canada cannot be exempt on this point. Although

at lower rates, low income Canadians have high levels of ill health at middle age, with signs already evident at the youngest age. In the end, universal access to health care alone does not eliminate the income gradient in health, however it does appear to moderate it to some extent (e.g., the income quintile and income group gradient for women is not as steep in Canada).

It is interesting to note that in Table 3 the self-reported health of those with missing income data is very similar to those in the second income quintile. Missing income data are also more prevalent in the U.S. sample, and may partly reflect relatively lower levels of trust and social cohesion. This in turn may have a negative impact on the health of the overall U.S. population.

Tables 3 and 4 about here

Low education also increases vulnerability to poor health (Table 5). The education effect is stronger in the United States though. Americans with low and middle levels of education, most notably women, have significantly poorer health than their Canadian counterparts.

Table 5 about here

Country of Birth and Race/Ethnicity

The health experience of Canadian immigrants is strikingly different from their American counterparts (Table 6). Rates of negative health are similar for foreign- and native-born Canadians, whereas foreign-born persons have significantly higher levels of ill health in the United States.

Table 6 about here

Within Canada there is also little difference in the distribution of negative health by race/ethnicity, at least as revealed by this survey. The only distinction available in the JCUSH is between the white and other populations, and there is no significant difference in per cent with negative health between these groups (Table 7). In the United States there are strong associations between race/ethnicity and health. Compared to white populations most age and sex subpopulations of American Indians/Alaska Natives have significantly higher rates of negative health, as do all age-sex groups of Blacks/African Americans, Hispanics/Latinos, and others. Only Asian men have a lower rate of ill health relative to whites. Comparing across the countries, these data further reveal that Canadians and white Americans report very similar low levels of negative health.

Table 7 about here

In the end, the health-related experiences of non-white and foreign-born persons are very different in the two countries. The incidence of ill health is similar for whites and non-whites and native- and foreign-born populations in Canada, which also has proportionately more immigrants than the United States. By contrast, there are significant and independent effects of country of birth and race/ethnicity in the United States --- both persons who are foreign-born and persons of American Indian/Alaska Native, Black/African American, and Hispanic or Latino origin, the vast majority of whom are U.S. born, experience higher rates of poor health compared to native-born and white persons.

Health Insurance Coverage

The data in Tables 8 and 9 again suggest, albeit more directly, that the U.S. health care insurance system plays an important part in shaping the distribution of health. Rates

of negative health vary significantly between the insured and uninsured in the United States, yet with the exception of women there are no significant differences between all Canadians and insured Americans (Table 8). The data also show that the health of immigrants is tied to health care access, as American immigrants with insurance have rates of poor health that are comparable to Canadian immigrants while the uninsured experience significantly higher rates (Table 9).

Tables 8 and 9 about here

Conclusion

The findings suggest that universal health care coverage, coupled with greater sharing of other economic and social resources, in Canada contributes to its advantages in health --- both in terms of overall health status and levels of health inequalities. When controlling for health care access, as well as racial/ethnic disparities in health, in the United States, these advantages by and large disappear. Overall, Americans are not as healthy and experience greater disparities in health, which reflect incomplete and unequal access to health care and higher levels of income and racial/ethnic-based inequalities.

If researchers are to further understand the underlying social basis of U.S.-Canada differences in health, much greater attention to appropriate variables is required. The JCUSH is a rich source of data, and gathered potentially important class-based data on debt, mortgages, homeownership, and self-employment. None of these data were released to users who could have produced more detailed analysis of inequalities. Equally limiting is the failure to ask basic questions relevant to the organization of work such as occupation, industry, and supervisory status. Language issues were also ignored and race/ethnic variables limited for Canada. The most basic spatially-based questions about

city and province or state of residence also were not asked. Yet as Ross et al. (2000) and Sanmartin et al. (2003) find, area of residence contributes to health differences between and within Canada and the United States.

These are all serious oversights and limitations that will have to be overcome before health and a more nuanced framing of inequality can be examined together in a comparative context. We think that the results that we have been able to produce from the JCUSH, despite its limitations on social variables, makes the case for additional, more developed comparative research on sex, age, social class, race/ethnicity, and health status.

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Appendix

Health Care Insurance: In Canada almost all medically necessary services provided in hospitals and by physicians are paid for by provincial and territorial insurance schemes without direct cost to the individual at point of service (a provision otherwise known as “first-dollar” coverage). The “medicare” scheme, as it is popularly known, is officially governed by the provisions of the *Canada Health Act, 1984* and by complementary provincial and territorial legislation and regulations (for example, in Ontario the program is known as OHIP—the Ontario Health Insurance Plan; in Quebec, Régie de l'assurance maladie du Québec—RAMQ). The *Act*’s famous five principles, which are the criteria provinces and territories must meet in return for federal government transfers, include universality (everyone in the province or territory must be covered) and accessibility (there must be no financial or other barriers to receiving health care when it is needed). Armstrong and Armstrong (1998) provide a more detailed examination of Canadian medicare organized around the five principles, which also include portability, comprehensiveness, and public administration.

Concentrated as it is on hospital and physician services, the Canadian system has many significant gaps. It provides only spotty coverage for prescription drugs or physiotherapy administered outside hospital, for eye care (other than by ophthalmologists), for long-term residential care, or for home care. And it provides almost no coverage for dental care or for alternative/complementary health care. There is federal/provincial agreement in principle to extend drug and home care coverage, but progress has been slow to date.

The U.S. health care insurance system by contrast is a mixed system of public health care insurance for certain groups of individuals (e.g., seniors) and private insurance for many others. Private health insurance schemes typically involve premium contributions from both employer and employee, as well as various co-payments (user fees, deductibles, etc.) for service. They also feature limitations on the services covered**,** with the result that many more U.S. residents may be said to be under-insured. One conservative estimate places the average number of under-insured aged 19-64 at 16 million in 2003 (Schoen et al. 2005). By another measure, an estimated 82 million, or one-third of the population under 65, lacked health insurance at some point in 2002-03, and most were uninsured for more than nine months (Associated Press 2004, citing Families USA). The private insurance share is also dropping in relative and indeed absolute terms, as premiums are rising much faster than either wages or GDP. Between 2003 and 2004, the number covered by private insurance fell by 3.1 million, and the number covered by Medicaid, the public program for the poor, grew by 1.9 million (PNHP 2005).

JCUSH Methodology: The JCUSH is a combination of two similar health surveys -- the Canadian Community Health Survey and the U.S. National Health Interview Survey (Statistics Canada and U.S. National Center for Health Statistics 2004). Almost identical questionnaires were administered to 3,505 Canadian and 5,183 American respondents. Separate sets of racial/cultural background questions were asked to Canadian and U.S. respondents, and some questions were asked to only Canadian or only U.S. respondents such as health insurance coverage ones. The same sample design and data collection and processing methods were used for both countries. JCUSH data are

therefore comparable, and allow researchers to directly assess differences between the two countries.

The JCUSH was conducted through telephone interviews in 2002-2003. Response rates were 66 per cent in Canada and 50 per cent in the United States. Institutionalized persons and full-time members of the Canadian and U.S. Armed Forces were excluded. This means that a sizable part of the vulnerable population in the United States (particularly those in prisons), as well as the armed forces (again larger in the United States), are excluded from the JCUSH. Relatedly, since telephone interviews were used, 1.8 per cent of households in Canada and 4.4 per cent in the United States without land-line telephones are excluded (Statistics Canada and U.S. National Center for Health Statistics 2004).

Self-reported health (SRH): SRH provides a global assessment of an individual's health (Idler and Benyamini 1997), and is predictive of more objective measures of health such as mortality (Mossey and Shapiro 1982), disability (Mansson and Rastam 2001), functional limitations (Idler et al. 2000), as well as health-related behaviours (Cott et al. 1999) and health care utilization (Pinquart 2001). Further, in comparing health status and patterns of health by SES between and within England and the United States, Banks et al. (2006) find that the results with self-reported measures of health are almost identical to those with biological (physical and laboratory examinations) measures.

SRH is not without limitations. Schnittker (2005) finds that the meaning of SRH changes with age (i.e., the association between SRH and more tangible measures of health such as functional limitations and chronic conditions varies by age), hence limiting its comparability between age groups. Cultural and language differences may also

influence the interpretation and reporting of health status (Kopec et al. 2001, Mechanic 1980, Saldov 1991, Zola 1966). In general, SRH provides an indicator of overall health status, and is able to capture other aspects of health (e.g., positive health status) that are not captured in other measures. Importantly, similar results (available from the authors upon request) were found here when the analysis was redone with other measures of health namely activity restriction and functional limitations.

Table 1. Percentage Distribution of Study Variables

		Canada (n=3,505)	**U.S.** (n=5,183)
Self-reported health	Negative (poor or fair)	**11.6**	**14.5**
	Positive (good, very good, or excellent)	**88.4**	**85.5**
Age	18-44	**52.3**	**52.3**
	45-64	**32.1**	**31.7**
	65+	**15.7**	**16.0**
Sex	Men	**49.1**	**48.0**
	Women	**50.9**	**52.0**
Marital status	Married/common-law/partner	**65.3**	**63.7**
	Other	**34.7**	**36.3**
Income quintile [a]	1st	**14.5**	**13.0**
	2nd	**14.6**	**13.2**
	3rd	**14.4**	**13.0**
	4th	**14.9**	**13.0**
	5th	**14.3**	**13.0**
	Missing	**27.4**	**34.7**
Poverty	Poor	**11.6**	**12.3**
	Non-poor	**61.0**	**53.0**
	Missing	**27.4**	**34.7**
Income group [b]	<$20,000	**20.5**	**16.3**
	$20,000-39,999	**30.2**	**23.0**
	$40,000+	**21.9**	**26.0**
	Missing	**27.4**	**34.7**
Education	Less than high school	**19.7**	**11.8**
	High school/trades/vocational/college	**52.5**	**51.3**
	Bachelor's or higher	**27.8**	**36.9**
Country of birth	Foreign-born	**19.9**	**16.2**
	Native-born	**80.1**	**83.8**
Race/ethnicity	American Indian/Alaska Native	--	**1.1**
	Asian	--	**2.9**
	Black/African American	--	**11.8**
	Hispanic or Latino	--	**10.7**
	Other	**17.9**	**3.4**
	White	**82.1**	**70.1**
Health insurance coverage [c]	Uninsured	--	**13.3**
	Insured	--	**86.7**

(shaded areas designate statistically different distributions between Canada and the United States at $p<0.05$, two-tailed test)

a. Income quintile distribution as shown here is calculated for the overall population
b. In U.S. dollars (adjusted for purchasing power parity)
c. Health insurance coverage rates calculated for Americans aged 18-64 only

Table 2. Percentage with Negative Health by Marital Status, Age, and Sex

		Canada	U.S.
18-44	Married [a]	4.6	8.7
	Other	7.6	8.4
	All respondents	**6.1**	**8.5**
45-64	Married	10.6	14.3
	Other	20.0	22.6
	All respondents	**12.8**	**17.2**
65+	Married	26.2	27.6
	Other	29.6	30.7
	All respondents	**27.7**	**28.9**
Men	Married	12.0	13.4
	Other	11.3	11.9
	All respondents	**11.9**	**13.0**
Women	Married	8.0	13.5
	Other	16.6	18.8
	All respondents	**11.3**	**15.9**

(shaded areas designate statistically significant differences between corresponding groups in Canada and the United States at $p<0.05$, two-tailed test)

a. Married includes common-law/partner

Table 3. Percentage with Negative Health by Poverty and Income Quintile and Group within Sex Groups

	Canada		U.S.	
	Men	**Women**	**Men**	**Women**
Missing income cases	11.2	12.6	14.4	20.5
Poverty				
Poor	32.6	22.0	32.1	28.5
Non-poor	9.0	8.3	8.5	9.0
Income quintile				
1st	31.4	21.3	28.6	29.1
2nd	11.3	11.3	14.3	16.4
3rd	7.4	7.8	7.6	8.3
4th	6.9	6.7	5.0	7.0
5th	3.0	6.3	6.5	5.4
Income group [a]				
<$20,000	27.6	18.4	26.8	27.2
$20,000-39,999	9.2	7.6	10.8	9.5
$40,000+	4.3	6.2	6.1	6.2

(shaded areas designate statistically significant differences between corresponding groups in Canada and the United States at $p<0.05$, two-tailed test)

a. In U.S. dollars (adjusted for purchasing power parity)

Table 4. Percentage with Negative Health by Poverty and Income Quintile and Group within Age Groups

	Canada			U.S.		
	18-44	**45-64**	**65+**	**18-44**	**45-64**	**65+**
Missing income cases	6.3	9.8	26.2	10.8	21.2	28.4
Poverty						
Poor	14.3	36.7	37.0	16.8	42.8	47.9
Non-poor	4.7	10.1	24.1	5.3	10.5	21.1
Income quintile						
1st	14.3	33.3	40.0	15.3	37.2	53.4
2nd	4.1	11.8	29.4	6.8	15.2	39.7
3rd	6.1	10.6	35.3	6.1	11.0	29.4
4th	4.3	7.5	17.6	5.0	6.7	12.2
5th	1.5	8.1	18.8	3.5	6.3	12.0
Income group [a]						
<$20,000	12.5	30.2	34.1	14.4	37.4	46.6
$20,000-39,999	5.1	10.1	23.1	6.6	14.1	19.0
$40,000+	2.0	6.9	18.2	3.6	7.9	13.9

(shaded areas designate statistically significant differences between corresponding groups in Canada and the United States at $p<0.05$, two-tailed test)

a. In U.S. dollars (adjusted for purchasing power parity)

Table 5. Percentage with Negative Health by Education Level [a] within Age and Sex Groups

		Canada	U.S.
18-44	Low	15.7	21.4
	Middle	5.2	9.8
	High	4.1	3.4
45-64	Low	21.3	47.2
	Middle	12.7	18.6
	High	7.1	7.2
65+	Low	34.4	46.1
	Middle	23.6	28.7
	High	15.8	13.9
Men	Low	26.4	34.5
	Middle	9.2	13.7
	High	5.7	5.6
Women	Low	21.6	35.8
	Middle	9.6	17.2
	High	6.4	6.3

(shaded areas designate statistically significant differences between corresponding groups in Canada and the United States at $p<0.05$, two-tailed test)

a. Low education: less than high school; Middle education: high school diploma, trades certificate, vocational school, apprenticeship training, community college diploma; High education: bachelor's or higher

Table 6. Percentage with Negative Health by Country of Birth within Age and Sex Groups

	Foreign-born		Native-born	
	Canada	**U.S.**	**Canada**	**U.S.**
18-44	4.7	15.5	6.2	6.9
45-64	12.1	28.9	13.4	14.7
65+	27.0	38.8	27.5	27.4
Men	11.9	19.8	11.8	11.5
Women	11.5	23.8	11.1	14.2

(shaded areas designate statistically significant differences between corresponding groups within foreign- and native-born populations in Canada and the United States at $p<0.05$, two-tailed test)

Table 7. Percentage with Negative Health by Race/Ethnicity within Age and Sex Groups

U.S.					
	18-44	**45-64**	**65+**	**Men**	**Women**
American Indian/Alaska Native	22.0	30.8	36.4	21.6	31.7
Asian	7.1	22.2	22.4	5.2	21.4
Black/African American	10.4	21.8	41.6	14.2	19.8
Hispanic or Latino	18.5	37.1	58.5	23.8	28.4
Other	17.1	23.7	48.5	21.8	24.5
White	5.2	12.9	24.7	10.6	11.9
Canada					
Other	4.9	12.5	38.9	8.8	12.3
White	6.3	12.9	25.8	12.5	11.0

(shaded areas designate statistically significant differences from the white population within each country by sex and age groups at $p<0.05$, two-tailed test)

Table 8. Percentage with Negative Health by Health Insurance Coverage within Age and Sex Groups

	Canada: All respondents	U.S.: Insured	U.S.: Uninsured
18-44 [a b]	6.1	7.1	15.3
45-64 [a b]	12.8	15.9	26.0
Men [a]	11.9	12.4	16.4
Women [a b c]	11.3	14.8	21.1

a. statistically significant differences between uninsured Americans and insured Americans at $p<0.05$, two-tailed test

b. a. statistically significant differences between uninsured Americans and all Canadians at $p<0.05$, two-tailed test

c. statistically significant differences between insured Americans and all Canadians at $p<0.05$, two-tailed test

Table 9. Percentage with Negative Health for Foreign-born by Health Insurance Coverage within Age and Sex Groups

	Canada: All respondents	U.S.: Insured	U.S.: Uninsured
18-44 [a b]	4.7	9.6	29.5
45-64 [b c]	12.1	27.2	36.5
Men [a b]	11.9	16.7	29.9
Women [a b]	11.5	20.1	35.2

a. statistically significant differences between uninsured Americans and insured Americans at $p<0.05$, two-tailed test
b. statistically significant differences between uninsured Americans and all Canadians at $p<0.05$, two-tailed test
c. statistically significant differences between insured Americans and all Canadians at $p<0.05$, two-tailed test

[1]The Gini coefficient ranges from 0 (complete equality) to 1 (complete inequality).
[2]The JCUSH dataset contains a derived income quintile variable that includes imputations for some missing cases. The imputations were based on information collected during the survey. The information was not released to the end user. Our measure of income quintile, based on the available income data, therefore contains more missing data compared the derived variable. However, analyses show similar findings with the derived variable to those reported here.

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