The Relationship between Primary Care Practice Organizational Characteristics and Chronic Disease Prevention and Management

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Background

- The performance level of primary care (PC) practices varies considerably, even those with a similar organizational model.
- Practices also vary in the way they are organized.
- Understanding how organizational attributes are related to performance could help identify the type of investments that should be made in PC
- A number of organizational attributes of PC practices have been shown associated with quality of care[1-6].
- No study to date has been able to simultaneously assess the potential influence of a number of organizational attributes on a variety of performance measures individually or as a composite quality measure.

Objective

➢ **To examine the association between primary care practices' organizational attributes and measures of quality of primary care in Ontario.**

Methods

Design: Cross-sectional survey to be inked to health administrative data

Sample: Inter-professional primary care practices:

- Salaried Community Health Centres (CHC) (n=56)
- Capitation Family Health Teams (FHT) (n=77)

Tool: Adapted from the Canadian Institute for Health Information

Survey delivery: Online population-based survey of primary care practices in 2016 to capture organizational characteristics of primary care practices in Ontario.

Outcome:

- Quality of care composite score derived from chronic disease prevention and management indicators (CDPM)
- Represents the proportion of processes of care performed for which an individual was eligible between 2016-2018 (0.0-1.0)

Independent variables:

Organizational Characteristics

Statistical Analysis: Clustered linear regressions

Covariates:

Patient	Provider	Practice
Age	Age	Model Type
Sex	Sex	Rurality
Household income	Foreign Graduate	Size of Practice (number of MDs)
Recent Immigrant	Years since graduation	
Rurality	Years Practicing in Current Model	
Health Status (ADG)		

Methods (Cont'd)

Linkage:

Organizational Characteristics

Identification of Practices:
Practice Type
Teaching Site
Rurality

Practice Site Resources:
Number and FTE of personnel
Resource Sufficiency

Practice Site Structures:
Internal Quality Improvement Processes
Clinical Quality Improvement Initiatives
Audit and Patient Feedback

Service provision and Clinical Practice:
Service Availability
Chronic Disease Management and Education Programs
Walk In visits
Evaluation Time

Practice Site Context:
Coordination with other practices and hospitals

OUTCOME: Health Administrative Data at ICES

CPDM: Contains 7 tests

- **Chronic Disease Screening:** Lipid Test,
- **Cancer Screening:** mammography, pap test, colorectal test
- **Chronic Disease Management:** DM- eye exam, DM- lipid test, DM-HgA1c tests
- Derived as follows:

Test Score = sum(#triggered indicators) / sum(#eligible indicators)

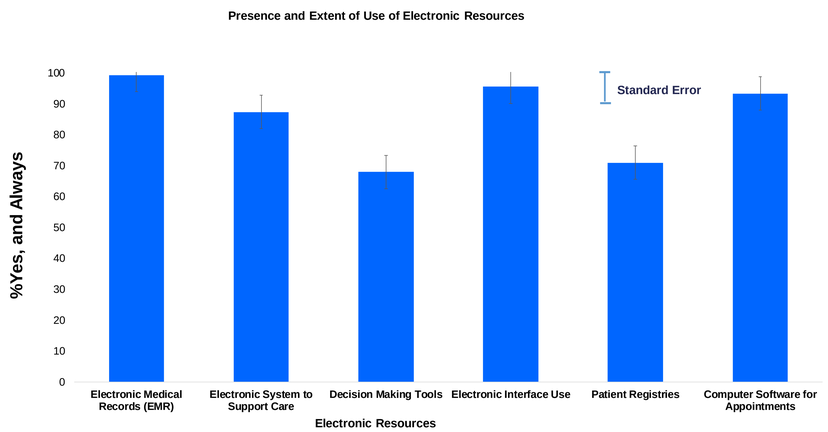
Note: Triggered indicates that the test was done within the time frame required; i.e. the quality was good.

Preliminary Results

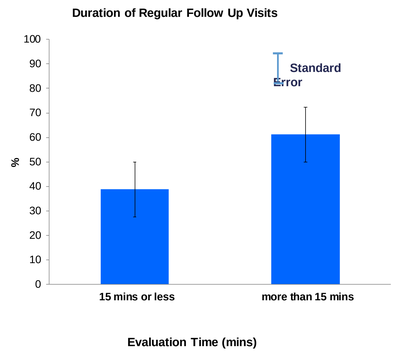
Table 1: Frequency distribution of number of patients within each CPDM category (2012)

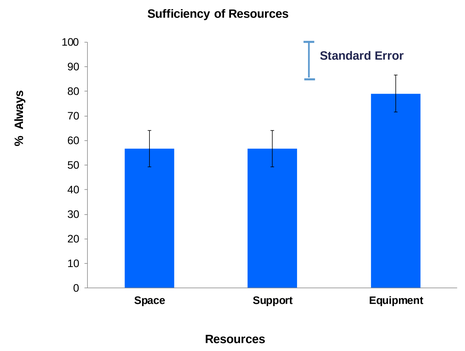
Categorized score	Number of Individuals	% Individuals
0.00-0.20	1,986,923	26.2
0.21-0.40	421,773	5.6
0.41-0.60	697,204	9.2
0.61-0.80	547,860	7.2
0.81-1.00	3,948,472	52.1

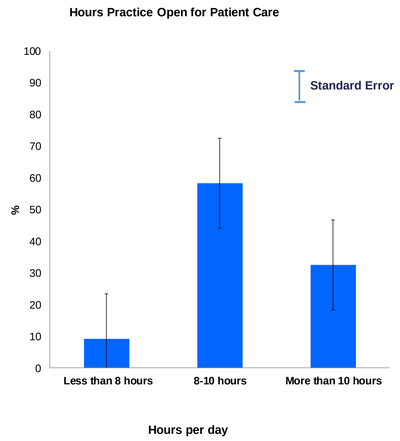
- High variability in various organizational characteristics across practices in 2016 as seen in the following graphs.

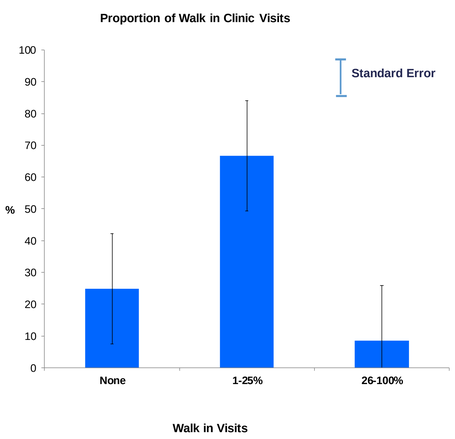


Preliminary Results (Cont'd)









Conclusions

- This will be the first study, to our knowledge, to report a relationship between a breadth of organizational attributes and a composite measure of quality of care.
- Results from this study will highlight factors that are likely to drive quality in primary care practices, and can be used to inform practices and policy makers on future investments to strengthen primary care delivery.

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