

A population-based evaluation of Ontario's large primary care reform models

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Background: FHG and FHN models

- **FHN 2002 = capitation**
 - primarily capitation eg \$119/person/year
 - age-sex adjustment but not health status
 - 10% shadow billing
- **FHG 2003 = enhanced FFS**
 - primarily fee-for-service eg \$30 per visit
 - small capitation payments eg \$2/person/month
- **Both models**
 - patient enrolment
 - after-hours care
 - incentives
 - voluntary

Why FHGs and FHNs?

- **Oldest and largest Ontario models available for study**
 - enough time to see change
 - more comparable than straight FFS
 - blended capitation vs FFS the major difference
 - little evaluation to date

Hypothesis: Inverse Care Law

- ***“The availability of good medical care tends to vary inversely with the need for it in the population served. This ... operates more completely where medical care is most exposed to market forces, and less so where such exposure is reduced.”***
(Hart, 1971)*

* Wikipedia

Objective

- **To evaluate practice characteristics and patterns of care in capitation in relation to enhanced FFS**

Methods

- Physicians belonging to capitation and enhanced FFS continuously from September 2005 to August 2006 and their enrolled patients
- Practices stratified by Rurality Index of Ontario
- Outcomes:
 - ▶ demographics, case mix
 - ▶ after-hours care, ED visits and new/unattached patients
- Generalized estimating equations for clustering of patients within physicians and groups

Results

Enhanced FFS

Capitation

Groups	274	53
Physicians	3553	507
Enrolled patients	2 517 527	487 131

Results: Demographics

Enhanced FFS

Quintile 1 - Low 14.5%

Quintile 2 17.6%

Quintile 3 20.2%

Quintile 4 22.4%

Quintile 5 – High 23.1%

Q5:Q1 = 1.59

Capitation

Quintile 1 - Low 15.6%

Quintile 2 18.9%

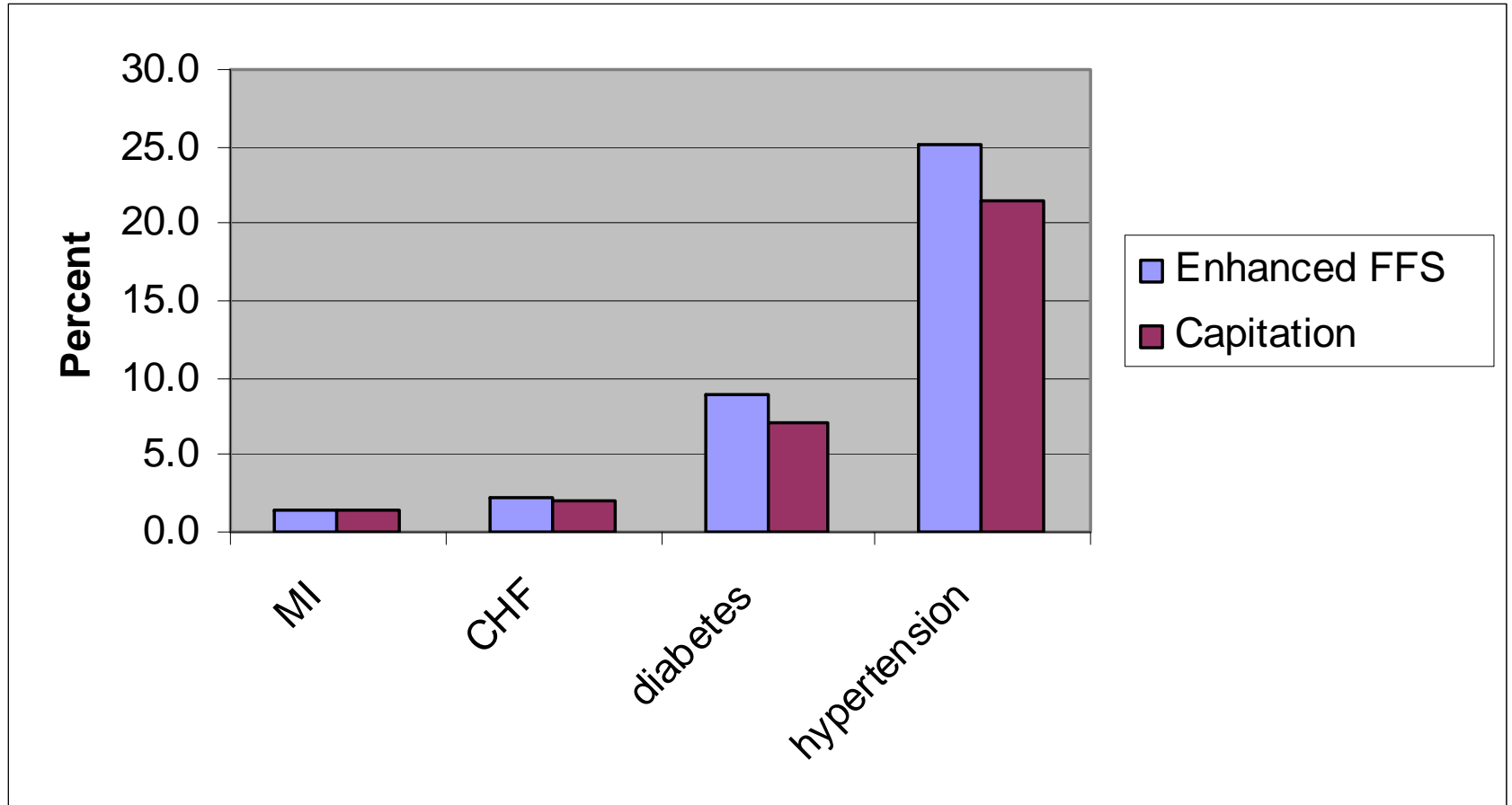
Quintile 3 19.5%

Quintile 4 20.6%

Quintile 5 – High 21.6%

Q5:Q1 = 1.38

Results: Case Mix



Results: Case Mix (2)

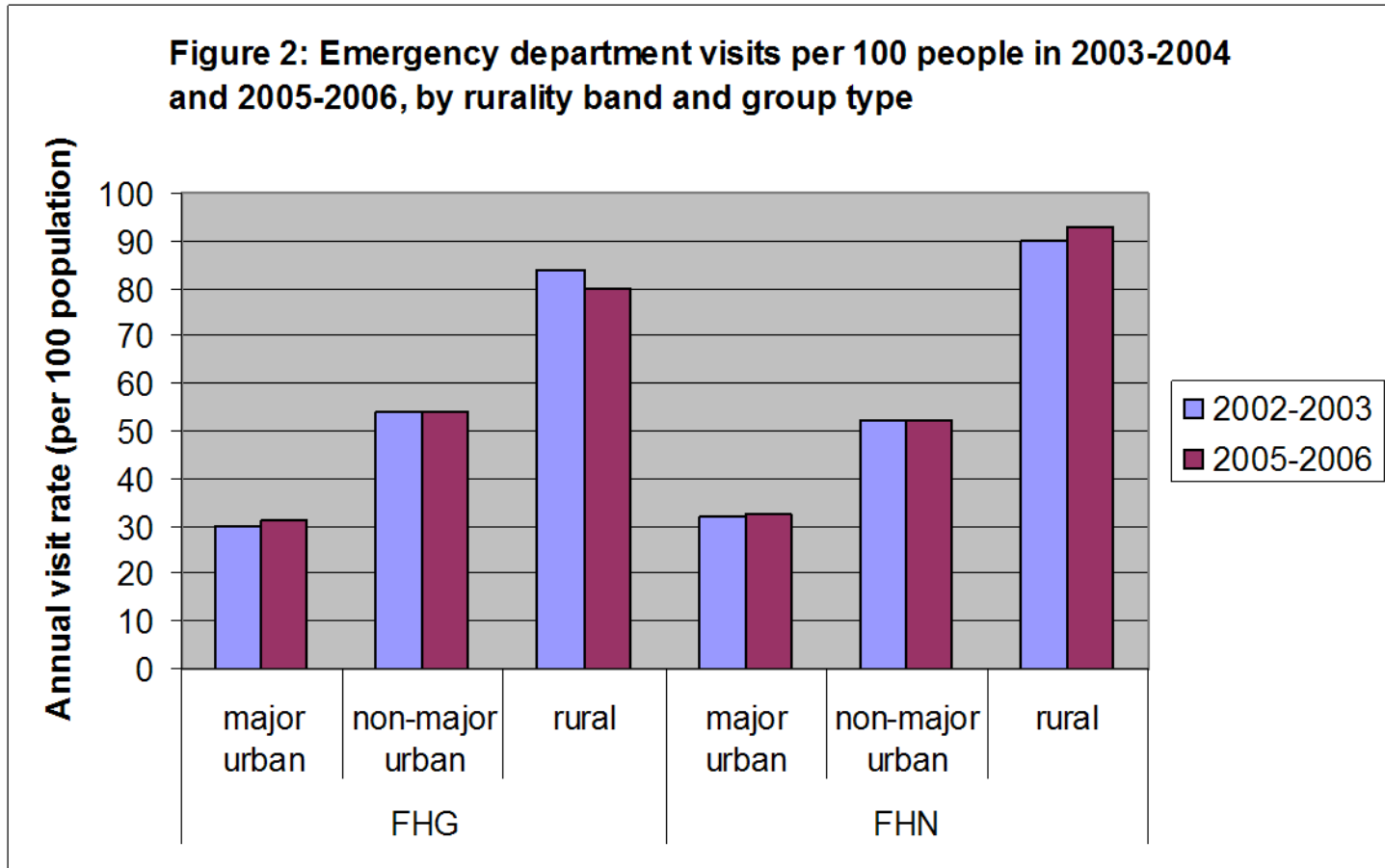
	<u>Enhanced FFS</u>	<u>Capitation</u>
RUBs (0-5)	2.4	2.1
ADGs (> 6)	20.7%	12.0%

Results: Capitation vs Enhanced FFS

- **After hours care:**
 - ▶ adjusted OR* 0.68 (95% CI 0.61, 0.75)
- **ED use:**
 - ▶ adjusted OR* 1.20 (95% CI 1.15, 1.25)

* adjusted for physician location, patients enrolled, months in group, sex, country of graduation, years since graduation, physicians in group; patient age, sex, income quintile, RUB, ADG

Change in ED Visits Before and After Joining Group



Unattached Patients

	Enhanced FFS	Capitation	RR
Per physician	52.0	37.0	1.41
Per new graduate	72.1	60.3	1.20

Limitations

- **Administrative, not research data**
- **Enrolled patients**
 - enhanced FFS had slightly fewer enrolled patients
- **Some groups still enrolling**
 - median 2 years in group
- **Despite extensive adjustment, residual confounding possible (eg urban-rural)**

Discussion

- **Both models have patients from higher income areas**
- **Physician self-selection into capitation produced less desirable practice characteristics**
 - ▶ healthier patients
 - ▶ less after hours care
 - ▶ higher ED visits
 - ▶ lower uptake of new/unattached patients
- **Likely pre-existing rather than due to adopting a new model**
- **Less desirable characteristics should be the focus of future policy development and research**

Policy Implications

- **Models are expensive**
 - Ministry has placed a hold on conversions “to better understand the financial forecasting for converting from one practice model to another”
- **Are not equitably distributed**
- **Possible modifications**
 - case-mix adjustment, targeting to disadvantaged areas, populations
- **Investment in primary care remains key to health system performance**

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