

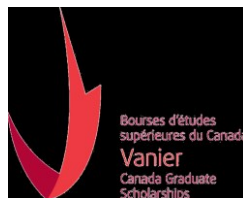
Health, access to health care, and supplementary health insurance among official-language minorities in Québec

James Falconer

Dept. of Sociology
University of Alberta

Amélie Quesnel-Vallée

Dept. of Sociology and
Dept. of Epidemiology, Biostatistics,
& Occupational Health
McGill University



Research Questions

What is the effect of supplementary health insurance among unilingual Quebec Anglophones for:

1. Health?
2. Access to health care?
3. Unmet health care need?

Linguistic composition of Quebec

2011 Census

Francophone only	51.8%
Bilingual	42.6%
Anglophone only	4.6%
Other	1.0%

Linguistic composition of Quebec

2011 Census

Francophone only	51.8%
Bilingual	42.6%
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Other	1.0%

Data Set

Bilingual Anglophone	76.2%
Unilingual Anglophone	23.8%

Data

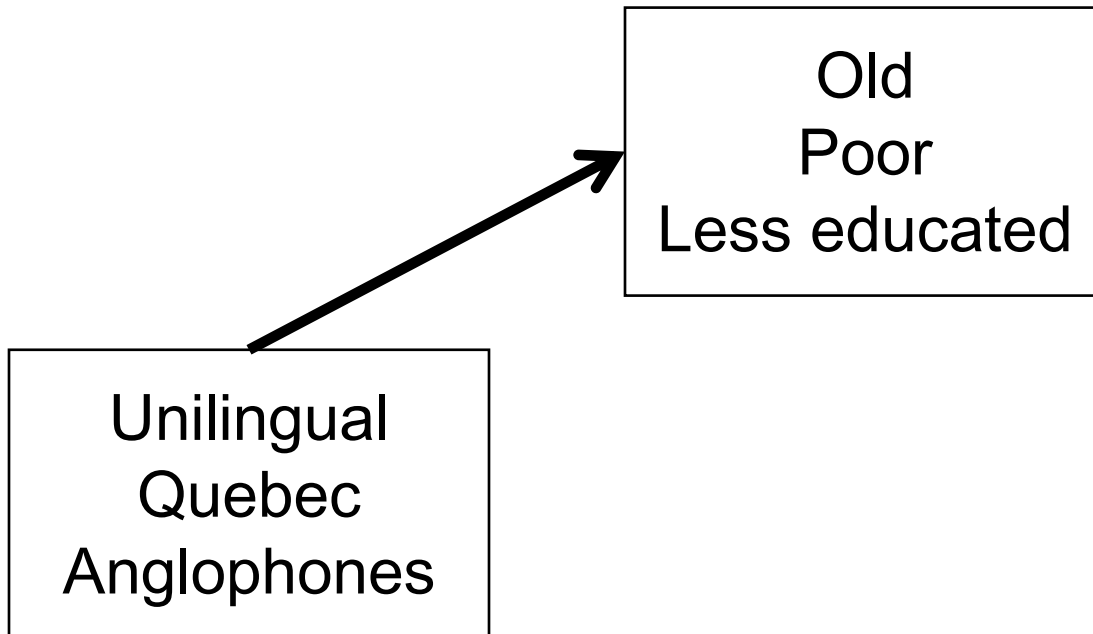
2005-2010 CHSSN-CROP Community Vitality Survey

- Quebec Anglophones
- N=3195
- 200 variables
- All 17 health regions
- Language measures: French identity, ability, daily use, mother tongue
- Health measures: Self-reported health, health care, health insurance

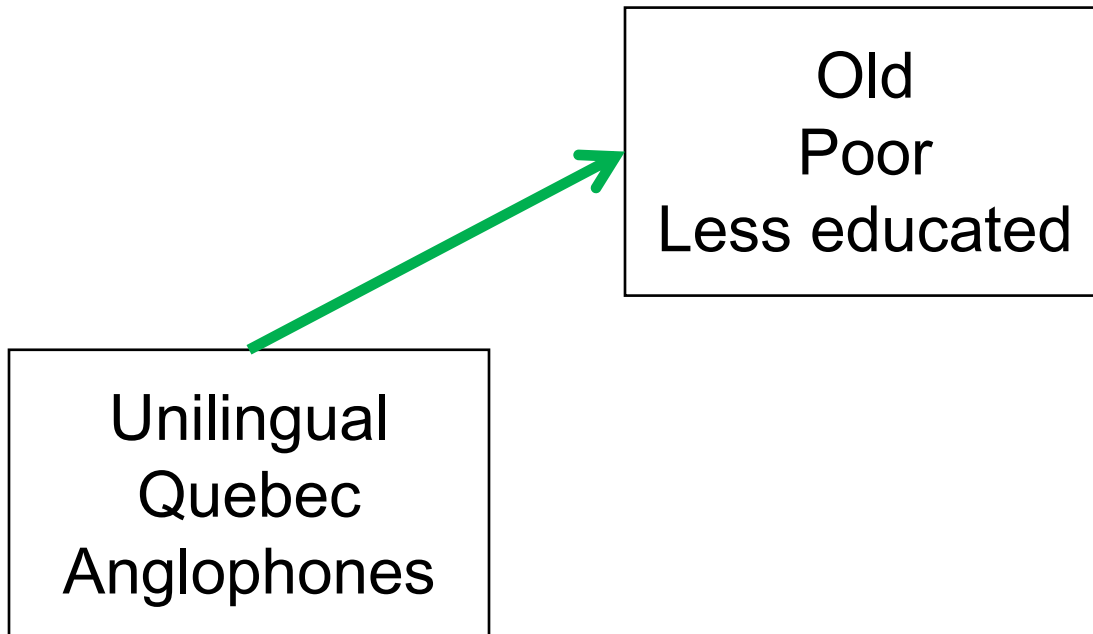
The Puzzle

Unilingual
Quebec
Anglophones

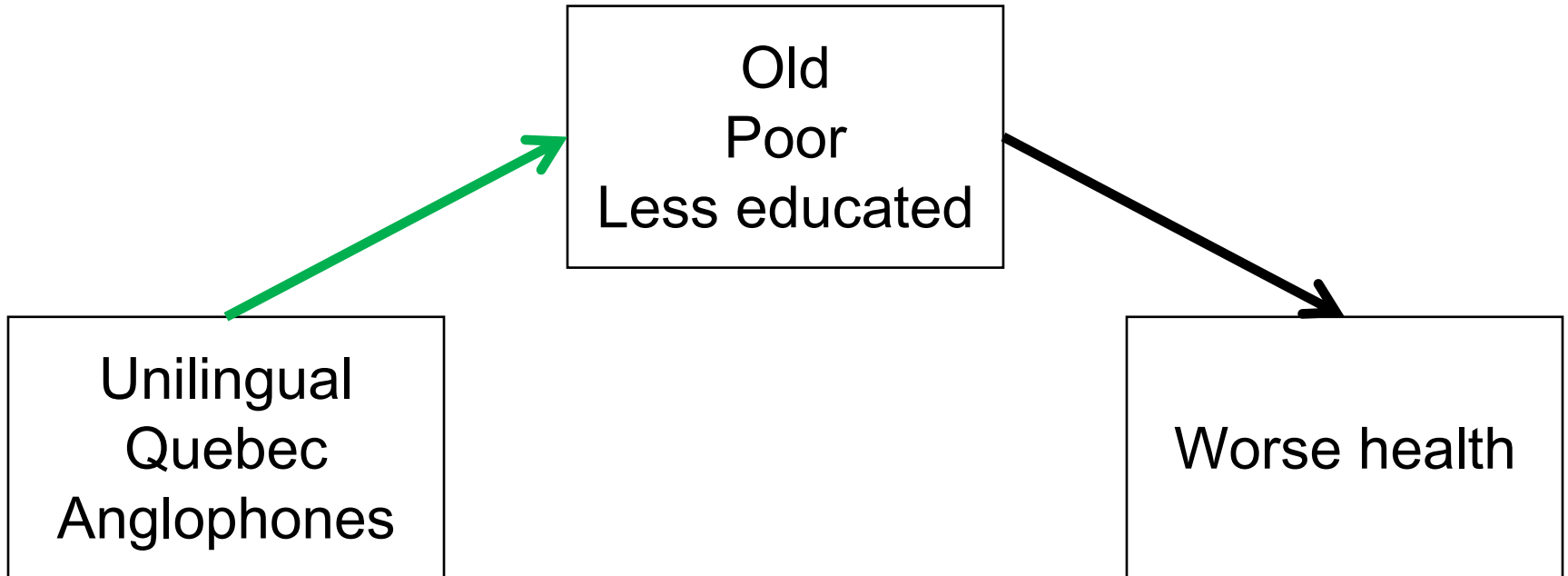
The Puzzle



The Puzzle

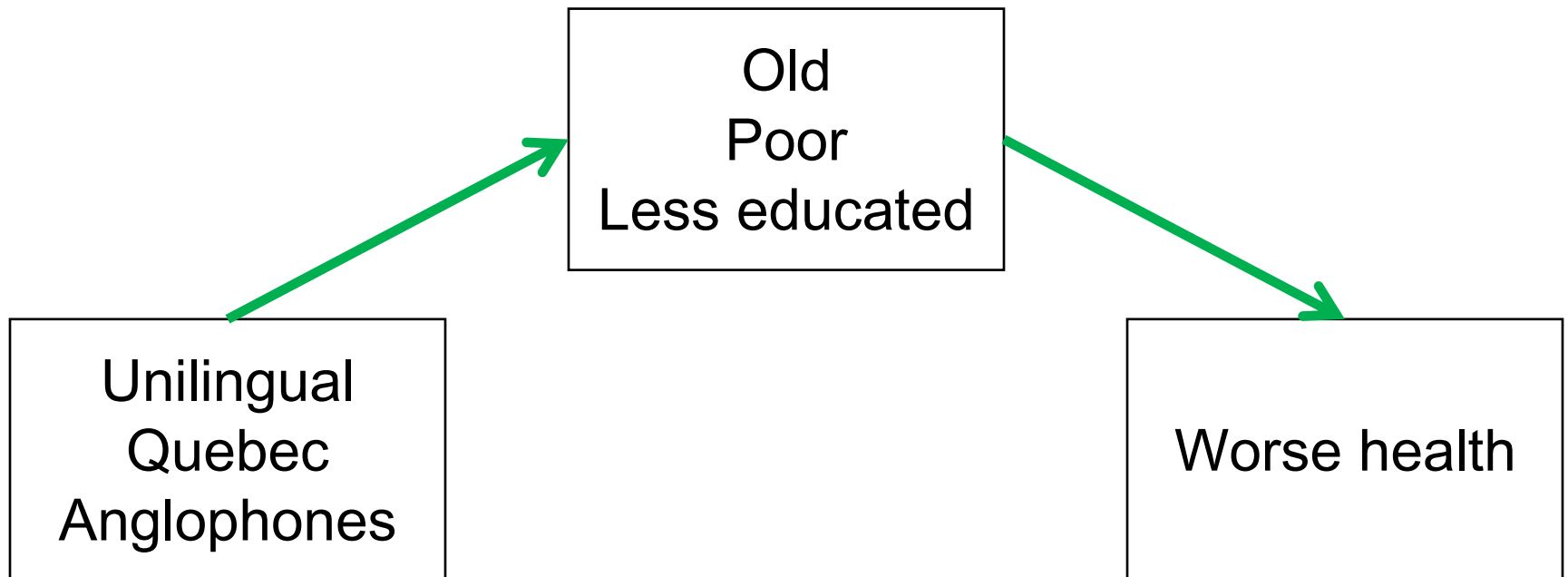


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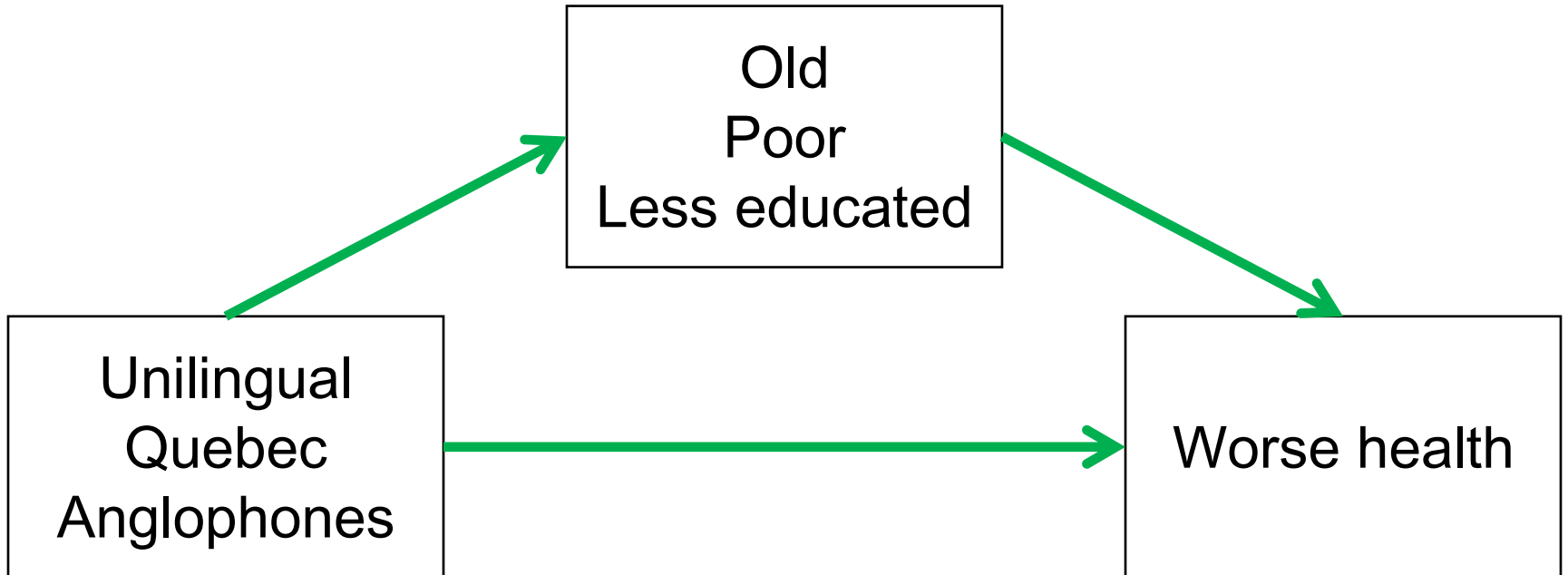


McCullough & Laurenceau (2004)
Phelan et al. (2010)
Huisman et al. (2007)

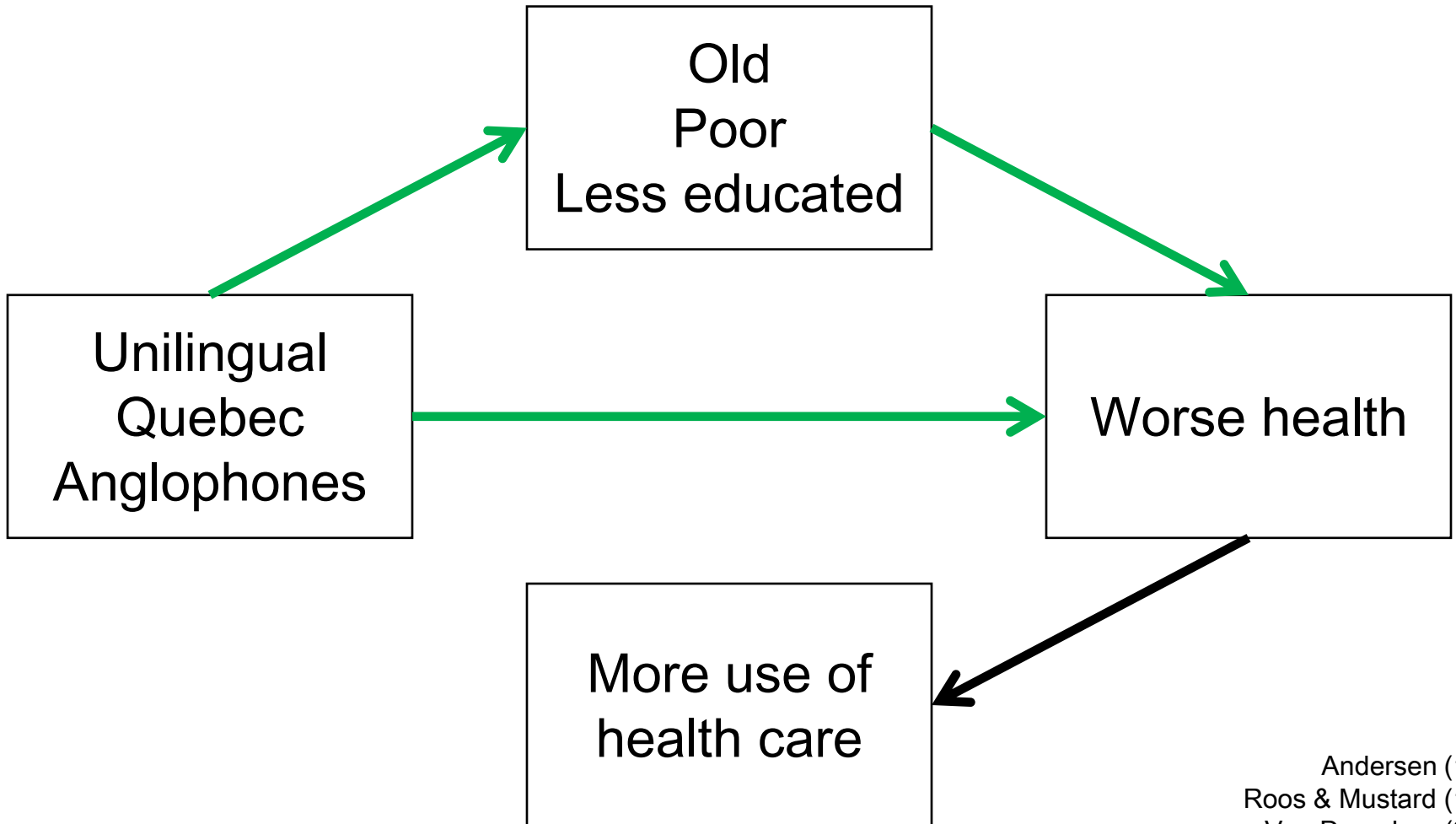
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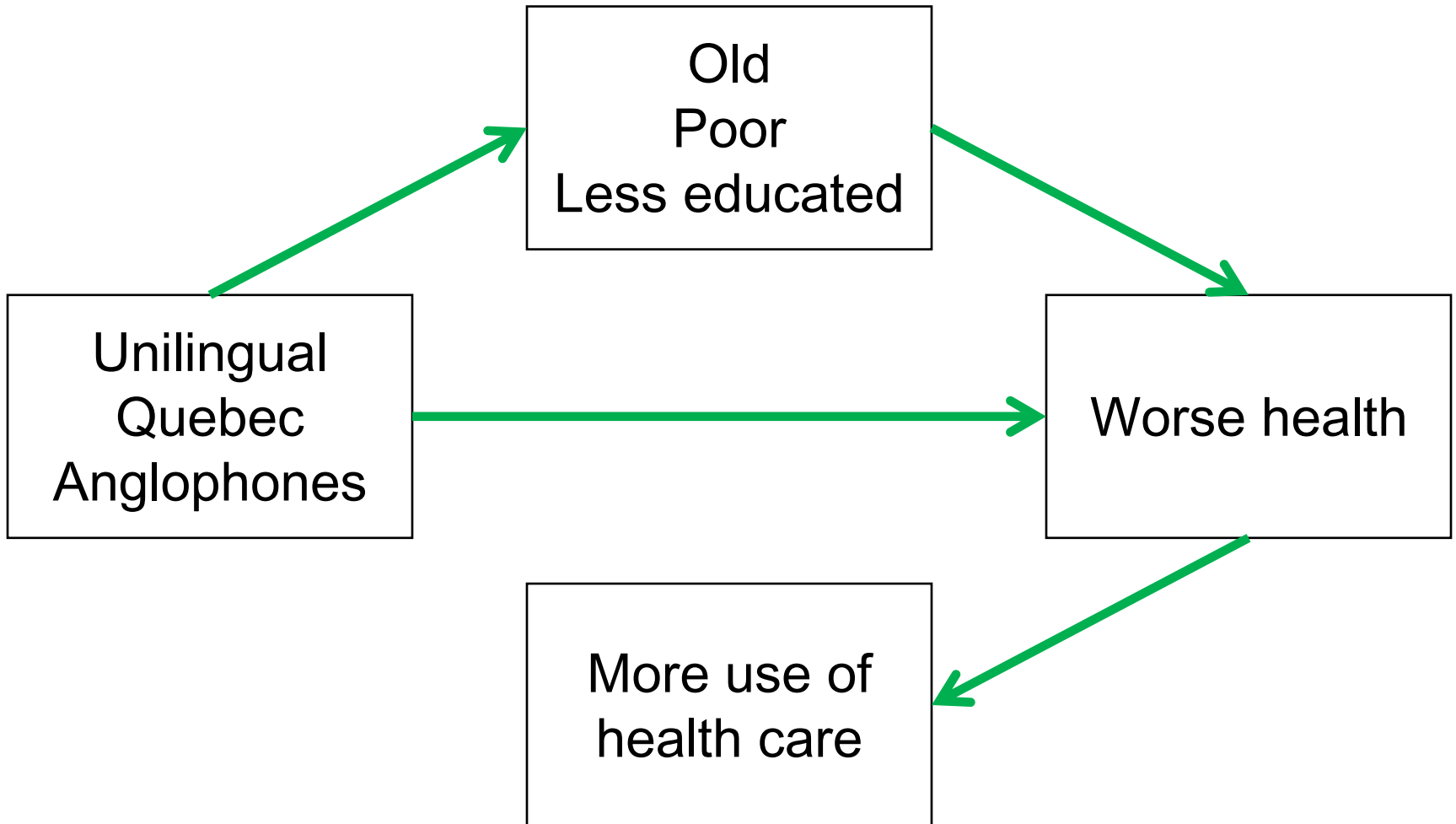


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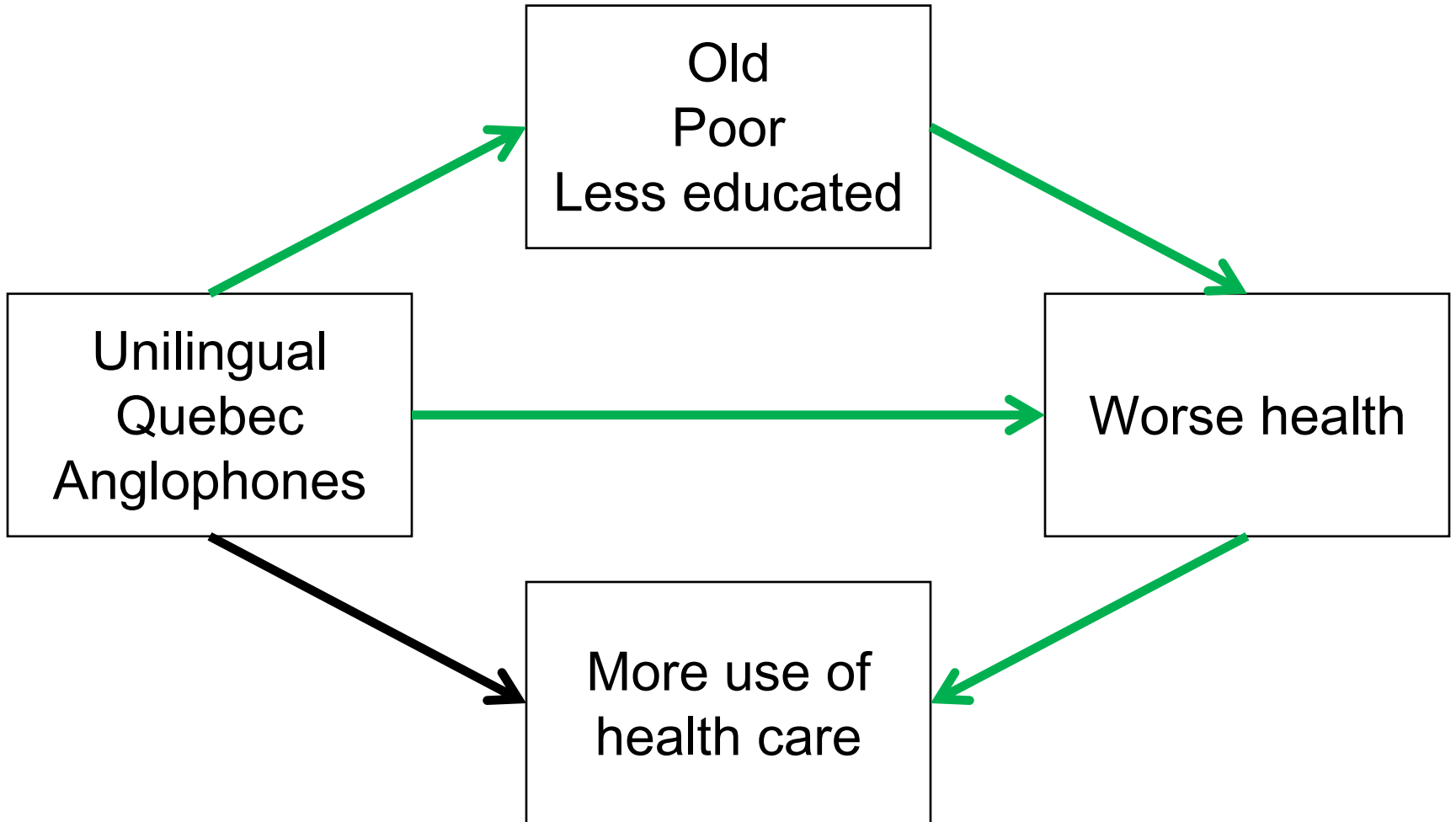


Andersen (1995)
Roos & Mustard (1997)
Van Doorslaer (2006)
Wiggers et al. (2005)

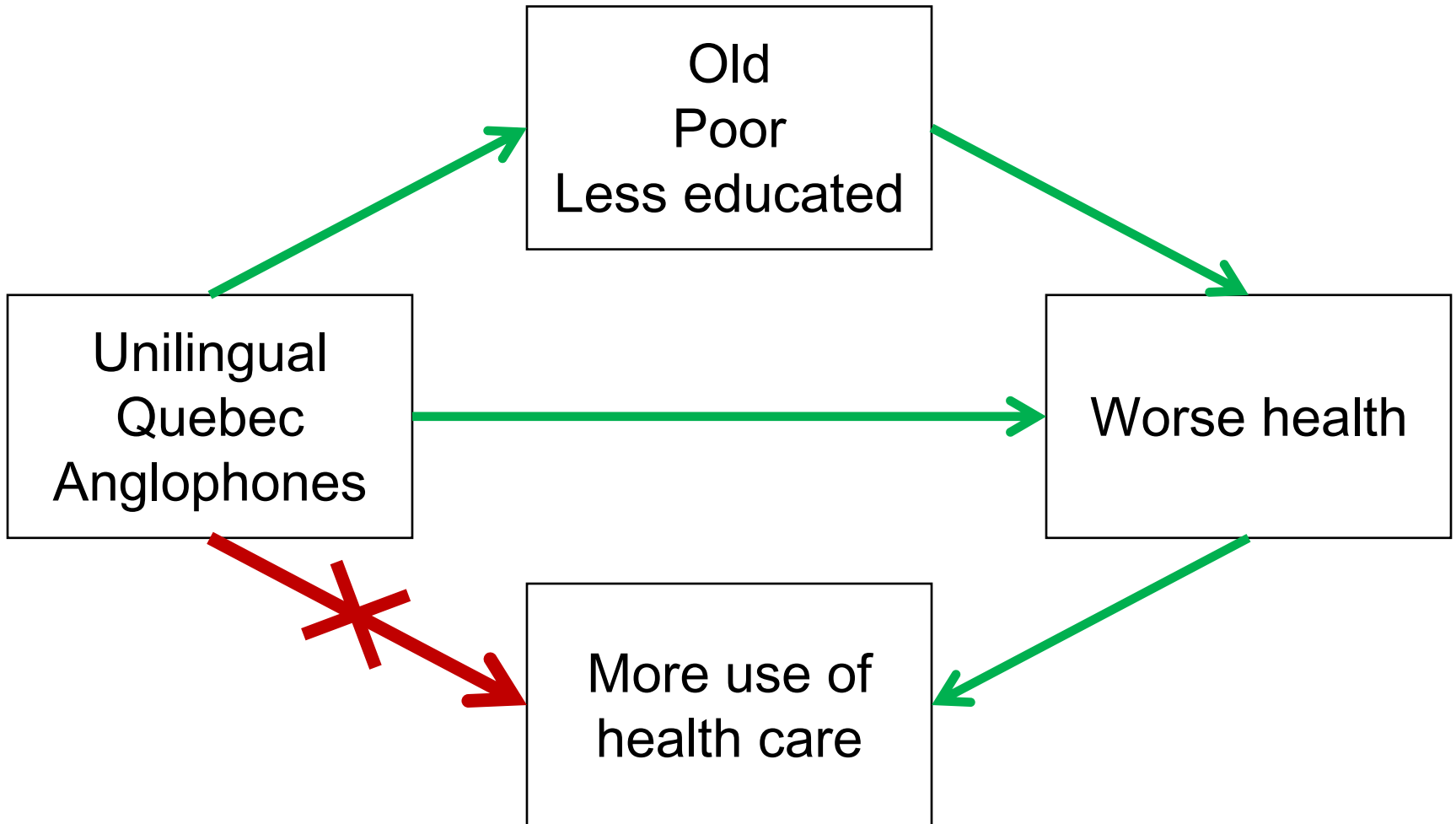
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The Puzzle



The Puzzle

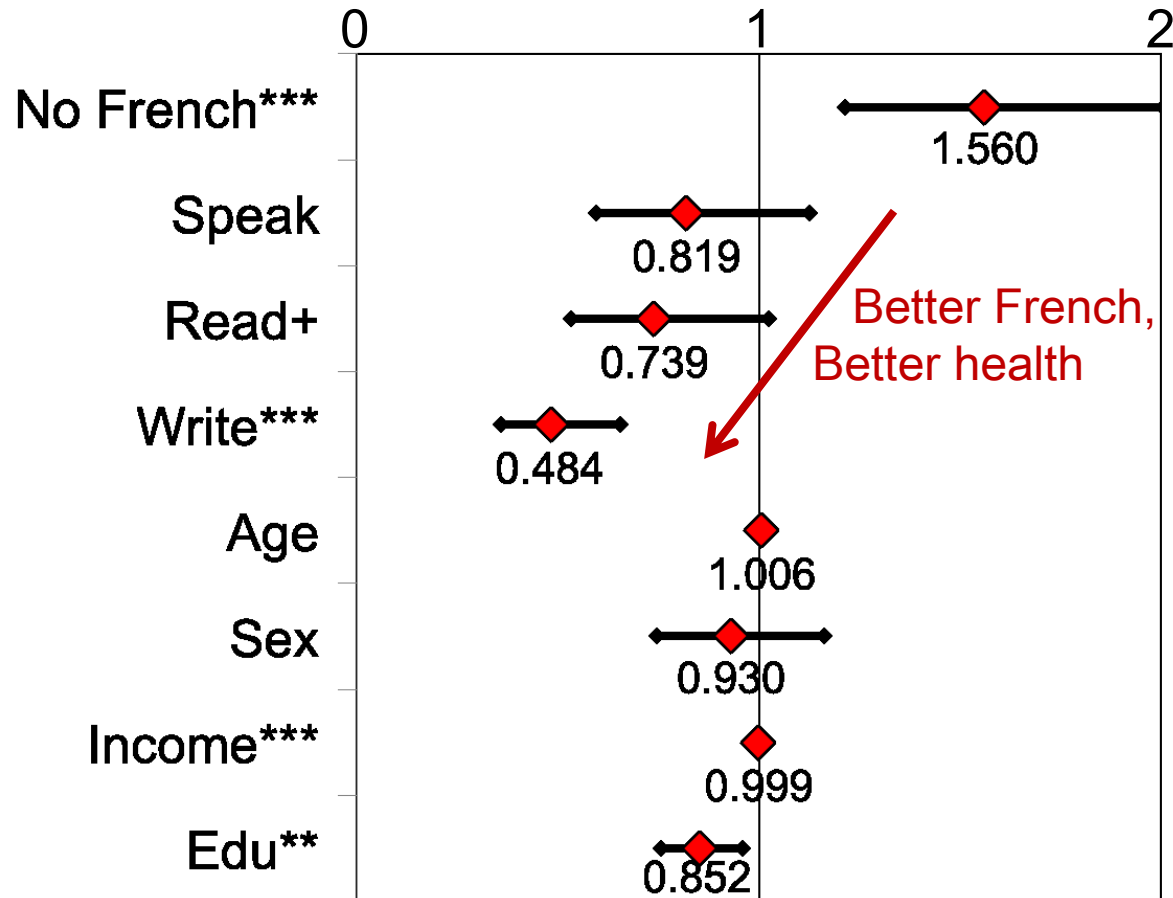


Identifying “unmet need”

	Healthy	Sick
Uses health care	Preventive	Needs met
Does not use health care	No need	Unmet need

Establishing “unmet need”

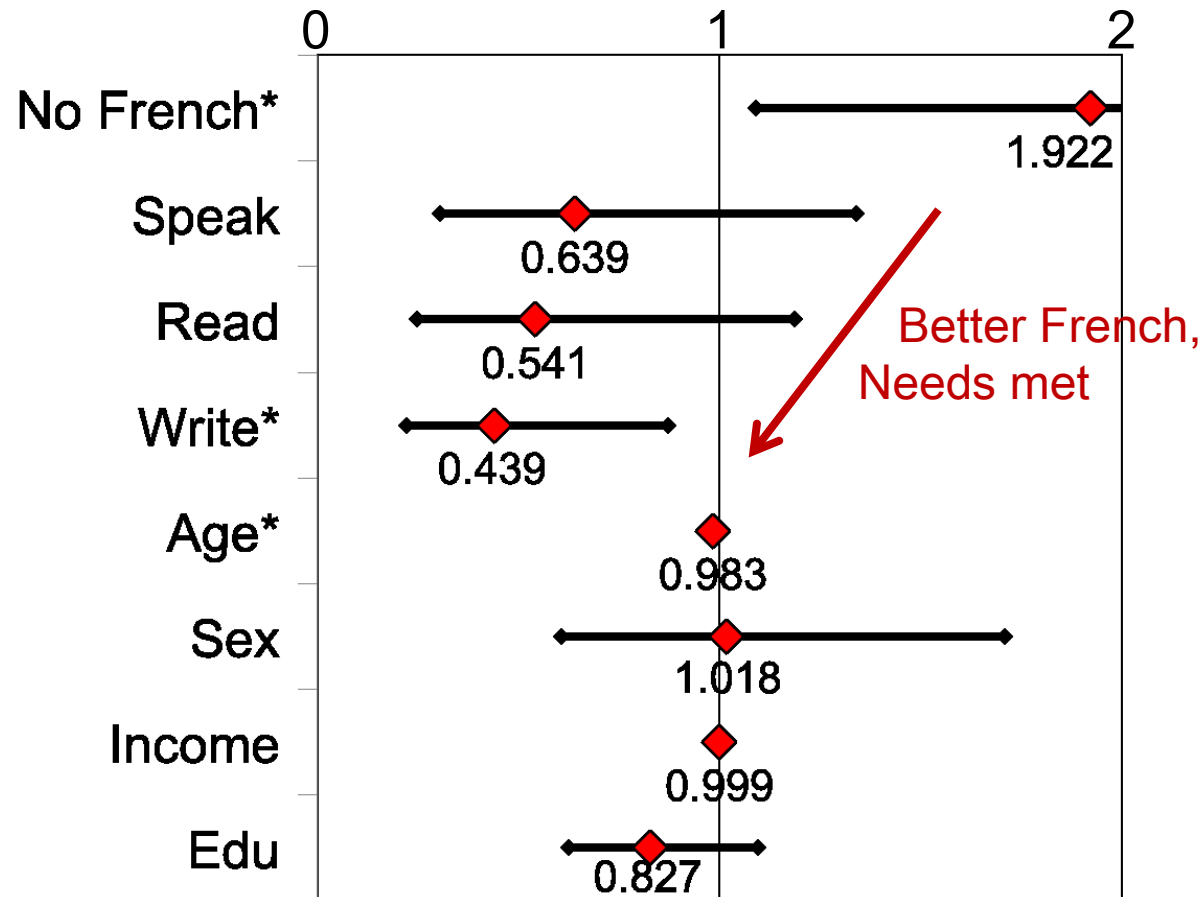
Determinants of **poor health**: Odds ratio with 95%CI



Falconer & Quesnel-Vallée (2014)

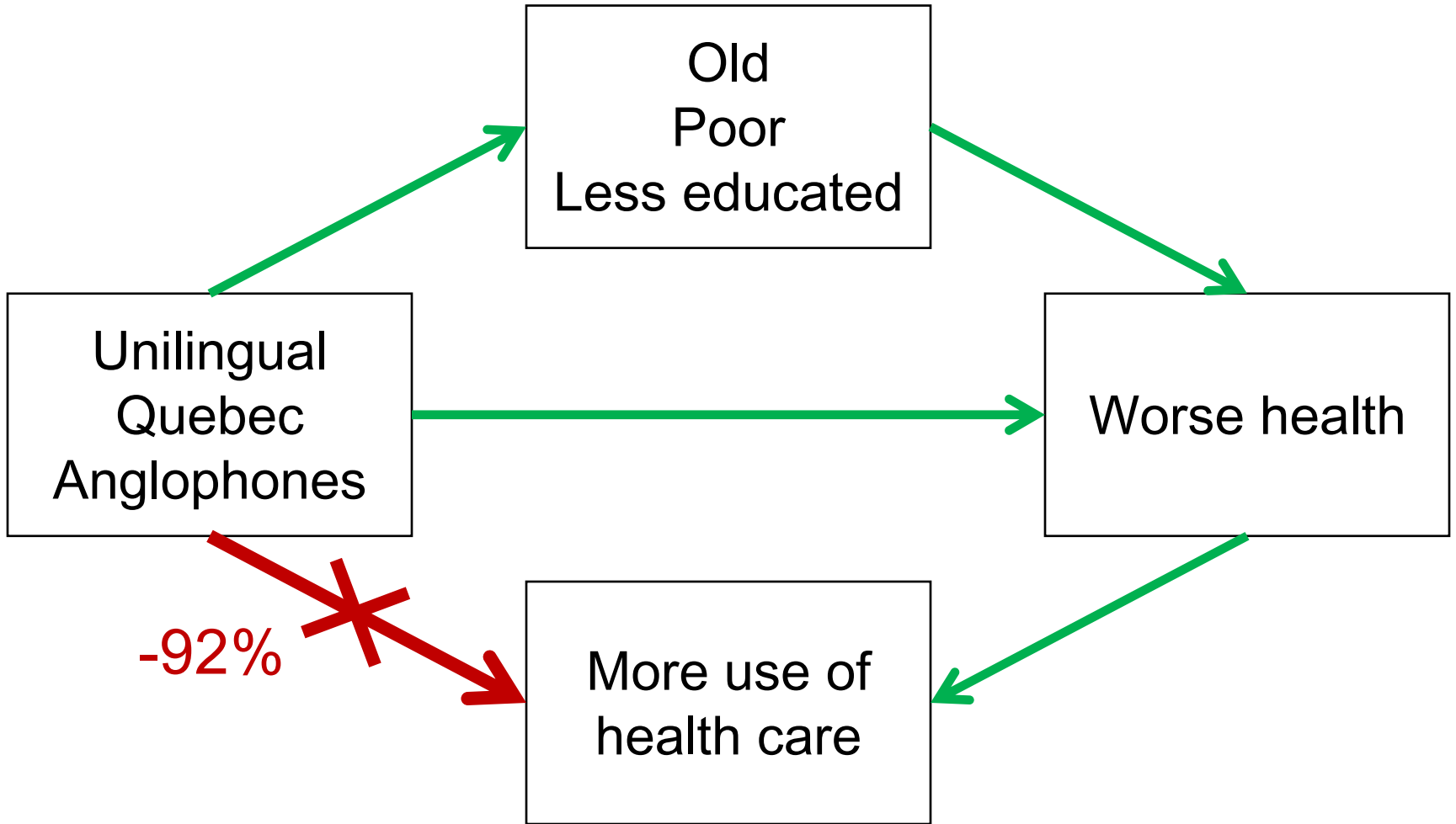
Establishing “unmet need”

Determinants of **unmet need**: Odds ratio with 95%CI



Falconer & Quesnel-Vallée (2014)

The Puzzle



Quebec's health care regime

Canada Health Act

- Universality
- Reduce inequalities

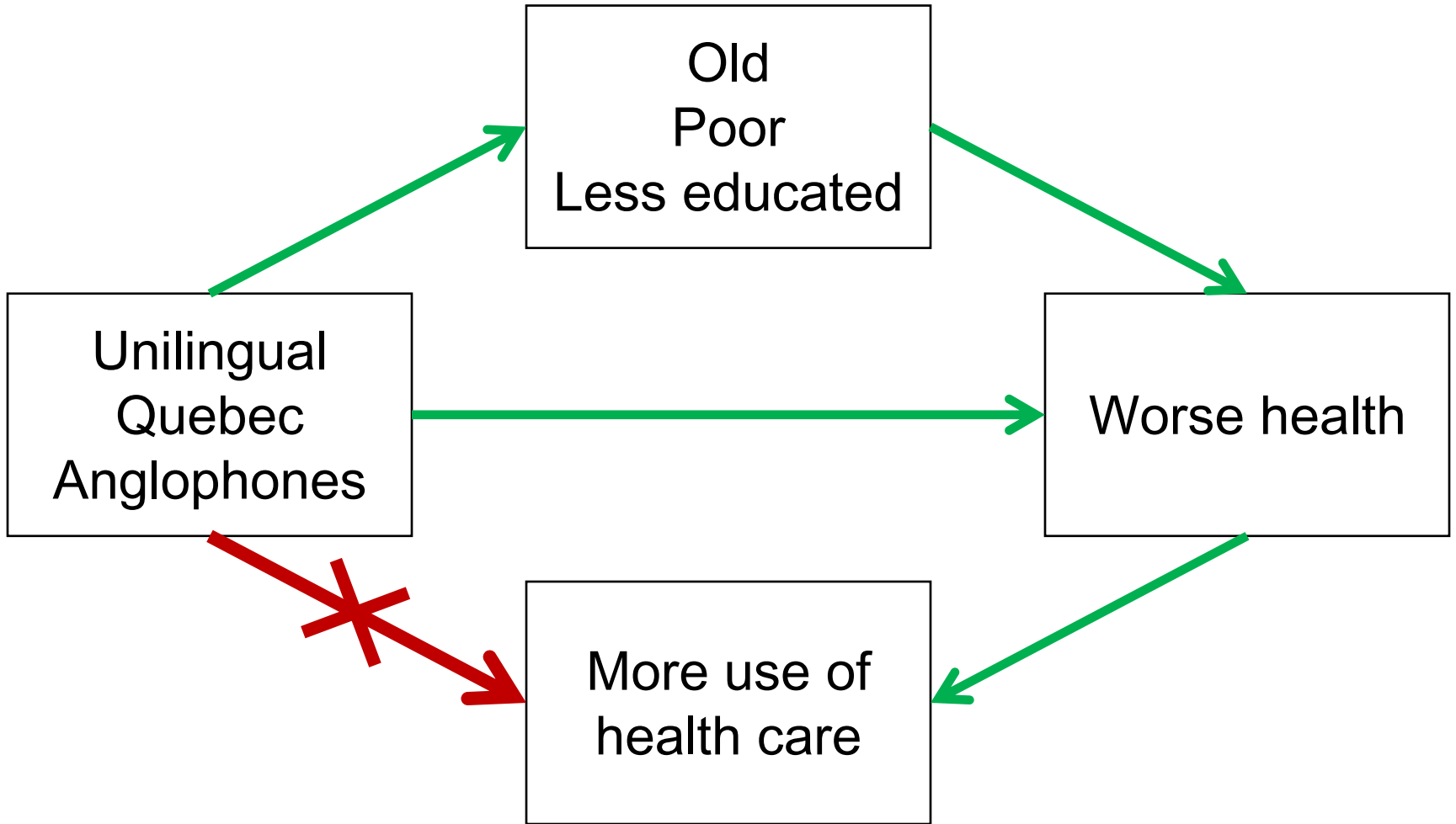
Charte de la langue française

- French exclusive language of public administration

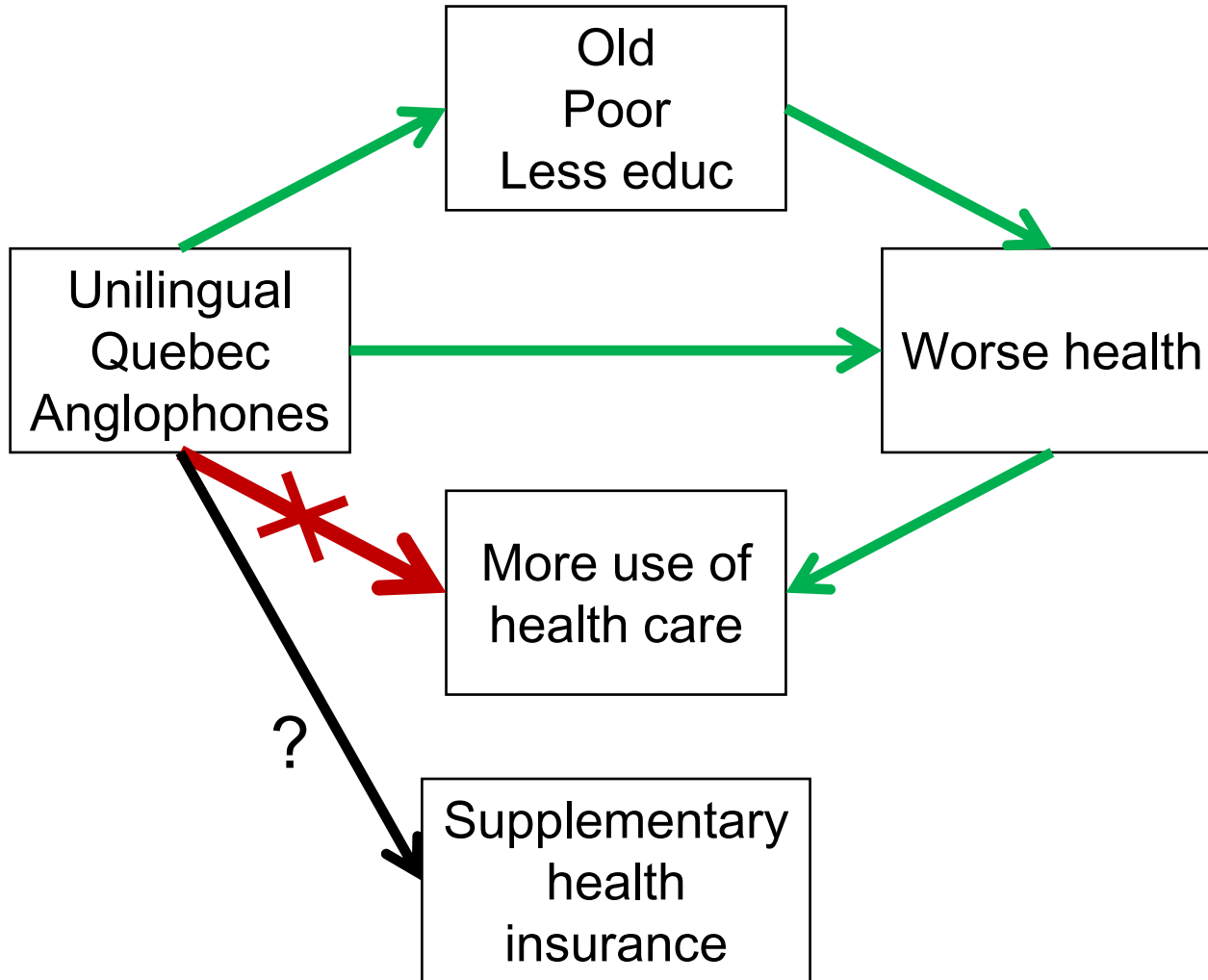
Loi sur les services de santé et serv. sociaux

- Entitlement to provincial health services in English
- ...with exceptions

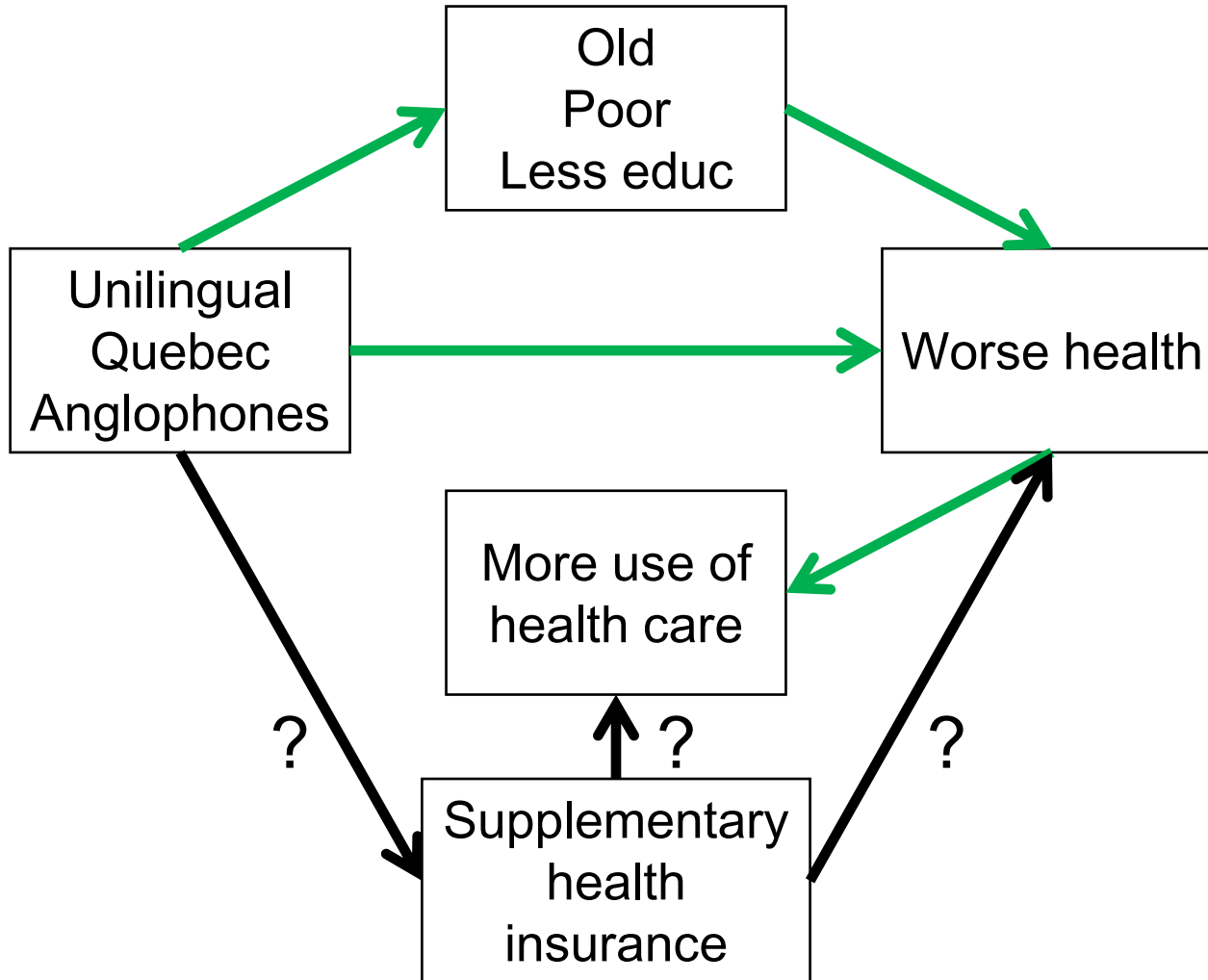
The Puzzle



The Question



The Question



Supplementary health insurance in Canada

Services not provided by public health care

- Prescription drugs
- Dental
- Optical
- Home care
- Disability/mobility accessories
- Vaccinations
- Physiotherapy
- Travel health
- Semi-private hospital beds
- Ambulance
- Medical appliances
- Expenses incurred outside Canada

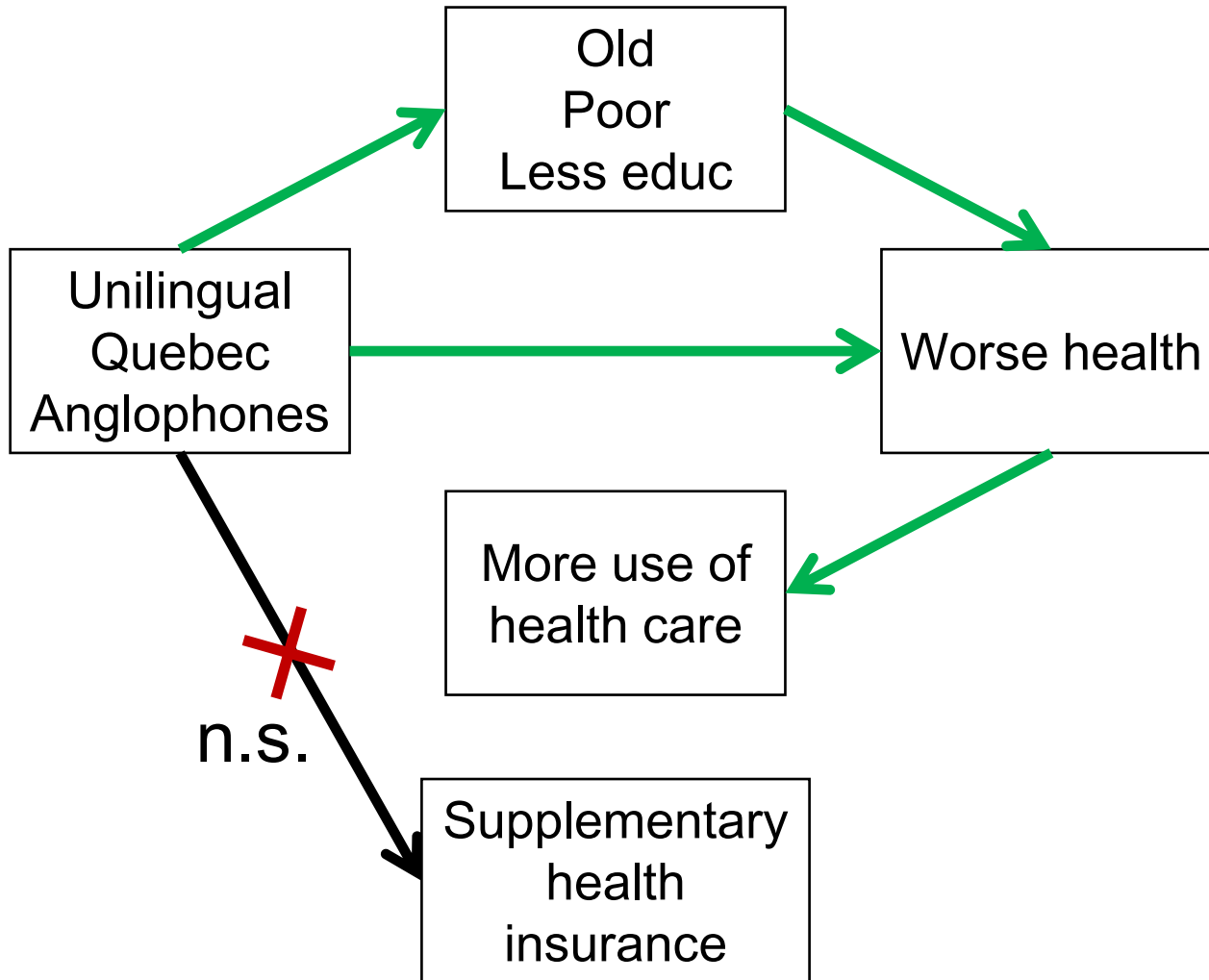
Canadian supplementary health insurance in global context

% Private health spending per capita
U.S.A.
Switzerland
Canada
Germany
Austria

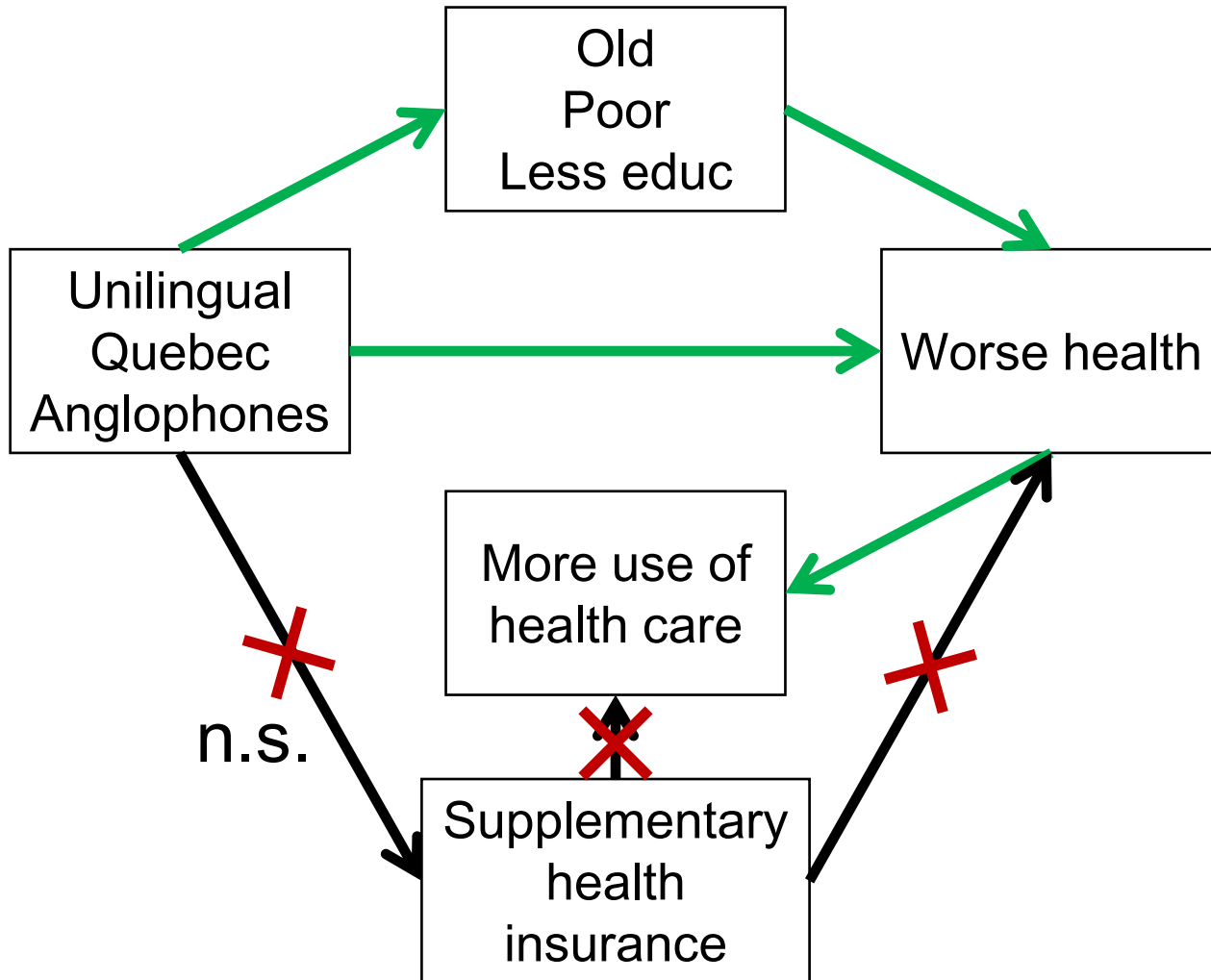
% Population covered by SHI
France
Netherlands
Belgium
Canada
Australia

90% of private health insurance policies in Canada are provided by employment benefits

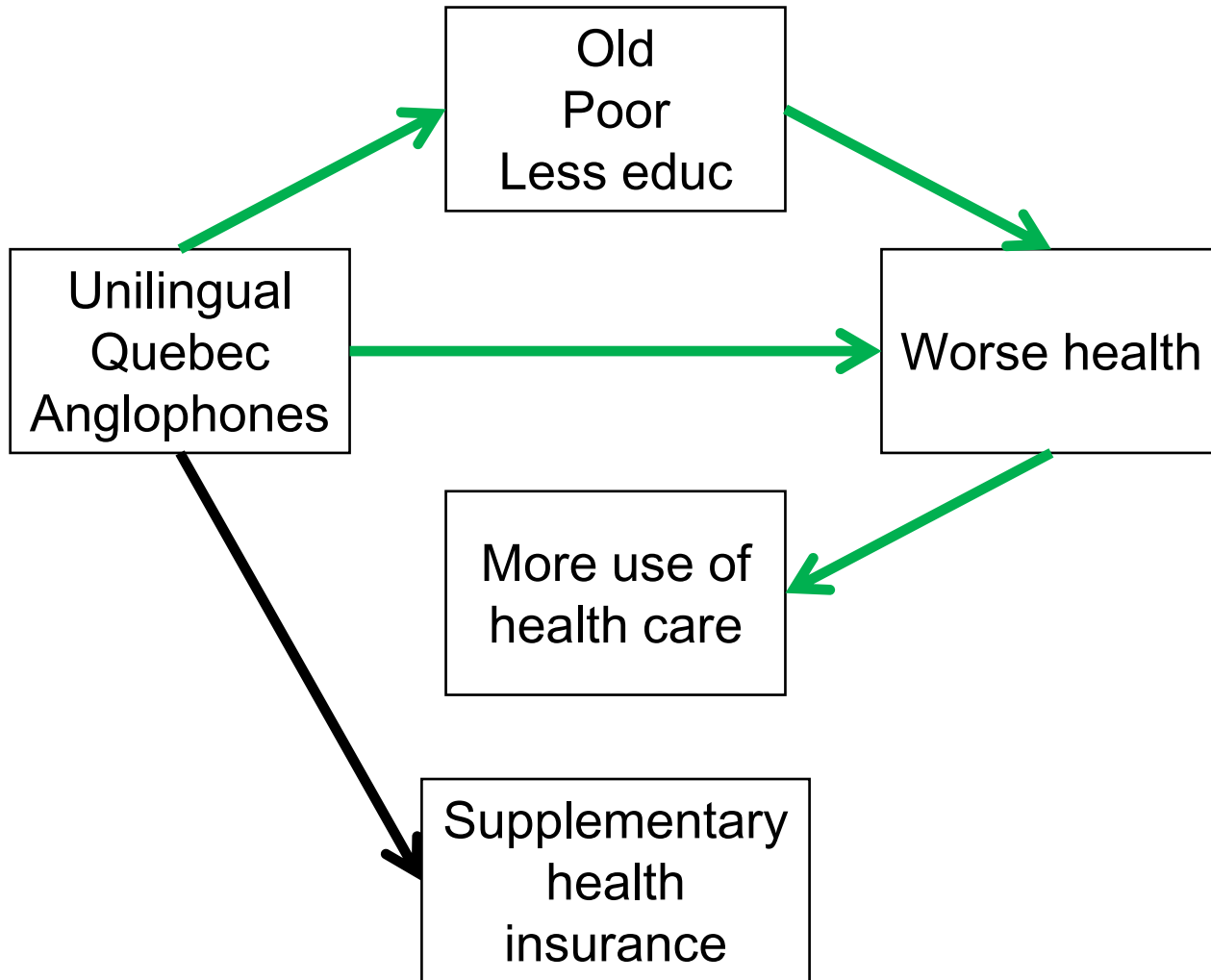
Results



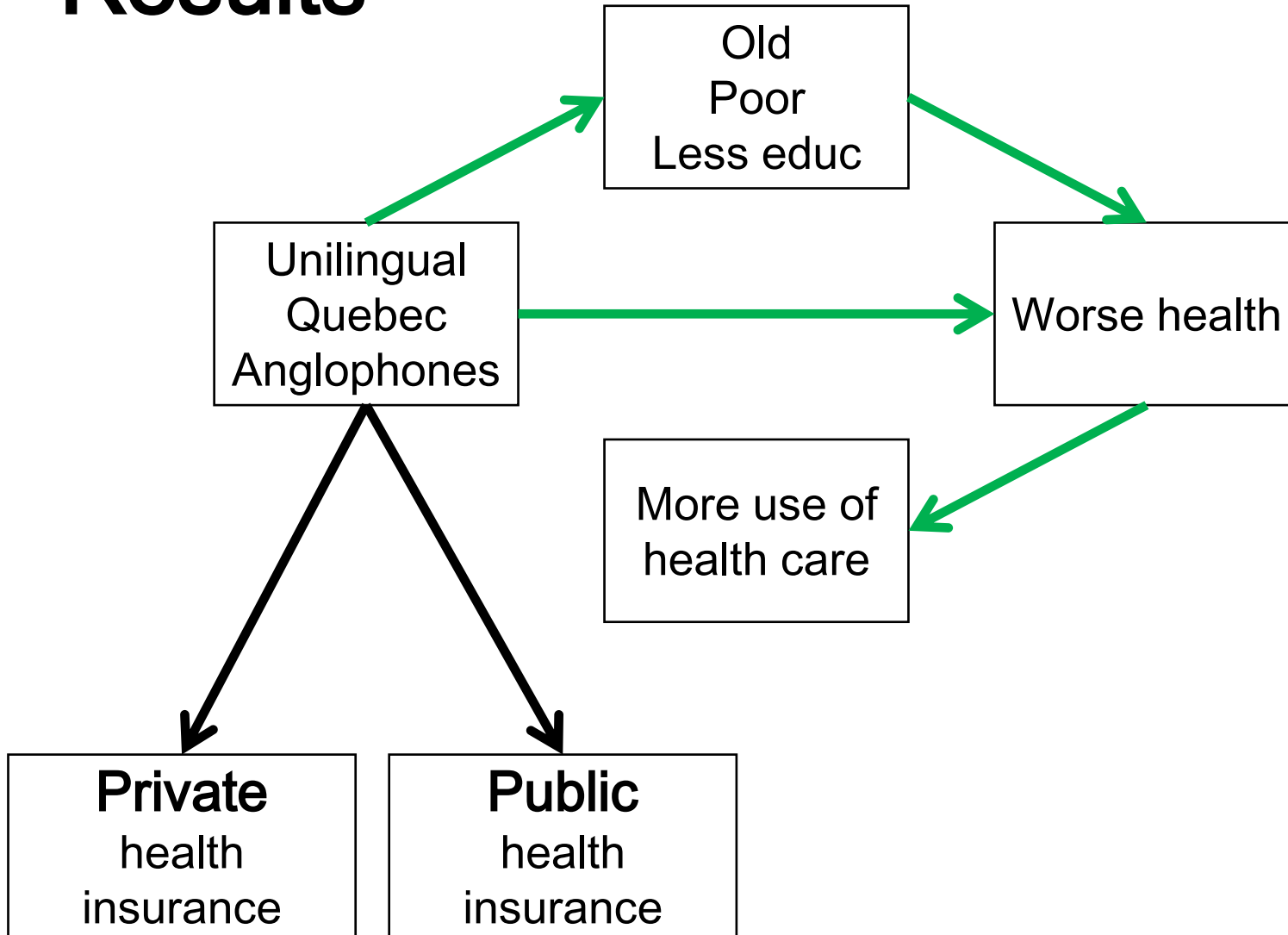
Results



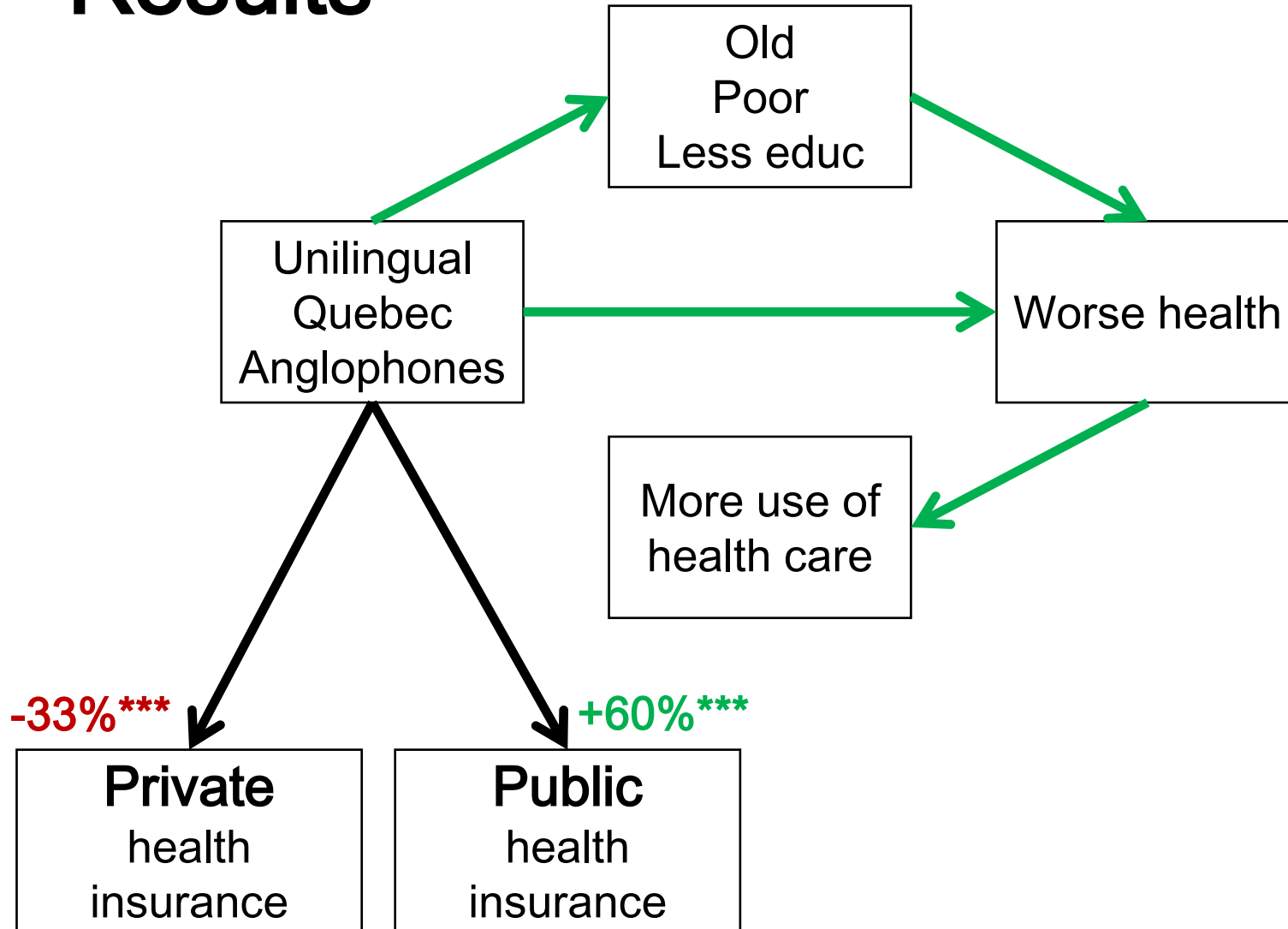
Results



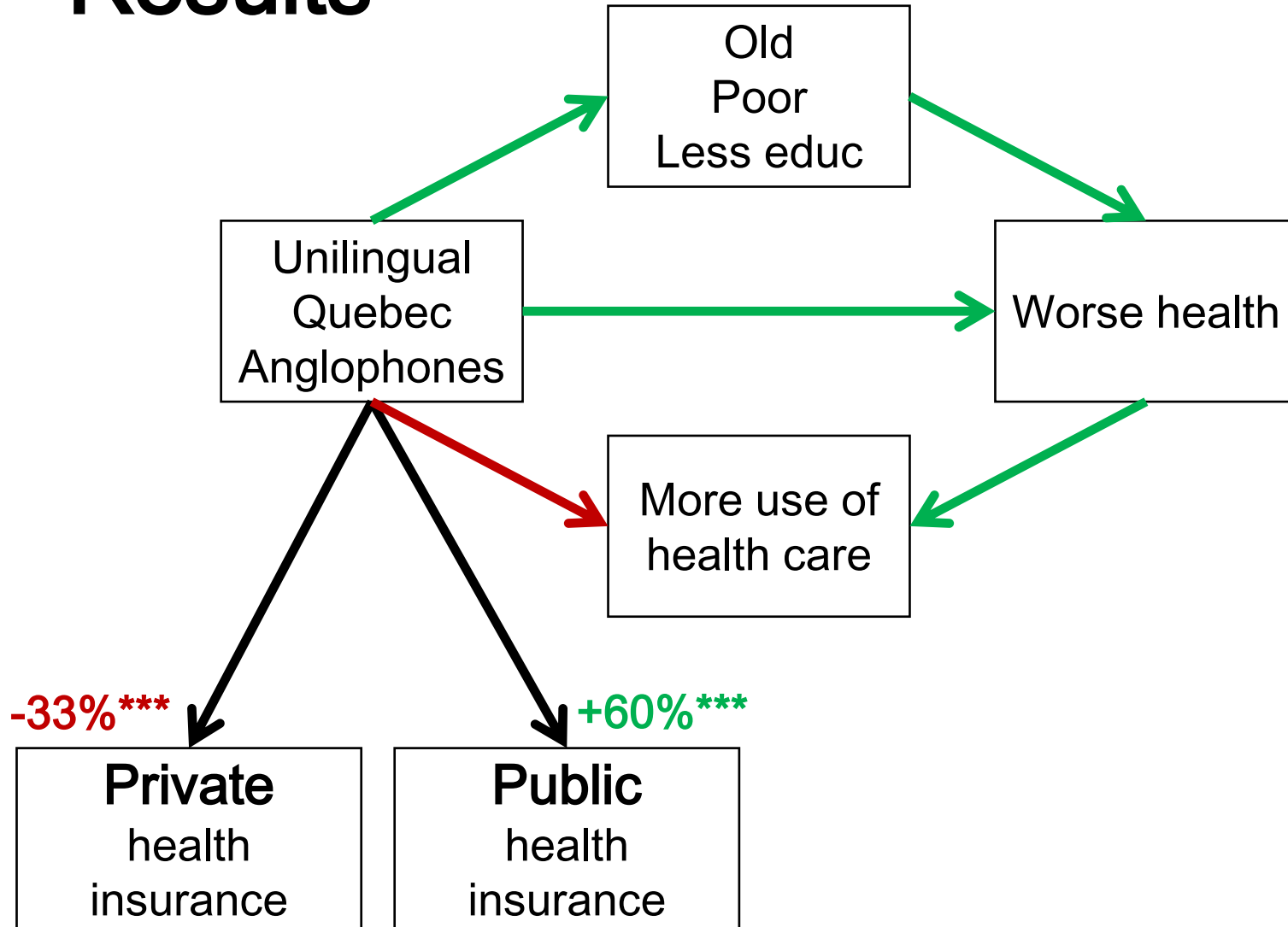
Results



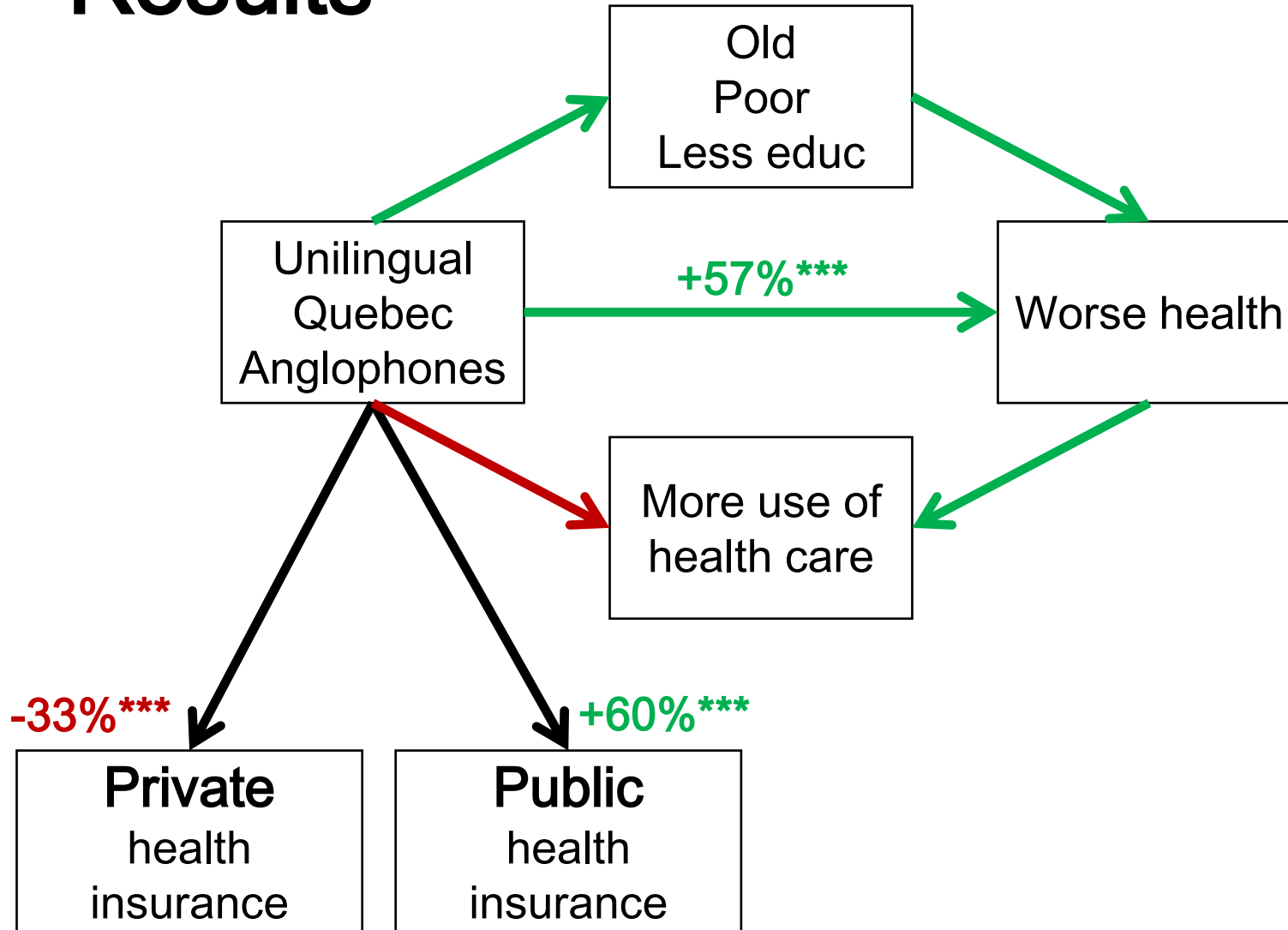
Results



Results



Results



Conclusions

1. Unilingual Quebec Anglophones have **higher** rates of public health insurance, **lower** rates of private, employer, dental, and life insurance.
2. Holding health insurance (public or private) does not significantly affect health, or access to health care, net of other factors.
3. Health insurance is likely to worsen, not alleviate, health inequalities among linguistic minorities in Quebec.

Thank you

This project has been carried out thanks to funding from Health Canada, administered by the McGill Institute for Health and Social Policy & the Training and Retention of Health Professionals Project.

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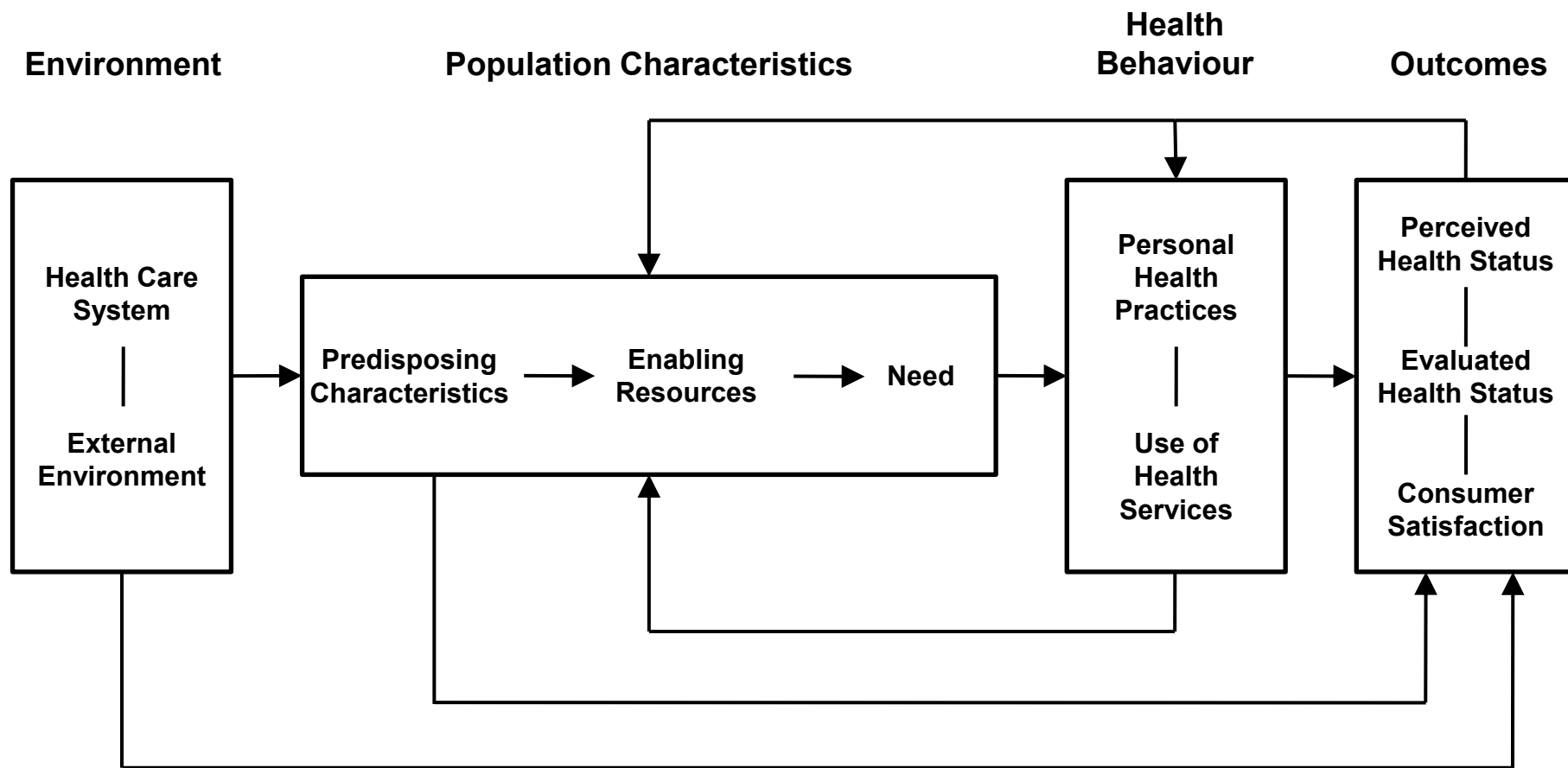
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Source: Andersen, Ronald M. (1995) Revisiting the Behavioral Model and Access to Medical Care: Does it Matter? *Journal of Health and Social Behavior*, Vol.36, No.1, p.8.

Table 1: Descriptive statistics

Variable	Total N	Mean or %	Standard deviation	Min	Max
“Poor” self-rated health					
Bilingual	334	13.8%	0.35	0	1
Unilingual	195	25.9%	0.44	0	1
Used health care in the past 12 months					
Bilingual	1940	79.7%	0.42	0	1
Unilingual	617	81.1%	0.39	0	1
Unmet need for health care					
Bilingual	47	1.9%	0.14	0	1
Unilingual	32	4.2%	0.20	0	1
French language ability					
None	761	23.8%	0.43	0	1
Speaks French	2271	71.1%	0.45	0	1
Reads French	2004	62.9%	0.48	0	1
Writes French	1300	40.8%	0.49	0	1
Has supplementary health insurance					
Bilingual	1942	80.2%	0.40	0	1
Unilingual	548	72.4%	0.45	0	1
Age (mean)					
Bilingual	2434	51.8	14.75	18	99
Unilingual	767	59.8	15.46	19	93
Sex (female)					
Bilingual	2434	58.4%	0.49		
Unilingual	767	60.1%	0.49		
Income (mean)					
Bilingual	1904	\$69,480	42,398	0	150,000
Unilingual	550	\$47,145	37,539	0	150,000
Education (% post-secondary)					
Bilingual	2434	66.8%	0.47	0	1
Unilingual	761	35.9%	0.48	0	1

Table 2: Odds ratios with standard errors for the determinants of poor self-rated health among Anglophone official-language minorities in Quebec, 2010

	Model 2.1: No French	Model 2.2: Index of French ability	Model 2.3: Control variables	Model 2.4: No French, full model	Model 2.5: Index of French ability, full model
DV: Poor Health					
No French	2.182*** (0.222)			1.560*** (0.200)	
Speaks French ¹		0.666** (0.092)			0.819 (0.133)
Reads French ¹		0.510*** (0.070)			0.739 ⁺ (0.123)
Writes French ¹		0.350*** (0.043)			0.484*** (0.075)
Age			1.008* (0.004)	1.006 (0.004)	1.004 (0.004)
Sex (F)			0.931 (0.105)	0.930 (0.105)	0.947 (0.107)
Income			0.999*** (0.000)	0.999*** (0.000)	0.999*** (0.000)
Education			0.817*** (0.048)	0.852** (0.051)	0.869* (0.053)
Pseudo-R ²	0.020	0.027	0.037	0.042	0.048

⁺ $P \leq 0.1$; * $P \leq 0.05$; ** $P \leq 0.01$; *** $P \leq 0.001$

¹ With reference to excluded category 0: No French Ability

Table 3: Odds ratios with standard errors for the determinants of unmet health care need among Anglophone official-language minorities in Quebec, 2010

DV: Unmet health care need (poor health, zero visits)	Model 3.1: No French	Model 3.2: Index of French ability	Model 3.3: Control variables	Model 3.4: No French, full model	Model 3.5: Index of French ability, full model
No French	2.229*** (0.520)			1.922* (0.557)	
Speaks French ¹		0.602 (0.196)			0.639 (0.242)
Reads French ¹		0.359** (0.131)			0.541 (0.217)
Writes French ¹		0.429** (0.119)			0.439* (0.154)
Age			0.986 (0.009)	0.983 ⁺ (0.009)	0.982* (0.009)
Sex (F)			1.014 (0.268)	1.018 (0.269)	1.031 (0.273)
Income			1.000 ⁺ (0.000)	1.000 (0.000)	1.000 (0.000)
Education			0.777 ⁺ (0.110)	0.827 (0.118)	0.839 (0.121)
Pseudo-R ²	0.015	0.017	0.020	0.029	0.030

⁺ P ≤ 0.1; * P ≤ 0.05; ** P ≤ 0.01; *** P ≤ 0.001

¹ With reference to excluded category 0: No French Ability

Table 4: Odds ratios with standard errors for the determinants of having private or supplementary health insurance among Anglophone official-language minorities in Quebec, by language ability and unmet need for health care, 2010

DV: Has health insurance	Model 4.1: Unmet need	Model 4.2: No French	Model 4.3: Index of French ability	Model 4.4: Control variables	Model 4.5: No French, full model	Model 4.6: Index of French ability, full model
Unmet need ¹	0.686 (0.176)				0.082 (0.242)	0.790 (0.239)
No French		0.649*** (0.062)			0.968 (0.120)	
Speaks French ²			1.289+ (0.168)			1.226 (0.200)
Reads French ²			1.520*** (0.194)			0.923 (0.147)
Writes French ²			1.689*** (0.185)			0.987 (0.140)
Age				0.995 (0.003)	0.995 (0.004)	0.995 (0.004)
Sex (F)				1.545*** (0.162)	1.546*** (0.162)	1.551*** (0.163)
Income				1.000*** (0.000)	1.000*** (0.000)	1.000*** (0.000)
Education				1.163** (0.063)	1.158** (0.064)	1.171** (0.066)
Pseudo-R ²	0.001	0.006	0.007	0.085	0.085	0.087

+ P ≤ 0.1; * P ≤ 0.05; ** P ≤ 0.01; *** P ≤ 0.001

¹ Defined as having poor health, but zero visits to a public health care service in the past year

² With reference to excluded category 0: No French Ability

Table 5: Odds ratios with standard errors for the determinants of having either public or private health insurance among Anglophone official-language minorities in Quebec, by language ability and unmet need for health care, 2010.

DV: Public or Private Health Insurance	Model 5.1: Private health insurance, No French	Model 5.2: Private health insurance, Index of French ability	Model 5.3: Public health insurance, No French	Model 5.4: Public health insurance, Index of French ability
Unmet need ¹	0.911 (0.265)	0.917 (0.268)	0.921 (0.286)	0.903 (0.281)
No French	0.670*** (0.074)		1.602*** (0.184)	
Speaks French ²		1.440* (0.206)		0.775+ (0.114)
Reads French ²		1.342* (0.189)		0.688* (0.102)
Writes French ²		1.621*** (0.202)		0.505*** (0.068)
Age	0.991** (0.003)	0.991** (0.003)	1.014*** (0.003)	1.013*** (0.003)
Sex (F)	1.290** (0.119)	1.281** (0.118)	0.996 (0.099)	1.009 (0.101)
Income	1.000*** (0.000)	1.000*** (0.000)	0.999*** (0.000)	0.999*** (0.000)
Education	1.252*** (0.061)	1.246*** (0.062)	0.953 (0.051)	0.970 (0.052)
Pseudo-R ²	0.137	0.138	0.040	0.043

+ P ≤ 0.1; * P ≤ 0.05; ** P ≤ 0.01; *** P ≤ 0.001

¹ Defined as having poor health, but zero visits to a public health care service in the past year

² With reference to excluded category 0: No French Ability

Table 6: Odds ratios with standard errors for the effect of health insurance status on poor self-rated health, access to health care, and unmet health care need among Anglophone official-language minorities in Quebec, by language ability, 2010.

	Poor Health		Access to Health Care		Unmet Need	
	Model 6.1: No French	Model 6.2: Index of French ability	Model 6.3: No French	Model 6.4: Index of French ability	Model 6.5: No French	Model 6.6: Index of French ability
Health insurance	0.842 0.112	0.833 0.111	1.089 0.141	1.088 0.141	0.785 0.236	0.780 0.234
No French	1.569*** 0.202		0.902 0.118		1.916* 0.555	
Speaks French ²		0.830 0.135		1.123 0.190		0.648 0.245
Reads French ²		0.723+ 0.121		1.035 0.168		0.537 0.215
Writes French ²		0.481*** 0.074		1.145 0.167		0.440* 0.154
Poor health			1.447* 0.221	1.452* 0.223		
Use of health care in past year	1.459* 0.224	1.468* 0.226				
Age	1.004 0.004	1.003 0.004	1.024*** 0.004	1.024*** 0.004	0.982+ 0.009	0.982* 0.009
Sex (F)	0.928 0.106	0.945 0.108	1.415*** 0.146	1.411*** 0.146	1.038 0.275	1.051 0.279
Income	0.999*** 0.000	0.999*** 0.000	1.000 0.000	1.000 0.000	0.999 0.000	0.999 0.000
Education	0.854** 0.052	0.873* 0.053	1.071 0.061	1.071 0.062	0.831 0.119	0.844 0.122
Pseudo-R ²	0.045	0.051	0.024	0.024	0.030	0.032

+ P ≤ 0.1; * P ≤ 0.05; ** P ≤ 0.01; *** P ≤ 0.001

¹ Defined as having poor health, but zero visits to a public health care service in the past year