

Should we pay family physicians to register unattached patients?

The unintended consequences of financial incentives in Quebec's access registries.

Julie Fiset-Laniel¹

Roxane Borgès Da Silva^{2,3}

Archan Hazra⁴

Erin C. Strumpf^{1,4}

¹Dept. of Epidemiology, Biostatistics and Occupational Health, McGill University

²Faculty of Nursing, Université de Montréal

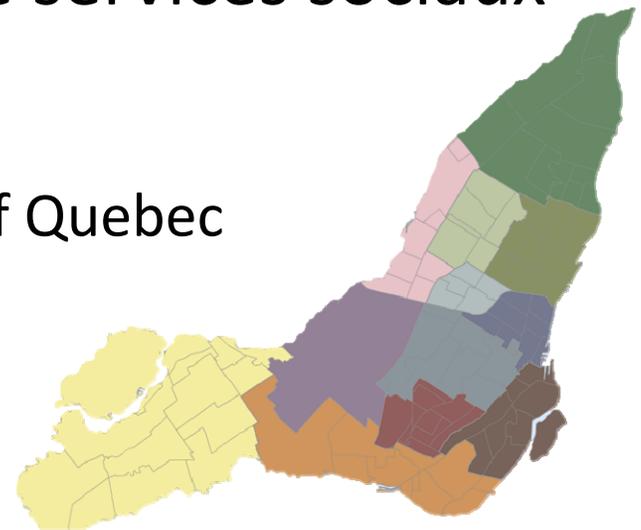
³ Institut de recherche en santé publique de l'Université de Montréal

⁴ Dept. of Economics, McGill University

Quebec's Access Registries (GACO)

- 27 % no family physician (Qc. 2009)
- Implemented in 2008
- To help patient in their search for a family doctor
- 1 *Guichet d'accès pour la clientèle orpheline* (GACO) by Centre de santé et de services sociaux (CSSS)

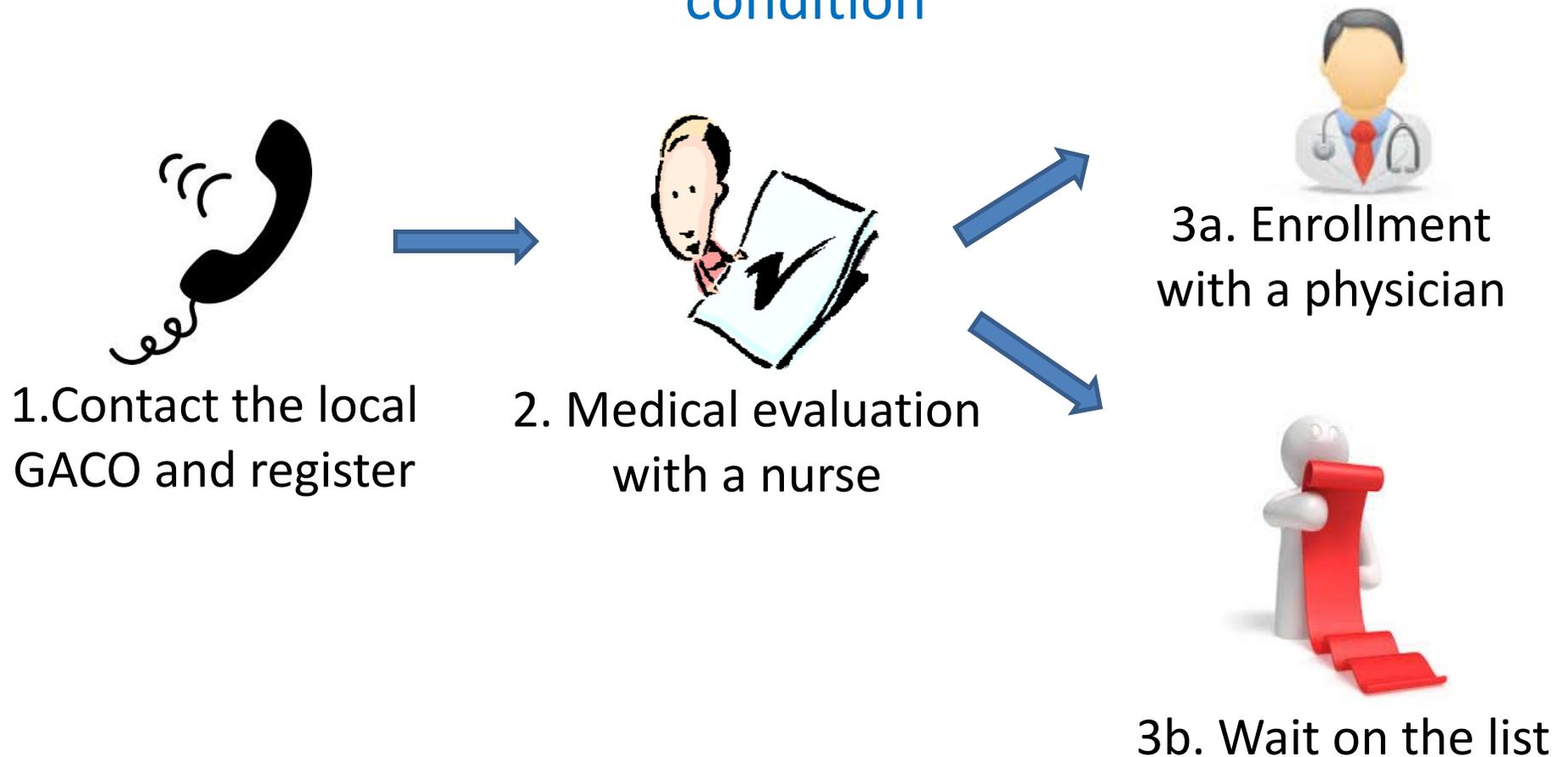
➔ Total of 95 GACOs in the province of Quebec



Ex. CSSS in Montreal Area

How Does GACO Work?

Each CSSS is responsible for administering patients' registrations and for evaluating patients' health condition



GACOs' Levels of Priority



Priority	Clinical Definition	Expected waiting time
P1	People with loss of autonomy, temporary or permanent, whose health problems requires complex and immediate medical attention	≤ 30 days
P2	People with a particular health condition or at risk, permanent or temporary, requiring a follow-up in primary care to avoid the use of ER or hospitalization	30 days to 3 months
P3	People with a known health problem, but for whom medical support is required to maintain the health status and prevent complications	3 to 6 months
P4	People with no known health problem, but whose health condition may require regular annual monitoring	6 to 12 months
P5	Healthy people with no known health problem	

Vulnerability Status

- RAMQ's Definition*
- Changes in the financial incentives

	Location	Until October 2011	Nov. 2011 – June 2013
Vulnerable patients	Private practice	\$103.60	\$208.60
	Local community service center (CLSC) or institute	\$77.60	\$173.80
Non-vulnerable patients	Private practice	\$0	\$100
	Local community service center (CLSC) or institute	\$0	\$83

*8 chronic conditions were added to RAMQ's definition of vulnerability in 2012

Who gets a family physician through centralized waiting lists?

Mylaine Breton^{1,2*}, Astrid Brousselle^{1,2}, Antoine Boivin^{3,4}, Danièle Roberge^{1,2}, Raynald Pineault^{3,4}
and Djamal Berbiche¹

- Document the GACO policy
- Describe the changes after the introduction of new financial incentives (vulnerable patients less enrolled with a family physician after the changes)
- Conclude that « reflexion is needed to understand why physicians are reluctant to enroll vulnerable patients ».
- Suggest important regional variations

Breton *et al.* (2015)

Objectives



1. Revisit the analysis on patient enrollment with a family physician (and add waiting time) after the changes in the GACO policy using regional level data, instead of provincial level
2. Describe regional characteristics associated with the GACO's performance
3. Interpret the unintended consequences of the GACO policy using concepts from health economics

Methodology

1. GACOs' administrative reports* to fit a regression model of the

- ✓ No Patients enrolled
- ✓ Average Waiting times

Sommaire des patients référés à un médecin pour la région 6 Montréal
Année 2010-2011

Patients référés vulnérable par priorité

Priorité	Périodes													Total	Délai moyen en jours
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13		
P1	54	69	37	36	25	60	56	47	28	42	56	78	62	650	59,9
P2	164	185	187	199	180	270	267	249	236	141	262	282	362	2984	42,3
P3	271	384	421	401	395	527	475	506	555	418	464	551	916	6284	31,4
P4	10	21	21	26	21	55	29	42	40	31	27	51	21	395	24,6
P5	2	6	4	1	0	1	1	2	2	76	66	82	92	335	4,9
Total	501	665	670	663	621	913	828	846	861	708	875	1044	1453	10648	35,1
Délai moyen en jours	19,7	20,9	16,3	25,0	34,4	21,8	39,6	26,2	29,0	32,4	40,3	53,6	59,8		

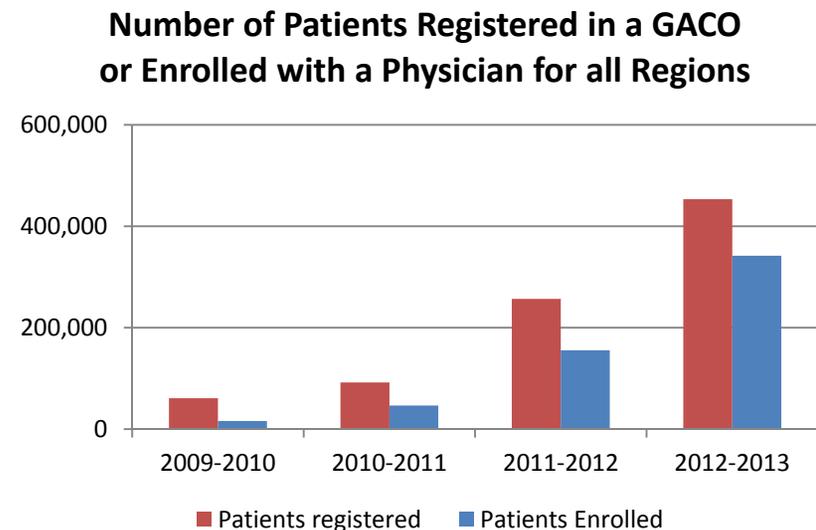
2. Eco-Santé + GACOs' administrative reports

- ✓ Sociodemographic
- ✓ Health status
- ✓ Health services
- ✓ No Patients registered
- ✓ No Patients enrolled
- ✓ % Patients enrolled
- ✓ No MD participating
- ✓ No Installations participating

*Saguenay–Lac-St-Jean (03), Mauricie and Centre-du-Québec (04), Montréal (06), Outaouais (07), Abitibi-Témiscamingue (09), Montérégie (16)

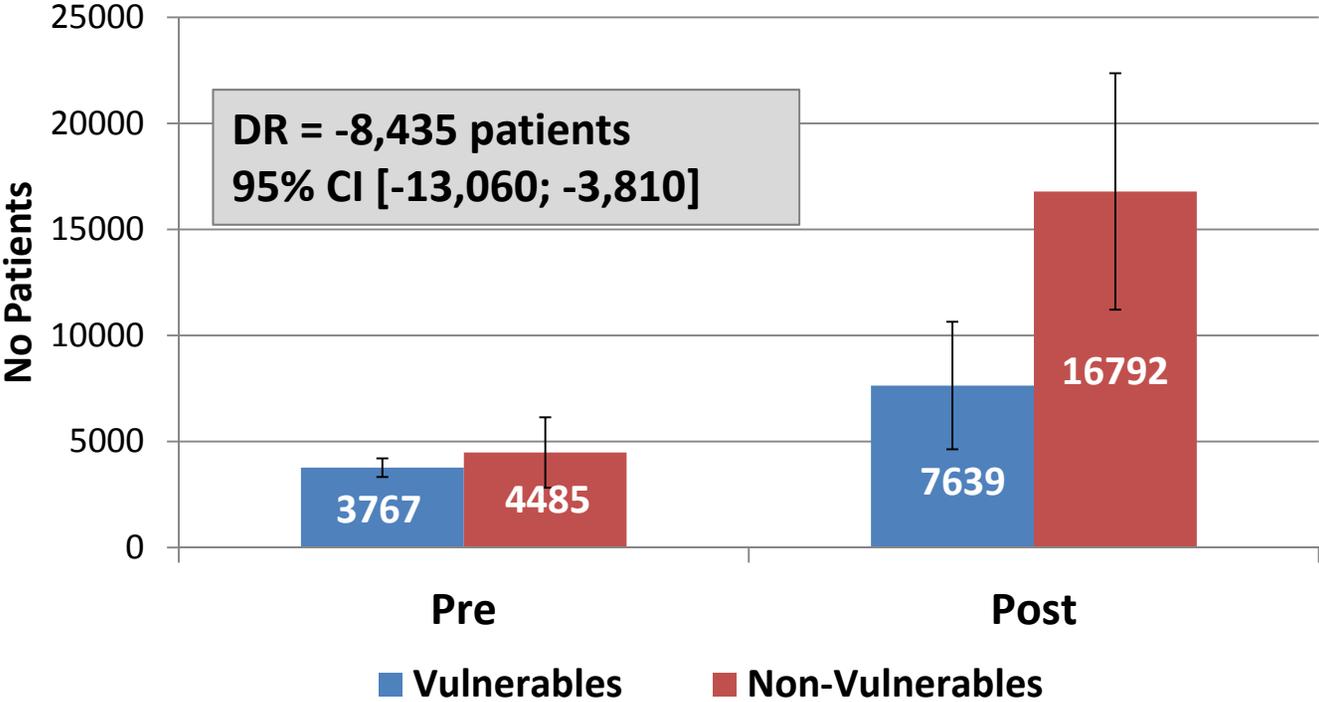
GACOs in brief

- 700,000 patients have registered through the GACO and 500,000 of them enrolled with a physician due to GACO between 2009-2013
- Half of Quebec's regions enrolled about 80 % of registered patients with a family physician, while the other half enrolled only 65 %



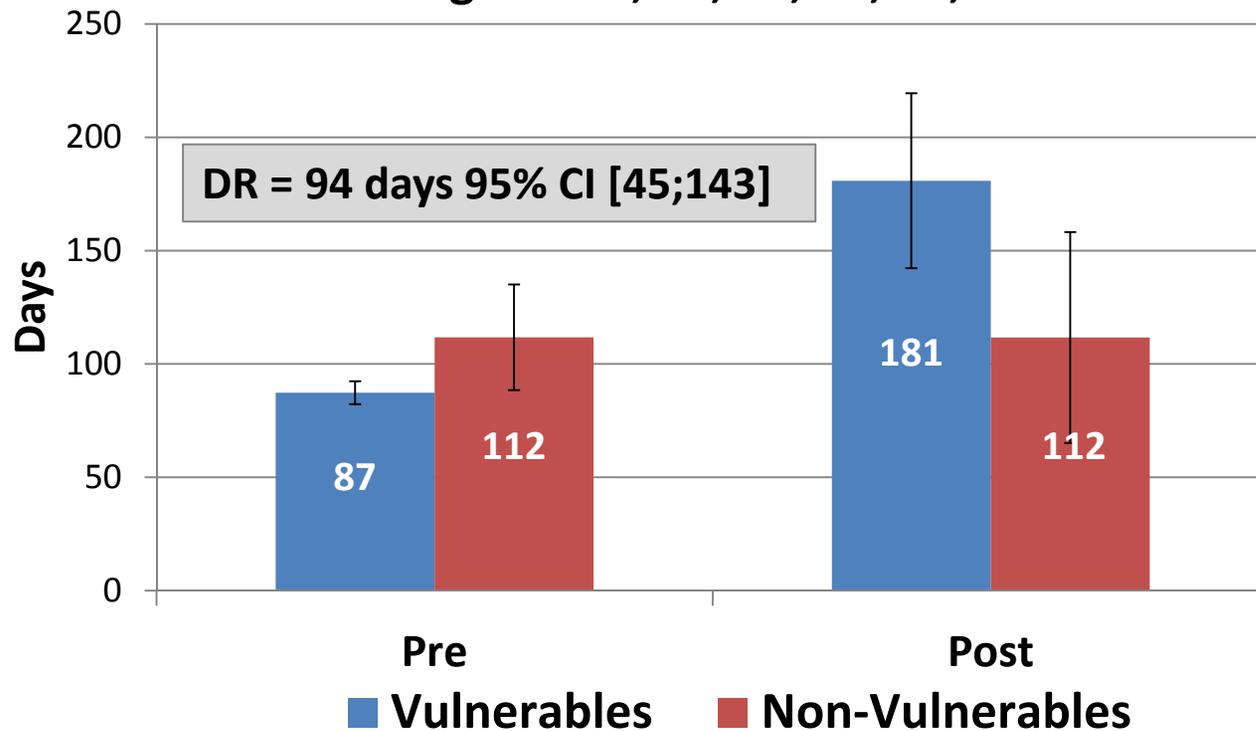
Patients Enrolled with a Physician

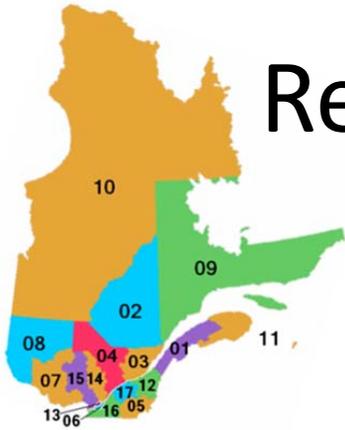
Patients Priority 1 to 5
Regions 03, 04, 06, 07, 09, 13



Waiting time

Patients Priority 1 to 5
Regions 03, 04, 06, 07, 09, 16





Regional characteristics associated with the GACO's performance

Regions

- Older population and with a population in better financial position
- Healthier population
- Less health resources available



GACOs

- + Patients enrolled with a physician
- + Patients & MD registered
- + Installations participating

How can we interpret these
unintended consequences of the
GACO policy?

Concepts from Health Economics



Physician: an economic agent

- Maximize utility = maximize well-being
- Physicians' well-being positively correlated with
 1. Physician's impact on patients' health (altruism)
 2. Income
 3. Leisure time
- In Quebec's context, the *marginal opportunity cost* of an extra working time is high

Patient Selection

- **Skimming:** Physicians may choose to take care of certain types of patients because they receive more benefits from it in terms of income, leisure time and effort.
- **Dumping:** Physicians may avoid patients that are expensive in terms of time and income.



Payment Mechanisms

- Fee-for-service + GACO bonus = good option!

(Retrospective)



- Selection

(less effective in a context where the *marginal opportunity cost* of an extra working time is high)

(Prospective)



+ Selection



Limits

- Aggregated data at the regional level
- Non-causal analysis
- Other health policy changes during the follow-up period:
 - Changes in the RAMQ's definition of vulnerability in January 2012
 - Ministerial notice asking GACOs' administrators to refer non-vulnerable orphan patients to GPs (2010-2011)

Conclusions

- The analysis of the change to physician financial incentives reveals that **vulnerable patients were disadvantaged** in their search for a family physician.
- GACOs **performance** is **higher** in regions where the population is **healthier** and where the **availability of health resources is smaller**.



Should we pay family physicians to register unattached patients?

- Yes, if the intention is to increase patients' enrollment with a family physician regardless of needs
- Otherwise, policymakers need to take the time to estimate adequately the patient burden, in order to avoid patient selection, and they need to take into account physician utility maximization