

# PHC Models and related outcomes

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# PHC Models and related outcomes

## 3 Ideas

- **PHC models**
- **Association of PHC models & outcomes**
- **Combination of Models to achieve all outcomes**

## 2 Sources

- **Policy synthesis for CHSRF**
  - **Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada**
- **Research project in Quebec**
  - **PHC in urban and rural settings : Organisation Models & Effects**

# PHC models

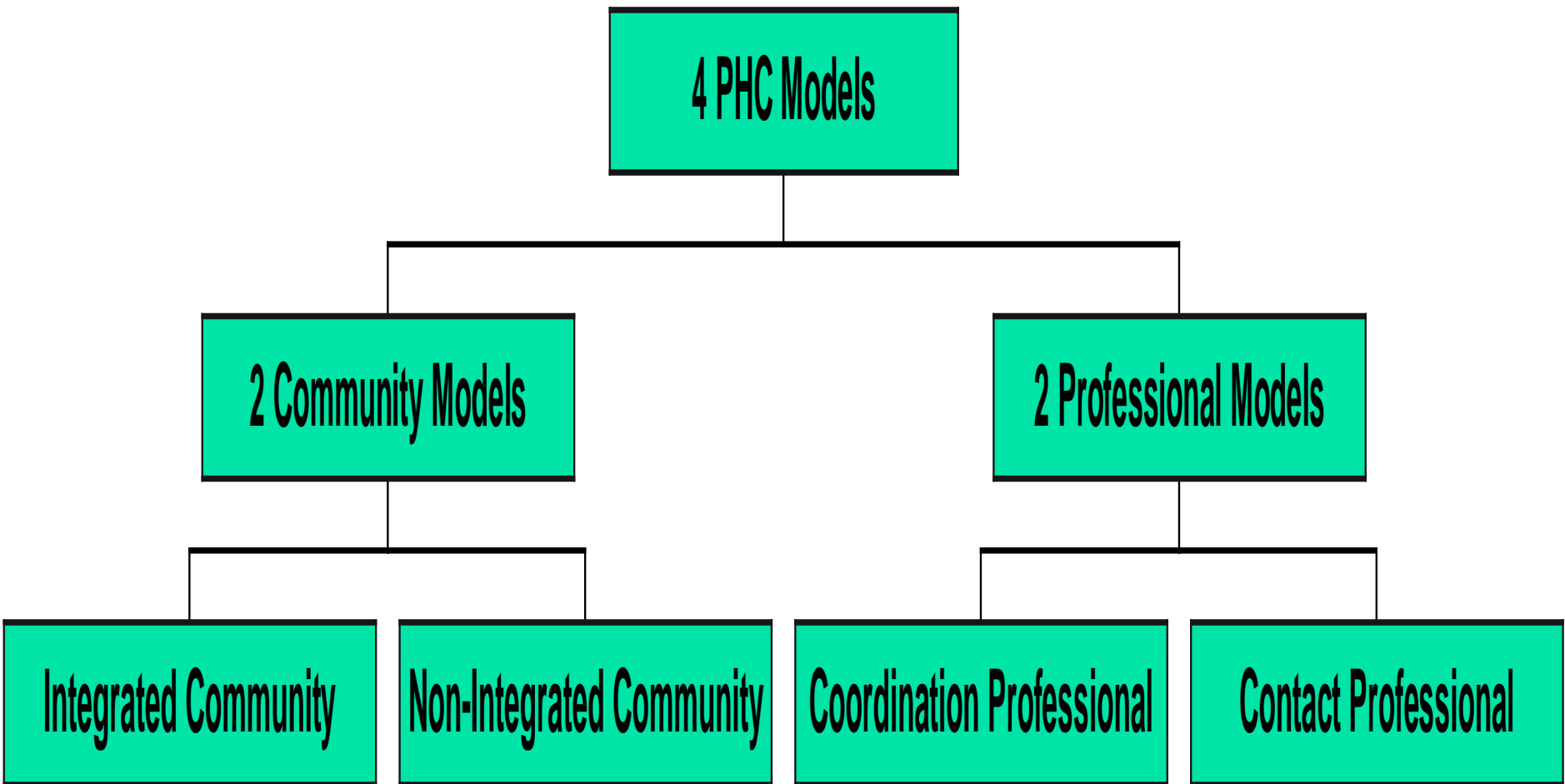
- **PHC** : Organisation providing GP or FP services
- **PHC organisation**
  - Conceived as organized system for action
    - Actors interact for mobilizing and using resources to generate activities, goods or services to achieve their objectives
  - Best described by 4 components
    1. **Vision** : beliefs, values, goals guiding action
    2. **Resources** : Quantity and variety mobilized
    3. **Structure** : Rules governing behaviours and relationships among actors
    4. **Practices** : Process behind services production

# PHC Models

- **PHC Model**
  - A specific configuration of characteristics related to vision, resources, organisational structure, practices
- **Limited number of models**
  - Internal coherence between these characteristics
  - For organisations to be empirically viable
- **Examples**
  - From 28 cases in 14 countries: 4 models
  - From 100 cases in Quebec : 6 models

# Results : Taxonomy PHC Models

## Industrialized countries



# Industrialized countries: 4 PHC Models

Comp	Community Models	Professional Models
<b>Vision</b>	Population health & development Health needs Comprehensive services	Provision of services Medical services Clients or enrolees
<b>Res</b>	Multidisciplinary team Funding : lump sum from RHA RHA oversee services & resource allocation to PHC & other levels of healthcare	Team : MDs & Nurses Funding : MDs compensation
<b>Organ</b>	Healthcare centres Governance : Pop. representatives MDs paid : time based	MDs : individual/group Governance : professionals
<b>Pract.</b>	Wide range of services: from promotion to palliative, medical to community, screening to home care	Limited range of services : Medical, from preventive to curative



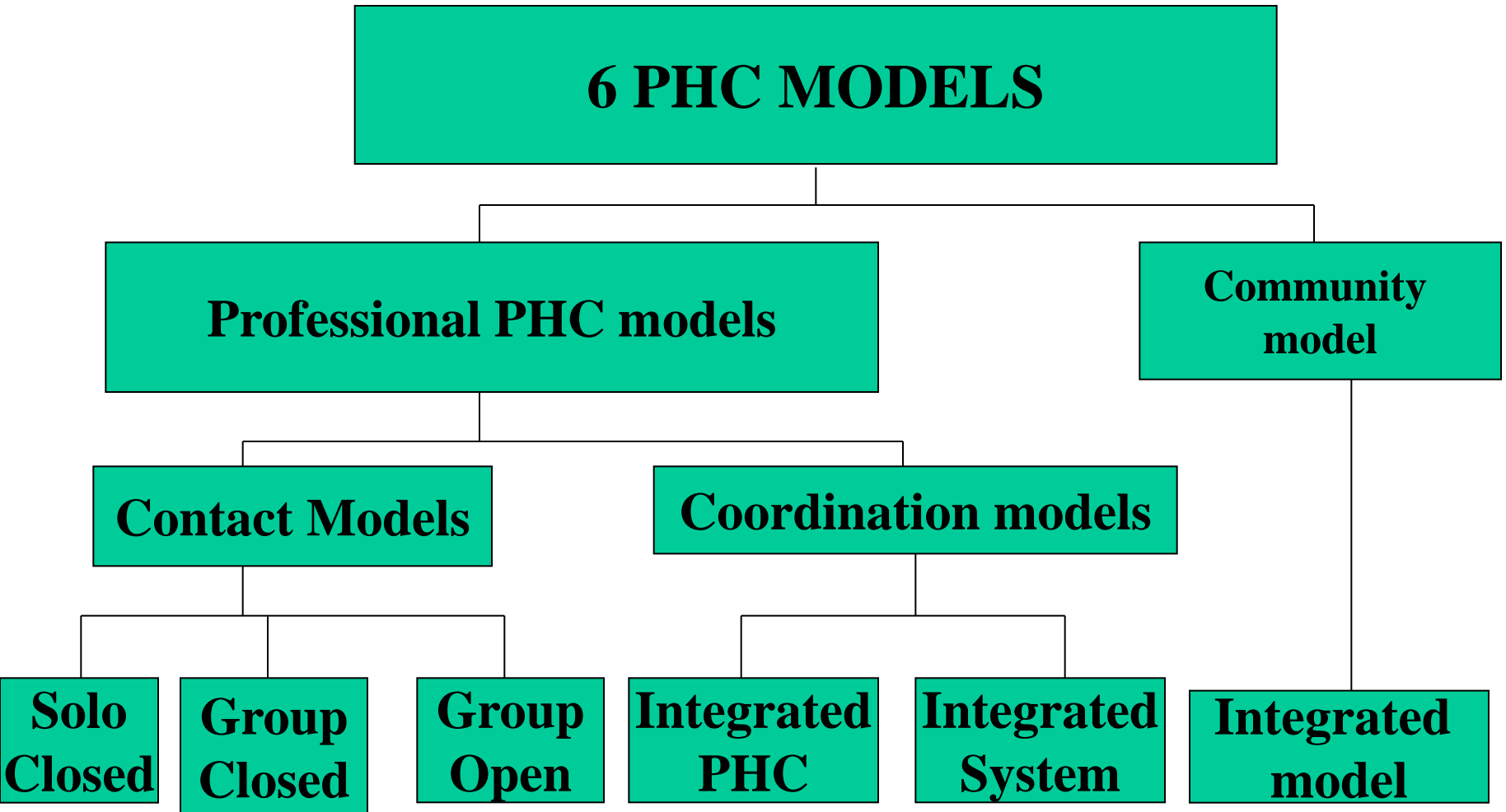
# Industrialized countries: 4 PHC Models

	<b>Integrated Community model</b>	<b>Non-integrated Community-based</b>
<b>Vision</b>		
<b>Res.</b>	Availability of IT Transfer clinical & admin. info To facilities serving the population	No IT
<b>Organ</b>	Networking with other PHC facilities	No formal integration mechanism
<b>Pract.</b>	Provision in conjunction with others (contract/purchase) - 24/7, comprehensiveness Longitudinal continuity	No 24/7 No longitudinal continuity Independent provision of services

# Industrialized countries: 4 PHC Models

Comp	Professional Coordination Model	Professional Contact Model
<b>Vision</b>	Provide continuous & coordinated services To enrolees	Provide accessible services To clients
<b>Res.</b>	MDs & nurses Availability of IT Transfer info: whole system MDs paid : capitation or mix	MDs Availability of IT Transfer info within own unit MDs paid : more on FFS, capitation or mix
<b>Organ</b>		
<b>Pract.</b>	Longitudinal continuity Clinical integration : nurses liase with system components	No formal integration mechanism

# Quebec : 6 PHC Models



# 6 PHC Organisation Models

	Professional contact		
	Solo	Group	
	Closed	Closed	Open
<b>Vision</b>			Goal : Provide services Responsible for individual patient View medical practice as commercial entreprise
<b>Resources</b>	GP alone No nurse	GP in group Nurses	Group of MDs : GP & specialists
<b>Structure</b>			
<b>Practices</b>	Centered regular patients Limited range services Not available outside working hours	Centered regular patients Take time with patients Focus contact vs follow-up Nurse role : Traditional	Drop-in Limited range services Collaboration with PHC et secondary care organisations

# 6 PHC Organisation models

	Professional coordination		Community
	PHC	System	Integrated
<b>Vision</b>			Responsible of population Provision obj : Accessibility & comprehensiveness
<b>Resources</b>	Group GPs Nurses	Group GPs Nurses	Multidisciplinary clinical team
<b>Structure</b>			Members of population on governing body Under responsibility of regional authority supervising all levels of care Mds paid on salary
<b>Practices</b>	Centered regular patients Take time with patients Visits on appointment/ no drop-in Enlarged role of Nurses Formal collaboration more with PHC	Centered regular patients Take time with patients Visits on appointment/ non drop-in Enlarged role of Nurses Formal collaboration more with hospitals but also PHC	Comprehensiveness of services Available outside regular hour Enlarged role of Nurses Formal collaboration with both PHC and hospitals

# Outcomes

- **CHSRF : 6 outcomes**  
Effectiveness, Accessibility, Continuity  
Quality, Productivity , Responsiveness
- **Quebec study : 4 outcomes**  
Accessibility, Continuity, Responsiveness,  
Utilisation of services (GP, Spec, ER)

# Outcomes associated to PHC Models

- **Effects vary by PHC model**
  - Different models different effects
  - Same effects obtained by different models
- **No single best or worst PHC model (?) on all effects**
  - A better and worst PHC Model on most effects but not all effects
- **The trust : Combination of PHC models**
  - The issue : how each effect is valued and by whom ?

# Ranking of PHC models on effects: 38 studies in industrialised countries

Effects \ Models	Prof. contact model	Prof. Coord. model	Non-integrated community model	Integrated community model
Effectiveness	4	3	2	1
Productivity				
- Cost	3	3	1	1
- Use	4	1	3	2
Continuity	3	4	2	1
Accessibility	1	1	4	3
Equity	3	3	2	1
Responsiveness	1	1	3	3
Quality	3	3	2	1

# PHC organisation Models & Effects

Rank of presence of effect controled for vulnerability : Rank 1 > OR	Contact	Coordina	Community	Coordi	Contact	Contact
	Solo	tion	Integrated	nation	Groups	Groups
	Closed	System		PHC	Closed	Open
<b>ORGANISATIONAL ACCESSIBILITY</b>	1	2	2	2	5	6
Ease of contact	1	2	4	3	3	4
Accessibiliti in urgent situation	3	3	1	2	3	3
<b>CONTINUITY</b>	1	3	3	5	2	6
Relational continuity	1	5	4	2	3	6
Management continuity	1	1	1	5	1	6
Information Continuity	2	1	2	2	2	2
<b>RESPONSIVENESS</b>	1	1	2	2	2	6
Patient considered as a person	1	2	3	3	3	3
Time aspect	2	1	2	2	2	6
<b>USE OF SERVICES</b>	3	1	3	2	3	3
PHC	1	1	1	1	1	1
Specialists MS	1	1	1	1	1	1
ER	3	1	3	2	3	3
<b>GLOBAL RANK</b>	1	2	3	4	5	6
<b>Sum of ranks</b>	6	7	10	11	12	21

# Implications for Economic Evaluation of PHC

- 1. Need to agree on a inclusion criteria for PHC organisation**
  - As inclusive as possible and Relevant to the Canadian context
- 2. Need to agree on how to capture the similarities and differences of PHC organisation**
  - Vision, Resources, Organisational Structure, Practices is a good basis
  - Model is a useful concept for that purpose
- 3. Need to capture dominant & emerging PHC models in Canada**
  - Large enough to capture difference
  - Small enough the difference is significant
    - 4-8 different, coherent and significant PHC models
    - Comprehend the **internal coherence** of each PHC Model

# Implications for Economic Evaluation of PHC

## 4. The use of Models

- Structure the intervening variable
  - Put alike with alike
  - Differentiate different alikes
- Basis for explanation of observed effects
  - Explained by configuration characteristics and coherence
  - Not explained by one or few of these characteristics
- Basis for implementation
  - Ensure the coherence of characteristics

# Implications for PHC Economic Evaluation

## 5. Need to agree on a finite set of expected outcomes of PHC

- Effectiveness, Accessibility, Continuity, Quality, Responsiveness, Productivity, Equity
- The weight to each outcome by different actors
- Assess from population members perspective not patients/users perspective

## 6. Focus on combinations PHC Models which populations exposed to

- PHC system
- Limited number of combinations ?