

# Measuring Primary Care Performance



# Project Team

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# Research Question

1. Compare the performance of models of primary care delivery
2. Evaluate what organizational factors explain the difference?



# Design

- Cross sectional mixed methods study
- Sample of 137 Primary care practices in four models of primary care delivery – 35 in each model



# Theory based evaluation

- Definition: any evaluation that uses program theory or program logic as its guiding framework” (Davidson, 2004, p. 248).
- How does the “program” operate and through what mechanisms does it achieve its outcomes

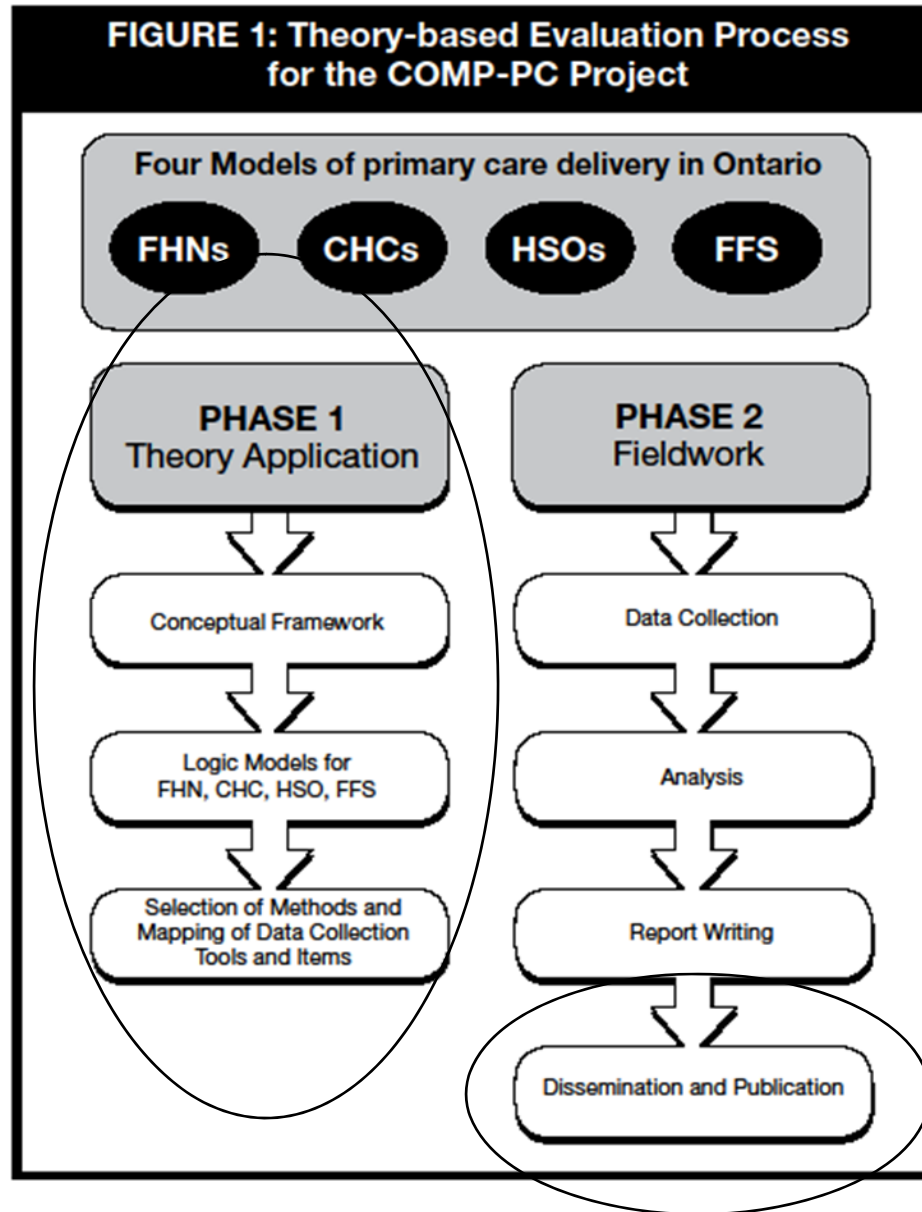


# Application to the COMP-PC project

- Stakeholders – social science approach
- Develop theory
  - Expert consultation
  - Literature synthesis
  - ...



# Theory based evaluation

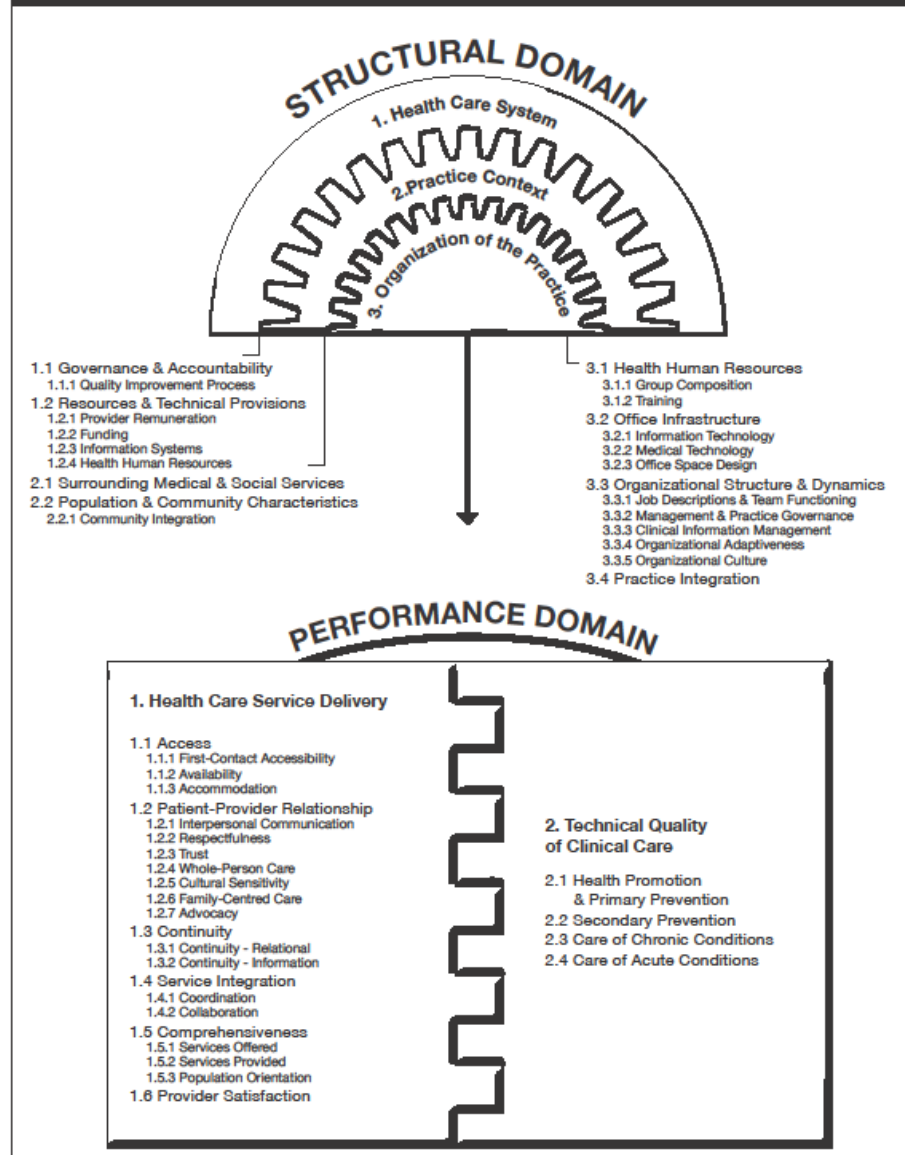


# Conceptual Framework

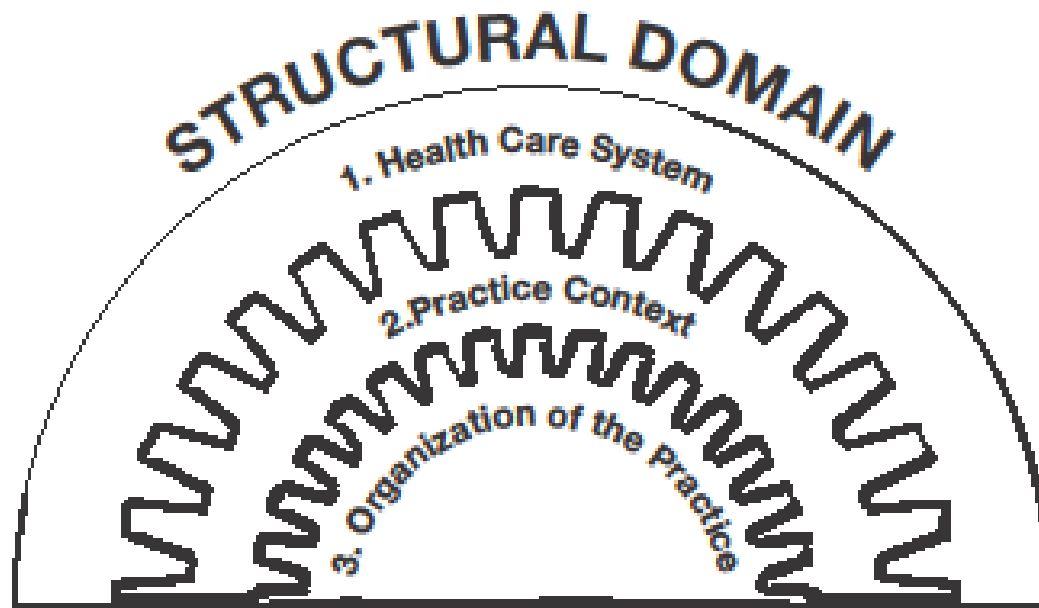
- Development of conceptual framework
  - Existing work
  - Consultation
  - Literature search
  - Evaluation team consensus



**FIGURE 2: Conceptual Framework for Primary Care Organizations**



# Structural Domain



- 1.1 Governance & Accountability
  - 1.1.1 Quality Improvement Process
- 1.2 Resources & Technical Provisions
  - 1.2.1 Provider Remuneration
  - 1.2.2 Funding
  - 1.2.3 Information Systems
  - 1.2.4 Health Human Resources
- 2.1 Surrounding Medical & Social Services
- 2.2 Population & Community Characteristics
  - 2.2.1 Community Integration

- 3.1 Health Human Resources
  - 3.1.1 Group Composition
  - 3.1.2 Training
- 3.2 Office Infrastructure
  - 3.2.1 Information Technology
  - 3.2.2 Medical Technology
  - 3.2.3 Office Space Design
- 3.3 Organizational Structure & Dynamics
  - 3.3.1 Job Descriptions & Team Functioning
  - 3.3.2 Management & Practice Governance
  - 3.3.3 Clinical Information Management
  - 3.3.4 Organizational Adaptiveness
  - 3.3.5 Organizational Culture
- 3.4 Practice Integration



# Performance domain

## PERFORMANCE DOMAIN

### 1. Health Care Service Delivery

#### 1.1 Access

- 1.1.1 First-Contact Accessibility
- 1.1.2 Availability
- 1.1.3 Accommodation

#### 1.2 Patient-Provider Relationship

- 1.2.1 Interpersonal Communication
- 1.2.2 Respectfulness
- 1.2.3 Trust
- 1.2.4 Whole-Person Care
- 1.2.5 Cultural Sensitivity
- 1.2.6 Family-Centred Care
- 1.2.7 Advocacy

#### 1.3 Continuity

- 1.3.1 Continuity - Relational
- 1.3.2 Continuity - Information

#### 1.4 Service Integration

- 1.4.1 Coordination
- 1.4.2 Collaboration

#### 1.5 Comprehensiveness

- 1.5.1 Services Offered
- 1.5.2 Services Provided
- 1.5.3 Population Orientation

#### 1.6 Provider Satisfaction

### 2. Technical Quality of Clinical Care

#### 2.1 Health Promotion

& Primary Prevention

#### 2.2 Secondary Prevention

#### 2.3 Care of Chronic Conditions

#### 2.4 Care of Acute Conditions

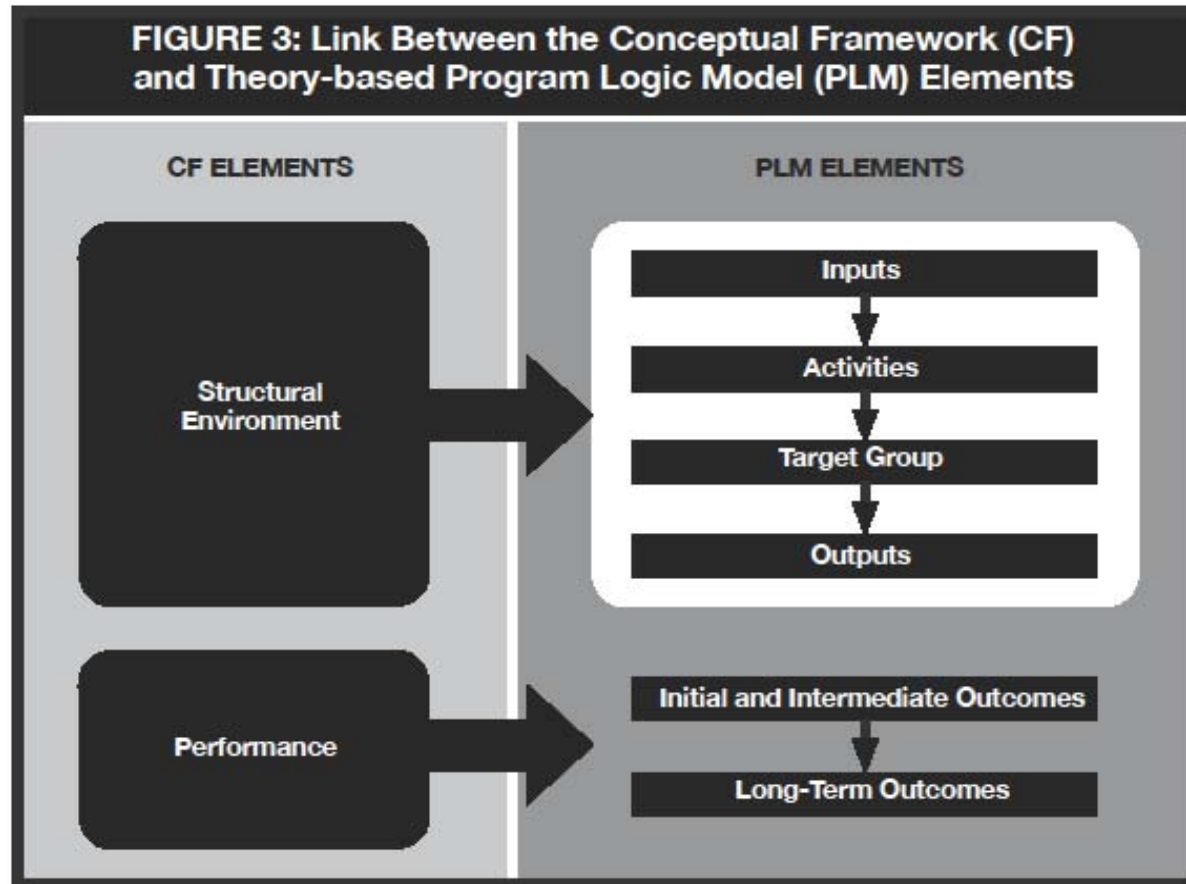


# Program logic models (PLM)

- Apply the conceptual framework to develop PLMs
- PLMs identify areas to measure



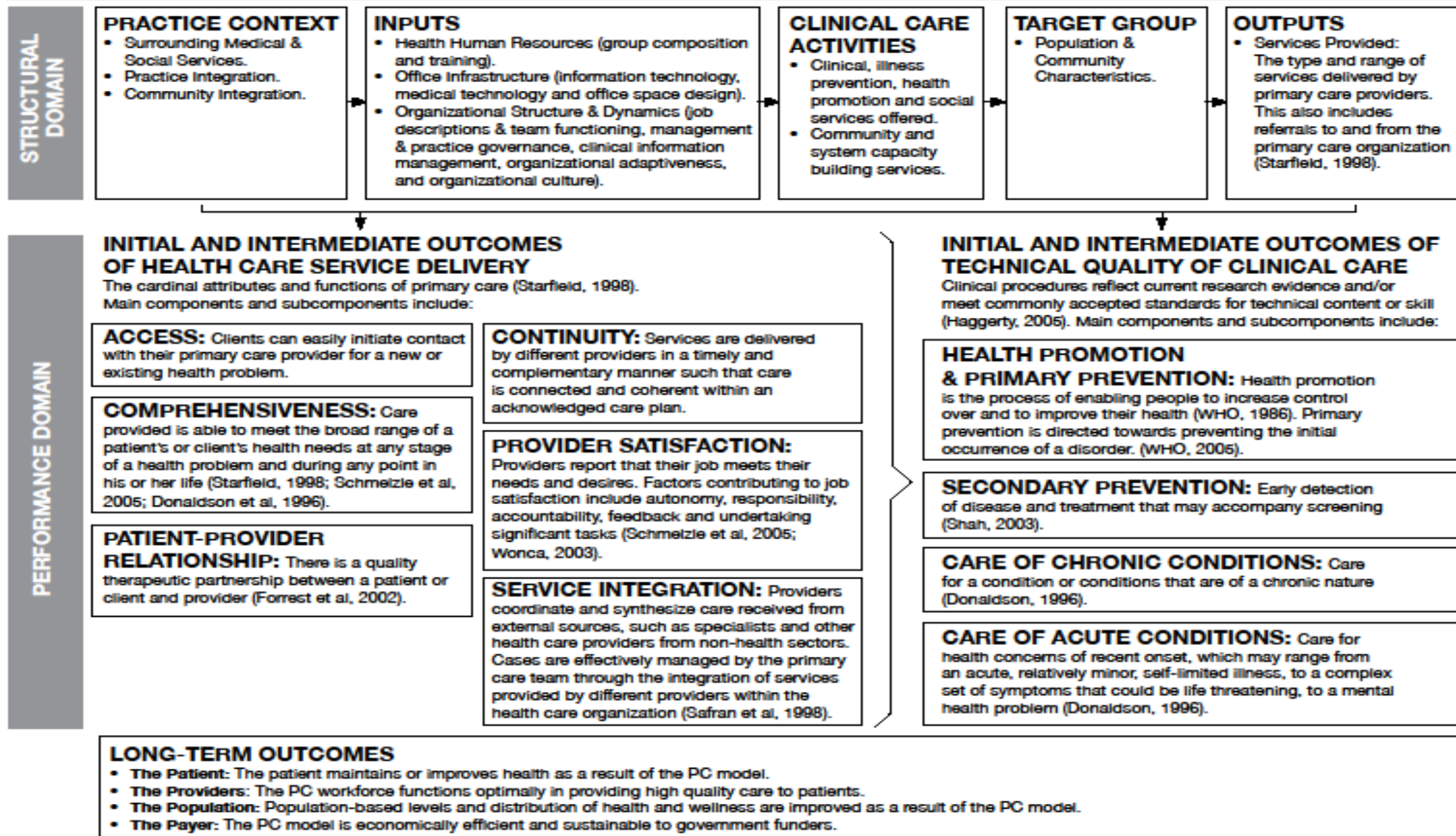
# Link between Framework and PLM



# Logic model

## Theory-based Logic Model for Primary Care Organizations in Ontario

**HEALTH CARE SYSTEM** – The policies, stakeholders (e.g., public agencies, professional associations) and factors at the system-level that can influence primary care (PC) organizations and providers. Governance & Accountability and Resources & Technical Provisions are two main components here.



# Measurement mapping

- Theory --→ Measurement
- Reveal deficiencies



# Measurement mapping

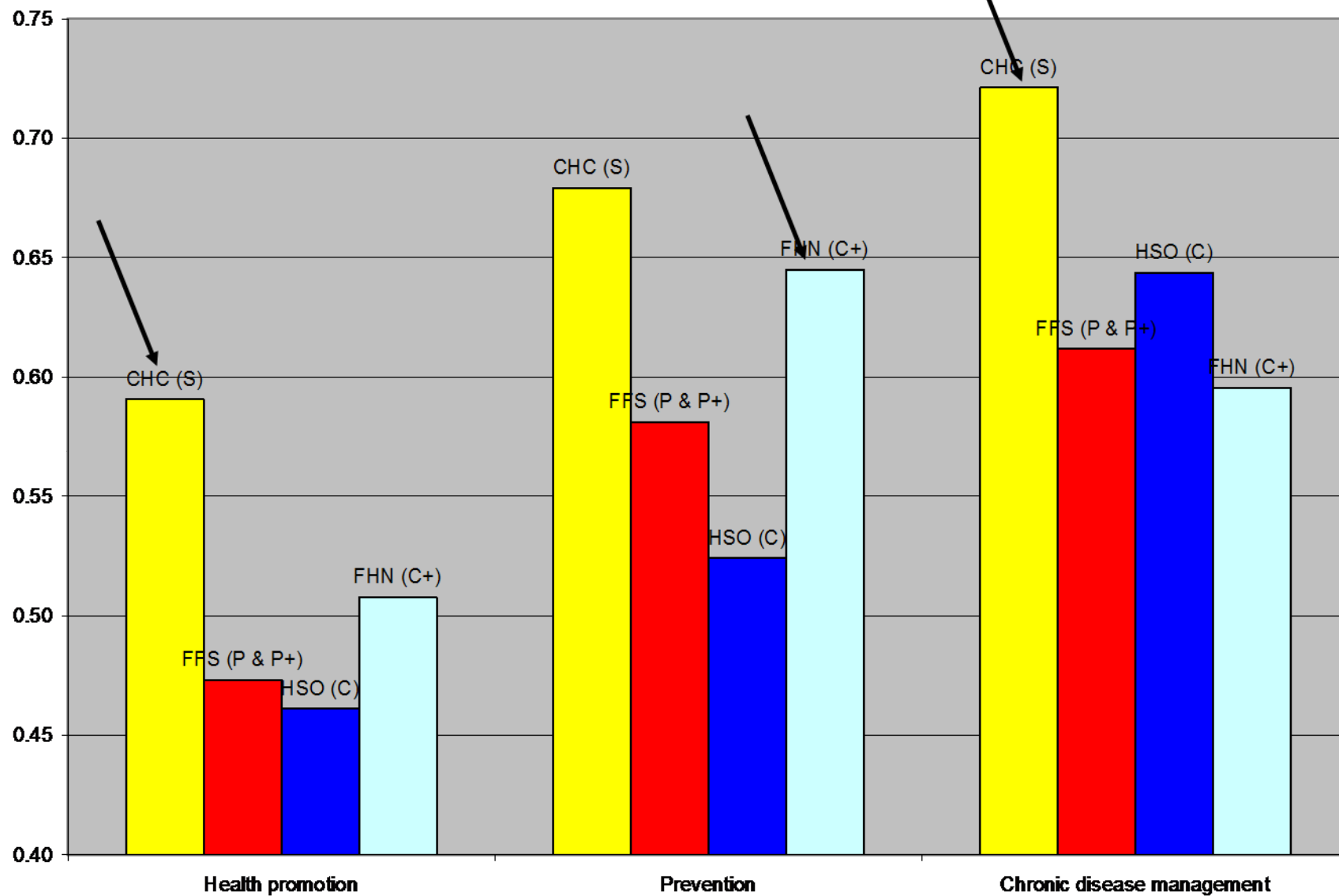
**Table 1: Measurement map for COMP-PC project (excerpt)**

Conceptual Framework Component	Sample Methods, Tools and Items			
Health Care Service Delivery	Patient Survey	Provider Survey	Practice Survey	Chart Audit
<p><i>Access: First Contact Accessibility</i></p>	<p><b>Q15.</b> When your provider's office is open and you get sick, would someone from this office see you the same day? <b>P116.</b> When your provider's office is open, can you get advice quickly over the phone if you need it? <b>P117.</b> When your provider's office is closed, is there a phone number you can call if you get sick?</p>	<p><b>Q1.</b> When your practice is open and a patient gets sick, would someone from your practice/network see them that day? <b>Q2.</b> When your practice is open can patients get advice quickly over the phone when they think they need it? <b>Q3.</b> When your practice is closed do you have a phone number (other than the Ontario Telephone Health Advisory System) patients can call when they get sick?</p>		
<p><i>Service Integration: Coordination</i></p>	<p><b>Q14.</b> When you want to see a specialist, do you get a referral from your provider?</p>	<p><b>Q8.</b> Does your practice phone or send patients the results of lab tests? <b>Q9.</b> Do you think you know about all the visits that your patients make to specialists or special services? <b>Q10.</b> When a patient needs a referral, do you discuss different places the patient might go to get help with their problem?</p>		<p><b>A.</b> Is there a problem (or diagnosis) list in the patient's records? <b>Was problem listed?</b> <b>B.</b> Is there a medication list in the patient's records?</p>
<p><i>Comprehensiveness: Population Orientation</i></p>	<p><b>Q26.</b> Does anyone at your provider's office ever make home visits? <b>Q27.</b> Does your provider know about the important health problems of your neighborhood? <b>Q28.</b> Does your provider get opinions and ideas from people that will help to provide better health care?</p>	<p><b>Q23.</b> The following questions are regarding community orientation: a. Do you make home visits? b. Do you think you have adequate knowledge about the health problems of the community your serve? c. Do you get opinions and ideas from people that might help to provide better health care?</p>	<p><b>Q6.</b> Does your practice site use the following types of <b>data</b> to determine what programs/services are needed by the communities you serve? <b>Q7.</b> Does your practice site use the following <b>methods</b> to monitor and/or evaluate the effectiveness of services/programs if offers? <b>Q8.</b> Does your practice site use any of the following <b>activities</b> to reach out to the population in the community you serve?</p>	

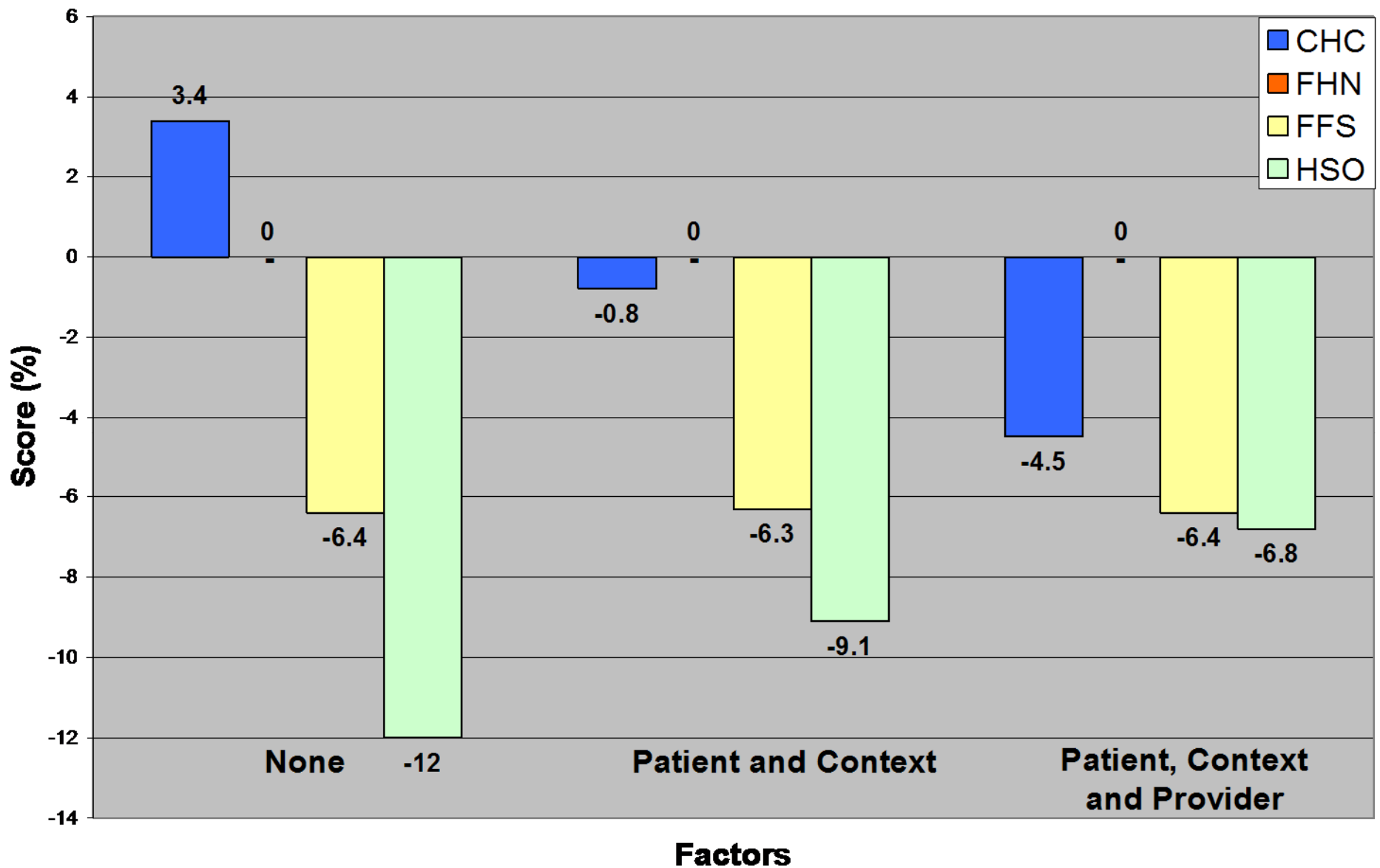


# Discussion

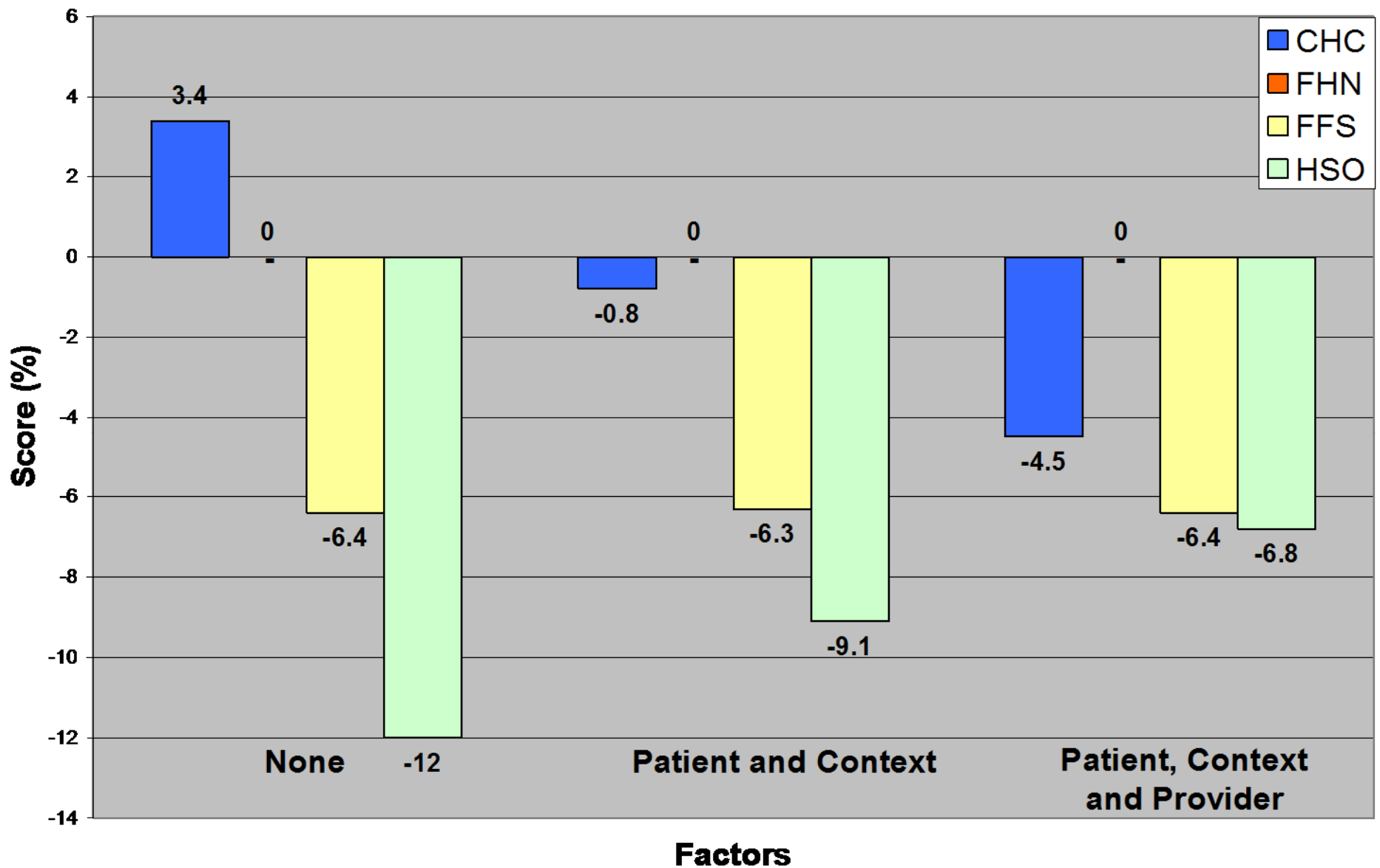




# Prevention score - Adjusted



# Prevention score - Adjusted



# Organizational factors associated with quality

Organizational factors	Accessibility	Continuity	Comprehensiveness	Health Promotion	Prevention	Chronic disease management
Doctor's age	↑					
Doctor's gender (women)				↑	↑	
Trained in Canada	↑					
Numbers of family doctors			↑			↓
Presence of NP(s)						↑
Number of nurses		↓		↑		
Presence of health prof			↑			
Hours of operation	↑					
Open on the week end		↓				
Visit duration				↑		
Panel size				↓	↓	↓
IT reminder system					↑	
Remuneration	-	-	-	-	-	-

