Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada
Finding new and better ways to deliver healthcare services is a priority for decision makers across Canada. In particular, improving the way we organize and deliver primary healthcare is an issue for managers, policy makers, clinicians, researchers and Canadians in general.

That's why, in 2001, the Canadian Health Services Research Foundation commissioned a team of researchers to create a policy synthesis on primary healthcare. They looked at primary healthcare models in Canada and around the world, considered all the relevant studies on the topic, and consulted a number of experts.

Discussions around the merits and shortcomings of the different ways to organize and deliver care are bound to be passionate; considering recommendations for improvements even more so. We hope the report by Paul Lamarche and his colleagues will enrich the debate in Canada about where we need to go, and what should be done.

Included in this document are main messages, an executive summary and a final report from the research team. Also included are commentaries by two leading experts in the field, working in both the research and decision-making environments.

The report's appendices include further information which will primarily be of interest to researchers. These include a taxonomy of primary healthcare models (appendix 1), analysis of effects associated with these models (appendix 2) and conversion strategies (appendix 3). These appendices are available on the CHSRF website (www.chsrf.ca) under the “documents and reports” section, and a limited number of printed copies can also be ordered from the foundation.

We hope that this report serves to stimulate a new level of debate in Canada about the future of primary healthcare, the guidance that research can provide, and the questions that remain unanswered at this time.

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*Given the scope and relevance of the research, readers are encouraged to read the appendices for more information on the methodology and approaches used to produce this synthesis. These appendices are available on request from CHSRF.*

*(See each appendix for a complete bibliography.)*

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Main Messages

Many Canadians are currently rethinking the way we organize and deliver primary healthcare in this country. Many different models are being proposed, and there is a need to know why, how, and under what circumstances one model may be preferable to another or a combination of models may be the best solution. This policy synthesis will prove useful to the many groups seeking these answers — including healthcare managers and policy makers, practitioners, elected officials, and the public.

Based on solid methodology and exhaustive research, this document boils down what we know about the benefits and drawbacks of these different primary healthcare models. Decision makers will find the report’s recommendations particularly useful, as they provide a guide for making these services as effective, relevant, and viable as possible in the current Canadian context. The key implications that emerge from the research are:

- No single organizational model for delivering primary healthcare among those identified can meet all the anticipated effects of primary healthcare: effectiveness, quality, access, continuity, productivity, and responsiveness.
- Two models stand out since they meet, to varying degrees, most of the desired effects — the integrated community model and the professional co-ordination model.
- If the attainment of all these desired effects is pursued, it is the combination of the integrated community model and the professional contact model which should be favoured, as long as ways are found to fill some remaining gaps in access to care. This combination of models maximizes all desired effects while minimizing duplication of effects and capitalizing on the organization that is currently in place.
- Various measures should be taken in order to ensure the efficient integration of one or more of these models in the Canadian context:
  1) allow primary healthcare to be funded by a per capita formula and to include components such as specialized medical and hospital services, drugs, diagnostic and therapeutic services, homecare and palliative services;
  2) encourage compensation of physicians by sessional payment, per capita formula, or a mix of payment methods;
  3) favour a multidisciplinary approach, and award sufficient funding of interdisciplinary training and internship projects in order to enhance long-term sustainability; and
  4) dedicate funds to develop integrated information systems for various care groups to help manage and plan the system, and develop diagnostic and therapeutic technologies that fit the needs of organizations offering primary healthcare services.
Primary healthcare has long been a concern of healthcare managers and policy makers. However, in recent years the organization, management, and delivery of care have also become a pre-occupation of politicians, the general public, and other interest groups. In fact, the organization of primary healthcare is viewed by many as one of the major challenges facing the healthcare system in the 21st century.¹

The term "primary healthcare" has been interpreted in different ways. At its core, however, primary healthcare is defined as a set of universally accessible first-level services that promote health, prevent disease, and provide diagnostic, curative, rehabilitative, supportive, and palliative services.

There are six broad effects primary healthcare should produce:

• effectiveness — the ability to maintain or improve health;
• productivity — the cost of services and the quantity, type, and nature of intake services for a health problem or care episode;
• accessibility — promptness and ability to visit a primary healthcare physician, and ease of accessing specialized and diagnostic services;
• continuity — the extent to which services are offered as a coherent succession of events in keeping with the health needs and personal context of patients;
• quality — the total appropriateness of care as perceived by patients or professionals, including compliance with guidelines, as well as the suitability of services; and
• responsiveness — consideration of and respect for the expectations and preferences of service users and providers.

This policy synthesis identifies four major models for organizing primary healthcare that are relevant to the Canadian context. Two models fall into what can be broadly called a community-oriented approach, while the other two fall into what can be called a professional approach.

The vision of community primary healthcare is to improve the health of specific geographically defined populations and to contribute to community development by providing a set of required medical, health, social, and community services. Within this vision, there are two types of models: the integrated community model and the non-integrated community model. These models differ by their degree of integration into other parts of the healthcare system. Several characteristics of their resources, organizational structure, and practices reflect their varying degree of integration.

The vision of professional primary healthcare is to deliver medical services to patients who seek these services, or to people who choose to register with one of the primary healthcare organizations (subscribers). Professional models are subdivided based on delivery objectives into a professional contact model and a professional co-ordination model. The professional contact model is by far the most common in Canada, and classically involves physicians operating their own practices, being paid on a fee-for-service basis.

Although no single model best meets all the desired effects of primary healthcare at all times, two models appear superior. The integrated community model and, to a lesser extent, the professional co-ordination model, appear to best approach the ideal, although both have some notable shortcomings.

The integrated community model appears to be most effective (in terms of health and service), provides services of the highest quality (technical and relevant), and shows the best possibility of controlling costs and use, especially due to the capability of shifting use of services from a

¹ The Advisory Committee on Health Services of the Conference of Federal, Provincial and Territorial Ministers of Health, the Canadian Coordinating Office for Health Technology Assessment, the Canadian Institute for Health Information, as well as the Institute of Health Services and Policy Research of the Canadian Institutes of Health Research, 2001.
specialty to a primary health care level. It also has better continuity and equity of access. It suffers shortcomings, however, due to less accessibility (especially for primary healthcare) and responsiveness to patients. Nonetheless, the integrated community model appears to meet the goals of primary healthcare to the greatest degree.

On the other hand, the **professional co-ordination model** provides certain important benefits. It provides good access to primary healthcare, is responsive to patients, and shifts services from the specialty to the primary level. However, there appear to be drawbacks in health efficiency, continuity, equity, costs, and quality.

Of course, for these primary healthcare models to be truly effective, it must be possible to implement them in Canada. Neither of the preferable models is currently dominant in Canada — that distinction belongs to the professional contact model, evidenced by the number of physicians operating their own practices and working in walk-in clinics. Many of the characteristics of this dominant model are very different from the characteristics of the models that have been shown to be the best. In particular, there are differences in the method used for funding services, compensating physicians, multidisciplinary teamwork, and information, diagnostic, and therapeutic technology.

Regardless of the chosen vision — community or professional — major effort is required to make effective changes to primary healthcare organization. To increase the possibility of success, strategies for change must set a clear, firm direction for the change to be introduced. At the same time, there must be flexibility and room for movement in the implementation plan, to allow the emergence of a primary healthcare model suited to local conditions while accommodating professional and clinical autonomy.

**Structure of this Report**

This report has five parts. The first describes the approach used to produce this policy synthesis. The next three parts discuss the taxonomy of primary healthcare models, the effects associated with the various models, and the most promising implementation strategies. The last presents recommendations on the preferred primary healthcare models. The recommendations cite the conditions that must be put in place to ensure their integration into Canadian healthcare, the best implementation strategies, and the research priorities that should be followed by funding agencies, in order to further improve the organization of primary healthcare in Canada.

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**Highlights of the Recommendations**

- The integrated community model should be used as a benchmark for changing primary healthcare in Canada, although measures should be instituted to offset the model's shortcomings in accessibility and responsiveness.
- When a professional vision of primary healthcare is chosen, the professional co-ordination model should be preferred.
- Funding of primary healthcare should be allowed on a per capita formula and should include specialized medical and hospital services, drugs, diagnostic and therapeutic services, homecare and palliative services. Sessional payments for physicians should be promoted, or a mix of per capita, sessional payment and/or fee-for-service, rather than pure fee-for-service payments.
- A strong focus should be placed on multidisciplinary work, and sufficient funding should be awarded to interdisciplinary training projects in order to enhance long-term sustainability.
- Priority should be placed on integrated information systems for many groups, for management and planning purposes, and on developing relevant diagnostic and therapeutic technologies for organizations delivering primary healthcare services.
In 2002, the Canadian Health Services Research Foundation (CHSRF), in partnership with New Brunswick’s Department of Health and Wellness, Saskatchewan’s Department of Health, Quebec’s Ministry of Health and Social Services, and Health Canada commissioned a group of researchers from the Université de Montréal to produce a policy synthesis on primary healthcare organization. As part of this assignment, the researchers were asked to identify various models for organizing primary healthcare and the effects associated with these models. The goal was to come up with recommendations on the approaches and measures that the federal government, provincial governments, and regional healthcare authorities could adopt to improve the organization of primary healthcare in Canada.

### Major objectives of the synthesis are to:
- produce a taxonomy of models for organizing primary healthcare models;
- identify the effects associated with each model; and
- make recommendations on the best implementation strategies for the current Canadian context.

### Six aspects of primary healthcare viewed as a system for organized action

1. **Vision:** the beliefs, values and objectives by which players communicate and justify their actions
2. **Resources:** the quantity and variety of resources available
3. **Organizational structure:** the legislation, regulations, agreements, and other arrangements that govern and guide the behaviour of players, their relations with each other, and the authorities that define them
4. **Practices:** the processes behind production of activities and services
5. **Effects:** the desired change in results of primary healthcare over time
6. **Environment:** the context in which players operate, and the other systems with which they interact

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This framework describes approaches to organizing primary healthcare and provides a better understanding of the links between these characteristics and the effects observed. It can also forecast the changes required for introduction of the necessary organization methods to achieve the desired effects in the Canadian context.

2. Models for organizing primary healthcare

Since models for organizing primary healthcare must be relevant to the Canadian context and to the current discussion, we looked at only services in the ambit of Canada’s public healthcare system and intended for the entire population. The primary healthcare cases that we analysed are in place in the industrialized countries, and include at least general practice or family practice medical services. We did not consider alternative medicine, services for specific groups such as the elderly, the underprivileged, or people with specific afflictions (mental health problems, cancer, or HIV/AIDS), or ambulatory services provided by hospitals.

The taxonomy of models was produced through analysis of 28 cases of primary healthcare organization in the industrialized countries (see Appendix 1). We make no claim that this is an exhaustive representation of all the different forms of primary healthcare organization in the industrialized countries, or that it exhausts all possible or probable forms for organizing these services. Nonetheless, it sufficiently covers the range of options currently being considered for the future direction of primary healthcare in Canada.

To produce the actual models for organizing primary healthcare, we used a configurational approach4 (see inset).

The configurational approach also provides an understanding of the effects associated with models for organizing primary healthcare, given the consistent grouping of effects that are related to specific organizational configurations of characteristics. In the preparation of this synthesis, we chose to link configurations of organizational characteristics with configurations of effects, rather than to isolate the respective influence of these specific characteristics on specific effects.

3. Effects associated with models for organizing primary healthcare

For purposes of this policy synthesis, six major effects were studied in detail: effectiveness, productivity, accessibility, continuity, quality, and responsiveness.

Effectiveness

The concept of effectiveness refers to each model’s ability to produce the expected outcomes.5 Effectiveness can be broken down into two components. First, health effectiveness measures the contribution of primary healthcare to improving and maintaining the health of individuals and populations.6 To assess this factor, we consider the following effects on individuals or populations:

1) the perception and observed contribution of models to improving or maintaining physical or mental health;

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2) state of health;
3) life expectancy and quality of life; and
4) the reduction in mortality and morbidity rates.

Second, service effectiveness is measured through the perceived or observed contribution of primary healthcare to the management of health conditions:

1) prevention of health problems and promotion of good health;
2) accurate diagnosis and early detection;
3) treatment and control of health problems;
4) maintenance of functional capacities of people with health problems, through rehabilitation and reintegration; and
5) support services and palliative care.

Productivity
The concept of productivity refers to the relationship between services delivered and resources used to deliver them. To assess productivity fully, we must consider the cost of services, as well as the quantity and type of resources used to produce the services. Any decrease in costs or a shift from the use of services at a specialized level to the primary healthcare level represents a gain in productivity, described as a substitution effect.

Continuity
The concept of continuity refers to the extent to which services are offered as a coherent succession of events in keeping with the health needs and personal context of patients. Service continuity is broken down into three key components:

1) informational continuity is the use of information about prior events that supports delivery of appropriate services in the patient’s current circumstances;
2) relational continuity refers to a relationship between a patient and a service provider that lasts over time, as well as the quality of that relationship; and
3) integrated clinical management harmonizes care provided by various providers.

Accessibility
The concept of accessibility covers the ease or difficulty of contacting healthcare services and is expressed in three ways. Overall accessibility describes the ease of accessing any services; accessibility of primary healthcare measures the speed of patient access to primary healthcare; and accessibility of other care levels refers to the ease of patient access to care and the promptness of delivery of specialized and diagnostic services.

Equity of Access
The concept of equity of access indicates the extent to which the level of access meets the needs of individuals regardless of a series of factors such as age, socio-economic status, or ethnic origin.

Responsiveness
The concept of responsiveness is used to establish the extent to which services meet expectations and are deemed satisfactory. The responsiveness of various primary healthcare models is assessed from the perspective of both users of primary healthcare and professionals providing these services.

Quality
The concept of quality covers three aspects of primary healthcare:

1) total quality, as perceived by patients and professionals;
2) technical quality, which is linked to the degree of compliance with established guidelines; and
3) appropriateness, which reflects the suitability of the services provided.

Assessment of the effects associated with primary healthcare models is based on two sources: empirical observations and the opinions of experts (detailed in Appendix 2). The empirical...
observations are drawn from 38 studies while the expert opinions reflect the assessment of situations by people recognized for their knowledge of the Canadian context and their experience with settings comparable to those being studied. Thirteen experts were consulted as part of a Delphi survey, and these comments enrich and complete the empirical observations. The empirical observations remain the determining factor when combined with the expert opinion. However, the expert opinion serves an important moderating effect for interpreting the link between the models and the effects seen (details in figure A2.3 in Appendix 2). The convergence of the empirical observations and expert opinion confirms or emphasizes the effects identified from the empirical observation. A divergence between the two sources mitigates the final synthesis of effects when those emerging from empirical observations are more positive than those expressed by experts. A model is said to have good potential when the effects revealed by empirical observations are less positive than those expressed by experts. Finally, expert judgment is used to differentiate between models when the empirical observation does not allow researchers to do so.

4. Strategies for change

Even if there is agreement on the need to change the organization of primary healthcare in Canada, the processes required to support the change is unclear. A review of about 100 scientific articles on change issues reveals three elements that must be considered to gain a better understanding of the reorganization strategies of primary healthcare in Canada and in the provinces:

1) the nature of the change;
2) the pace of change; and
3) the participation of players in the change.

Analysis of the facets of change and their interaction points to three scenarios for changing primary healthcare. These are described below.

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12 This introduction to analysis of conversions of primary care is based on and partly borrows the concept of change and conversions developed in a study entitled “Governance and Management of Change in Canada’s Health System” (Denis, 2002 — Study prepared for the Commission on the Future of Health Care in Canada).
Taxonomy of Primary Healthcare Models

This section describes in detail the four models for organizing primary healthcare that emerge from the taxonomy. They differ in their vision of primary healthcare. Two models are based on the so-called professional vision, while the two other models adopt a so-called community-oriented vision.

The sidebars provide concrete examples of different ways primary healthcare services can be organized and dispensed within each model and describe reforms introduced to promote their development.

1. Professional primary healthcare models

Professional models of primary healthcare are designed to deliver medical services to patients who seek these services (clients) or to people who choose to register with one of the parties responsible for primary healthcare to obtain these services (subscribers).

This responsibility falls to physicians working alone or in groups who do not report to a regional or local healthcare entity. The public plays no role in the governance of these organizations, and their funding is linked to compensation for physicians, primarily by a per capita formula (fixed payment) or a mix of payment methods — per capita, fee-for-service, and sessional payments. The caregiving team consists of physicians, with whom nurses may also be associated. The range of services provided is limited to preventive, diagnostic, or curative medical services.

There are two professional models of primary healthcare: the contact model and the co-ordination model. These are distinguished by the difference in the goals of their service provision. The contact model is centred on facilitating an individual’s first contact with the healthcare system. The co-ordination model focuses on the co-ordination of a range of services and follow-up with patients.

Professional contact model

The purpose of this model is to ensure the accessibility of primary healthcare, a responsibility that focuses more on clients than on subscribers. This model has the following characteristics:

- primary healthcare is provided almost exclusively to people who arrive at a physician’s office, by family physicians practising alone or in groups;
- physicians are rarely associated with other healthcare professionals, including nurses;
- physicians are more likely than any others to be paid on a fee-for-service basis;
- the information technology in use allows clinical information to be shared only within the organizational unit responsible for primary healthcare;
- there is no formal mechanism to guarantee longitudinal continuity of care for individuals, aside from patient loyalty to a physician; and
- no formal mechanism guarantees integration of services into the other components of the system, aside from certain informal arrangements, such as directing patients to other sources of care or physician affiliation with other sources of care.

Examples of the professional contact model

In Canada: Despite the existence of many models, the dominant form of primary healthcare is the professional contact model. Examples of the model include private practices and walk-in medical clinics that serve as the patient’s gateway to the healthcare system.

Change focus: Some Canadian proposals and experiments for changing the organization of primary healthcare strive to improve the professional contact model.13

Other countries: The organization of primary healthcare in the United States and Belgium is also based on this model.

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13 Sinclair, Health Transition Fund, Ontario and Nova Scotia.
Professional co-ordination model
The purpose of this model is to provide continuous services, over time, primarily to patients who register with an organization to receive care (subscribers). The model has the following characteristics:

- it is funded by payments to physicians, paid primarily through per capita or mixed payment mechanisms (per capita, sessional fees, and fee-for-services);
- the care-giving team consists of physicians and nurses;
- a professional — usually a physician but sometimes a nurse — is designated to provide follow-up and continuity of services to each patient or subscriber;
- information technology is used to transfer clinical information to other units in the system; and
- a nurse is a liaison with other components of the system and co-ordinates clinical integration of services.

As part of the professional co-ordination model, primary healthcare is integrated into the other components of the system. This approach guarantees continuity and sound co-ordination of services.

Examples of the professional co-ordination model
In Canada: The professional co-ordination model is fairly uncommon in Canada, at least in its purest form. The closest example is Ontario's health service organizations.
Change focus: Several proposals have been made to shape the organization of primary healthcare on the professional co-ordination model.14
Other countries: This model is used in various industrialized countries. Family physicians in England follow this model, especially since the introduction of fundholding. It is also used in Denmark, the Netherlands, and the United States as part of integrated healthcare organizations known as HMOs (staff-centred model).

2. Community primary healthcare models
The community approach to primary healthcare is designed to improve the health of populations living in a given geographic area and to promote development of the communities served. Its mission is to meet the healthcare needs of a population and to provide it with all the medical, health, social, and community services required.

The approach features healthcare service centres governed by public representatives. These centres obtain lump sum funding from a local or regional health authority. That authority oversees the organization of all healthcare services within its territory and allocates resources to primary healthcare and services for other levels of care.

Caregiving teams, which include professionals from various disciplines, provide a broad range of medical, social, and community services. Their functions include seeking to promote health and prevent disease, and providing a range of diagnostic, curative, and palliative care, rehabilitation, homecare, and early detection services. The professionals who work in these centres, including physicians, are paid by a sessional payment for the time they devote to their professional activities.

The community approach can be divided into two models: the integrated community model and the non-integrated community model. These differ by the degree to which they are integrated into the rest of the healthcare system. Each has specific characteristics linked to resources, organizational structure, and practices.

Integrated community model
This model has several attributes likely to promote the integration of primary healthcare into the other components of the healthcare system, including:
- use of information technology to convey clinical information and management evidence within healthcare centres and to other service providers serving the same population (e.g., private practices and hospitals), a practice that promotes the creation of networks;

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14 Fédération des médecins omnipraticiens du Québec (FM OQ), College of Family Physicians of Canada (CFPC).
The integrated community model of primary healthcare is focused on co-operation and interaction with the community. Healthcare service centres also have the necessary authority and financial resources to sign contracts or purchase services from other providers.

Non-integrated community model
The non-integrated community model differs from the integrated community model by the lack of specific integration mechanisms and has the following characteristics:

- it uses no information technology or other mechanisms to integrate services with those provided by the rest of the healthcare system;
- services are not available 24 hours a day, seven days a week; and
- no formal mechanism ensures longitudinal continuity of services to individuals.

The non-integrated community model offers the public as broad a range of services as that of the integrated community model, but the healthcare centres provide these services directly, with no collaborative arrangements with other parts of the healthcare system. The model can be seen as a closed system that provides care and services to the public with no significant interaction with other parts of the system.

Examples of community models

In Canada: The organization of primary healthcare is also based on community models. More than 250 healthcare service centres were surveyed, though their presence varies greatly from province to province. The most striking example is that of CLSCs (local community healthcare centres) in Quebec. However, it is unclear how CLSCs differ from each other, in terms of their degree of integration with the rest of the healthcare system. It appears that CLSCs tend to follow the integrated community model in rural settings, whereas in urban areas, most CLSCs are closer to the non-integrated community model.

Change focus: Proposals have been made to consolidate the presence of the community model of primary healthcare. Others are designed to facilitate change from the non-integrated model to the integrated model.

Other countries: Internationally, healthcare centres in the Scandinavian countries and primary care trusts in the United Kingdom constitute integrated community models.

15 Church and Lawrence, 1999.
17 Clair Report.
Effects Associated With Primary Healthcare Models

It is critical to establish the link between different primary healthcare models and the effects on the population. The following table ranks the four models according to the observed effects, with the first rank having the greatest degree of impact and the last the least. Ranking is based on both empirical observation and expert opinion. Those wishing to explore the detailed findings of this analysis can consult Appendix 2.

1. Results related to effects

Effectiveness
In terms of effectiveness, community models achieve, on the whole, the best empirical results. Expert opinion confirms the superiority of the integrated community model and ranks the professional co-ordination model second, followed by the non-integrated community model, which shares last place with the professional contact model. The experts make a clear distinction between the two community models. The empirical results observed for the two community models may be more attributable to the integrated community model than to the non-integrated community model.

Productivity
Productivity was analysed in two ways: costs and use.

Costs: The empirical observations show few major differences between the models in terms of the cost of primary healthcare services, although community models tend to post lower overall costs, due to lower costs for specialized services. Although the expert opinion does not support a distinction between the two community models, it does confirm the models’ ability to reduce all costs. Empirical observations show that costs for the professional co-ordination model are identical to those of the professional contact model, but

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<tr>
<th>Models’ Impacts</th>
<th>Professional contact model</th>
<th>Professional co-ordination model</th>
<th>Non-integrated community model</th>
<th>Integrated community model</th>
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<tbody>
<tr>
<td>Effectiveness</td>
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<td>Quality</td>
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Spotlight on Effectiveness
The integrated community model performs best in terms of effectiveness, followed by the non-integrated community model, then the professional co-ordination model, and, finally, the professional contact model. (integration of both data sources)
the expert opinion indicates a substitution effect towards primary healthcare for services offered at other levels.

**Use:** As in the case of costs, we observe a shifting of services from specialty levels to primary healthcare with the professional co-ordination model and, to a lesser degree, for the two community models. The empirical observation evidence indicates that this substitution effect is most prominent in the professional co-ordination model, whereas experts believe it has more potential in the integrated community model.

**Spotlight on Productivity**

For costs: The two community models are more productive due to their greater ability to control costs and achieve a substitution effect between primary healthcare and other levels of care, such as specialized and ultra-specialized services.

For use: The professional co-ordination model posts the best performance, followed by the integrated community model, then by the non-integrated community model, and, finally, by the professional contact model. This reflects the greater ability of some models to achieve substitution between primary healthcare and the other levels indicated above.

Total productivity: The professional co-ordination model and the integrated community model perform best when we interpret all the results for costs and use. There is reason to expect slight productivity gains for total costs and total use, and to expect major gains in terms of substitution and transfer from specialized services to primary healthcare.

**Spotlight on Continuity**

The performance of the two community models exceeds that of the two professional models for continuity. The integrated community model ranks first, followed by the non-integrated community model, the professional contact model, and, a close last, the professional co-ordination model, which still shows good potential.

**Accessibility**

The professional models provide greater accessibility than the community models, especially for primary healthcare. They are followed by the integrated community model and, lastly, by the non-integrated community model.

**Spotlight on Accessibility**

The professional models provide greater accessibility than the community models. They are followed by the integrated community model and, lastly, by the non-integrated community model.

**Continuity**

The empirical observations attest to the superiority of the community models compared with the professional models. Of the professional models, however, the contact model exceeds the co-ordination model in relational continuity (the relationship between provider and patient). The expert opinion also highlights distinctions between the two community models and confirms the superiority of the integrated model over the non-integrated model in terms of expected potential. Contrary to the empirical observations, the experts believe that the professional co-ordination model has greater potential than the professional contact model. For the experts, the integrated community model and the professional co-ordination model show greater potential than the empirical observation would appear to indicate.
Equity of Access
The assessment of equity of access — the use of services regardless of factors such as age, gender, and socio-economic status — was based solely on empirical observation.

Spotlight on Equity
Analysis of the empirical observations shows that the two community models provide the most equitable access to services. Of these two models, the integrated community model is more equitable than the non-integrated model. In turn, the two professional models appear less equitable but are both at the same level. (empirical data)

Quality
The empirical observations clearly indicate that the community models provide services of higher quality than the professional models. Both professional models are equivalent in terms of quality. Expert opinion confirms the empirical observation and highlights the greater potential of the integrated community model over the non-integrated community model. According to experts, the potential of the professional co-ordination model equals that of the non-integrated community model but exceeds that of the professional contact model.

Spotlight on Quality
In terms of quality of services, the integrated community model ranks first, followed by the non-integrated community model. The professional co-ordination model and the professional contact model are tied for last. (integration of both data sources)

Responsiveness
The empirical observation shows that responsiveness to patients served is better in the professional models than in the community models. The experts’ opinions show no appreciable difference between the various models.

Spotlight on Responsiveness
Based on the empirical observations, responsiveness is better in the professional models than in the community models, though the experts do not appear to support this distinction. (integration of both data sources)

2. Results related to models

Professional contact model
Given that the professional contact model is the dominant model in Canada, it was used as the benchmark for our analysis.

- **Strengths:** This model ranks first for accessibility and responsiveness to patients.
- **Weaknesses:** This model ranks last for effectiveness, productivity, equity, and quality.

Professional co-ordination model
Although this model has some advantages, it manifests several weaknesses.

- **Strengths:** This model provides good access to services, especially primary healthcare, and responsiveness is good. It performs very well with regard to substitution between primary healthcare and other levels, like specialized and ultra-specialized services.
- **Weaknesses:** This model suffers weaknesses in the areas of health effectiveness, equity, quality, and costs. From empirical evidence it ranked last in continuity, whereas the experts saw great potential in this area.
Non-integrated community model
It is often difficult to distinguish the two community models from one another, especially for certain effects. Thus, part of the favourable results linked to this model might well be attributable, in practice, to the integrated community model. This point is confirmed by the experts, who claim that this model has much less potential than the integrated community model and the professional co-ordination model, especially for effectiveness.

- **Strengths:** This model performs well for several effects such as costs, equitable access to primary healthcare services, quality of care, effectiveness, and continuity of care.
- **Weaknesses:** This model does not appear to have great potential with regard to accessibility to primary healthcare services, responsiveness of care, and substitution of services.

Integrated community model
This model shows the greatest benefits in many respects. If we consider the potential identified by the experts, the integrated community model appears to maximize attainment of the greatest number and degree of effects.

- **Strengths:** This model shows great effectiveness in health and services, and excellent performance for continuity, technical quality, appropriateness, cost control, equity of access, and substitution to primary care from the other levels. The expert opinion corroborates the observed positive outcomes and softens the negative results observed for accessibility.
- **Weaknesses:** This model is less attractive in the areas of accessibility to primary healthcare and responsiveness.

3. Selection of models
The integrated community model can be seen at a glance to provide the greatest benefits, based both on empirical observations as well as the potential identified by experts. It appears to incorporate the benefits of the non-integrated community model without its drawbacks (especially those identified by the experts). To some extent, it also encompasses the benefits of the professional models.

It does suffer some shortcomings, however, as revealed by the empirical observations. Perhaps most significantly, there is evidence of restricted access to primary healthcare, which is also seen in the community non-integrated model. The two professional models are better in this regard. Furthermore, responsiveness to patients is also weaker in the two community models than in the two professional models. This hints at potential shortcomings in the relationship between the patient and the physician. These shortcomings might be associated with characteristics specific to the organizations covered by the studies analysed.

It is plausible that the community models are more centred on linking organizations and patients, while the professional models foster a more personal one-on-one relationship between patient and physician. This may explain the lower accessibility to primary healthcare and responsiveness to patients and merits further exploration in future research.

It should be noted that expert opinion presents an overwhelmingly positive picture of the integrated community model, which they rank first for all impacts, except accessibility. This potential shortcoming for accessibility, which emerges from both information sources, remains a concern.

Finally, we should not expect major savings on total costs. Although the two community models and, to some extent, the professional co-ordination model promote better control of costs, this is due principally to substitution of services from other levels of care to primary healthcare.

Is there an optimal model capable of producing all the desired effects of a primary healthcare system?
Clearly, none of the four models would alone produce all the desirable effects of a primary healthcare system. Initially, we therefore must preserve the benefits already achieved by the professional models — their better accessibility for patients and responsiveness to clients. However, these models do not have the underlying conditions for continuity, equity, and quality. The two community models appear to best provide the necessary conditions for increasing productivity, especially since they also guarantee good quality and relevant use of services. The integrated community model provides the most benefits, while the non-integrated community model has several limitations. This probably explains the fairly harsh judgment of the experts.
4. Optimal Combination of Models

The area delimited by the dotted line in figure 2 below shows the hypothetical effects of an ideal model. Within this space, we have sketched each of four models, showing the extent of impacts on each effect based on a synthesis of the empirical observations and expert judgment.

The figure below shows that the integrated community model occupies the most space. If only one model is to be preferred for primary care, it should be this one. The non-integrated community model is contained within the space of the integrated community model, and introducing it in addition to the integrated community model adds nothing to the system.

The professional co-ordination model also covers a large part of the optimal space. If a professional vision of primary care organization is favoured, this is the model that should be preferred. Overlaying the professional contact model adds nothing to the system except in the area of continuity, where the addition is minimal. In addition, we have also pointed out that in the judgment of the experts, the professional co-ordination model has a large potential for continuity.

If the goal is to maximize the simultaneous achievement of all these effects, the approach is to combine models. The model that best offsets the shortcomings of the integrated community model while reducing duplication of effects and maximizing complementarity is the professional contact model. Thus, the integrated community model/professional contact model combination appears to be the optimal combination.

5. Conclusion

This analysis shows clearly that regardless of the model selected, there will always be residual areas where performance is lacking. In all cases, attaining optimal accessibility poses a problem and requires a solution. A choice must be made between two models: the integrated community model and the professional co-ordination model. Although the integrated community model shows greater potential, it remains incomplete, and for optimal performance it would have to borrow elements from the professional contact model.

Adoption of a predominant model will not be based entirely on the analysis presented. This choice of a model is founded in part on the underlying vision of the healthcare system and on coherence of the system with the other institutions that define society. This analysis highlights the consequences of the choices made on the anticipated impacts of primary healthcare.

Figure 2: Position of the four models, based on impacts in relation to a hypothetical optimal model
A review of the literature focused on organizational change and experiments in healthcare innovation highlights certain strategies to follow in changing primary healthcare.

1. Aspects of change
As part of efforts to analyse and design scenarios for changing primary healthcare models, we considered three aspects: the nature of the change, the pace of change, and participation by players in the change.

Nature of the change
Change may be convergent or radical, depending on whether it favours an adaptation to or a clear break from the existing model.

Pace of change
Time is an important factor. Change may be slow or fast, depending on the circumstances. When modulating the pace of change we must consider the challenges faced by players and organizations, and we must implement change that represents a meaningful departure from the usual way of doing business.

Participation in the change
In the healthcare field, several planned and proposed reforms resemble decrees from on high, since a political or bureaucratic authority is imposing a change, often in a fairly authoritarian manner. By contrast, the many reforms of the healthcare system have re-awakened interest in a change that is more participatory and is not directed by those at the top of the bureaucratic or political ladder.

The change strategies described here are based on a combination of the three aspects of change. It is hypothesized that implementation of the change strategies for primary healthcare will require mobilizing elements that are essential to produce change. Specifically, these are: material and human resources, the presence of strong leadership, the ability to establish new forms of co-operation, and a comprehensive vision of all the changes to be accomplished.

2. Analysis of Change
Analysis of the four primary healthcare models reveals two distinct and foundational visions to developing services: the professional vision and the community-oriented vision. In the current context, characterized by a predominance of professional models, a transition to community-oriented models would represent a very significant change that will be demanding to achieve.

In the transition to a professional co-ordination model or to community models, some benefits of the professional contact model must be maintained, especially in the area of accessibility and responsiveness. Management of primary healthcare changes, therefore, must pay special attention to safeguarding these achievements.

Analysis of changes suggests that reorganization of primary healthcare is always a process of major change. Whether change is radical or convergent depends on the model chosen and the starting point of the system. Even when changes appear to be convergent, as in the transition from a professional contact model to a professional co-ordination model, or the transition from a non-integrated to an integrated community model, transitions pose serious challenges.

It is especially interesting to analyse transition from a professional contact model to a professional co-ordination model. The latter actually maintains the professional dominance but requires sufficient reworking of the conception of professional roles that the nature of change is midway between convergent and radical. Similarly, creation of an integrated healthcare delivery system (of which the integrated community-based model is a part) requires a corporate approach that imposes significant constraints on professional autonomy, even if the framework is predominantly professional.

Such an integrated delivery system also threatens the autonomy of individual organizations, because it requires an explicit management of the interdependency between the organizations that compose the system. In this sense, the implementation of an integrated delivery system constitutes a fairly radical change.
A reorganization of primary healthcare toward an integrated community model that could maintain the benefits of a strong and solidly established professional approach constitutes a promising radical change in many settings. It remains to be determined what type of integration should be favoured: a formal integrated delivery system rising from an institutional integration of resources, or a community alliance representing a virtual integration of otherwise autonomous organizations.

What efforts are required to start change?

The experts’ opinions pointed to an increasing order of effort required to move from the professional contact model to the professional co-ordination model and, finally, to the non-integrated community-based model and to the integrated community-based model. There is no guarantee that the changes occurring within a given vision (professional or community) are easier to effect than the changes between models emerging from the two different approaches. In one sense, it is probably easier to implement an integrated community model in coexistence with a professional contact model, because these are opposite, complementary, and non-competing models. Conversely, it may prove more difficult to juxtapose a professional co-ordination model to a professional contact model, given their overlapping and competing nature.

3. Conclusion

The study of the nature and pace of the changes entailed in reorganization of primary healthcare leads to the following conclusions:

- Transition from one model to another is always difficult, since it requires a rethinking of the professional framework (e.g., toward a larger scope of responsibility) or prioritizing of the organizational approach (develop and formalize the organization of primary healthcare) and co-operation among players (e.g., multidisciplinarity) and organizations (e.g., creation of networks).

- Even if there was one model best suited to all settings, successful change would still require strong professional and population-based commitment, as well as better integration of resources.

- The process of reorganizing primary healthcare takes time. It permits experimentation and gives players and organizations space to master the key elements that support the reorganizations.

- Any policy to reorganize primary healthcare must be based on a clear direction and provide incentives to encourage players to commit to change without delay, while also giving them time to work out the emergence of models that best suit their setting (type of skills and availability of resources, the setting in which reorganizations take form, etc.).

Although a clear direction by government authorities is necessary to effect significant change and suggests a clear preference for a particular model, practical implementation of the policy must give regional and local players sufficient flexibility to develop a primary healthcare network adapted to their reality.

While we accept the importance of the professional approach in developing healthcare organizations, it is important to adopt a change strategy that allows operators (professionals and other staff) to participate in design and implementation of changes. The natural evolution of models for organizing primary healthcare has been disappointing in many regards. Since a change induced solely by local dynamics has not been enough, there is a need to combine top-down policy with bottom-up direction.
Implementation of a whole new model for organizing primary healthcare may be viewed as a process of change that will likely disrupt practice processes and players’ perceptions of their roles and activities — including the values they endorse, the boundaries of organizations and who will be in charge of making decisions in the system and organizations.

The more demanding the change, the greater the risk that it will fail, and the less certain its continued development. The less demanding the change, the greater the risk of no impact in the desired direction. Premised on these statements, there are three clear scenarios for change.

**Scenario 1: Convergent change**

The transition between two closely related models (from a professional contact model to a professional co-ordination model and from a non-integrated community-based model to an integrated community-based model) constitutes a convergent change, which takes shape gradually. Successful introduction of such a change is based on having appropriate context with:

- factors favourable to local change, such as leadership, practical and cognitive skills, and the availability of resources to support the change; and
- factors favourable to system-wide change, such as the ability of political and technocratic authorities to launch initiatives that support these transitions (e.g., changes in incentives and professional codes, in the transition between a professional contact model and a co-ordinated professional model, and in healthcare policies for a transition between the non-integrated community model and the integrated community model).

Analysis of the effects associated with the various models leads to the conclusion that convergent change — minor adjustments in predominating existing models — is not enough to produce the transition from one model to another in a way that benefits both professional autonomy and greater integration of care and services.

**Scenario 2: Radical change**

This type of change applies to the transition from a professional contact or co-ordination model to community models. These models are anchored in different traditions. In Quebec and Ontario, the desire to attract healthcare professionals to this environment has been viewed as a basic challenge to the identity, role, and power of the medical profession. The conditions amenable to this type of change appear to be lacking. The presence of professionals in such centres probably reflects their support of a community-oriented ideology and their choice to work within such organizations. It may also reflect the fact that the healthcare system has made a foundational pact with the medical profession that lends certain legitimacy to this method of organizing primary healthcare. We also find a parallel co-existence of the professional models and community models or a marginal integration of the medical profession into the non-integrated community-based model.

In another version of change, there is recognition of the need not only for major and thus radical changes, but also to institute these changes gradually to accommodate adjustments and experiments. In this context, the change is both emerging and imposed. It occurs because pressure is exerted on professionals and organizations to make changes. Political and technocratic mechanisms play a key role in this type of reform. There is an acceptance, however, that the changes will occur only where local players succeed in rethinking them, taking ownership of them, and acquiring the necessary skills to guarantee that they are implemented.
Scenario 3: Progressive radical change

Where a progressive radical change is considered, focused on a change of methods for organizing primary healthcare, authorities will opt for a phased strategy based on an existing model that supports ongoing improvement within the method for organizing primary healthcare. In this sense, the professional contact model is deemed useful but inadequate. It must subscribe to an organizational approach that fosters improved co-ordination and integration of services. Within such an organizational framework, clinical care and services assume a population outlook based on a clear grasp of professional responsibility and an expanded vision of professional roles.

In this scenario, implementation of a professional co-ordination model constitutes an improvement over the professional contact model. However, this involves only a step toward a more integrated form of organization like the integrated community model. Although the extent of the integration mechanisms may vary, there must be a move toward a radical change. The autonomy of organizations and the means for establishing professional autonomy must be re-examined in order to establish new forms of co-operation that support comprehensive primary care. The assembly of such systems can be neither totally emerging nor totally decreed. For such transformations to become reality, it is essential to have qualified local resources centred on the social entrepreneur model, and strong, articulated political leadership.
This synthesis reveals that no single model for organizing primary healthcare services produces all the desired effects. If Canada’s healthcare decision makers and managers truly want to achieve all the effects highlighted in this synthesis, they must choose a combination of models for organizing primary healthcare.

The wording of the following recommendations is designed to maximize the expected effects of primary healthcare — effectiveness, productivity, accessibility, continuity, quality, and responsiveness — and to provide Canadians with the best primary healthcare services possible in the current context.

1. Preferred models of primary healthcare

The research conducted for this policy synthesis highlights the following:

- the integrated community model maximizes attainment of the greatest number of effects and emerges as the most beneficial in several areas: health and service effectiveness, technical quality and appropriateness of services, cost control, continuity, and equity of access;
- the effects associated with the professional contact and co-ordination models are more positive for primary healthcare accessibility and responsiveness than the integrated community model; and
- the model that is currently dominant in Canada is the professional contact model.

Consequently, the combination of the integrated community model and the professional contact model is the one that maximizes all desired effects while minimizing duplication of effects and capitalizing on the organization that is currently in place. However, this combination may result in system inefficiencies, since its implementation would require doubled efforts in change strategies without substantial differences in effect.

The combination of the integrated community and professional contact models is advantageous from a change strategy perspective. This combination permits the simultaneous achievement of desired effects by promoting two extreme primary care models that are likely to be complementary and not in competition with each other. It also permits the concentration of efforts on the implementation of the integrated community model, since the professional contact model is already well-established in Canada.

**IT IS RECOMMENDED THAT:**

- the integrated community model be used as a benchmark for changing primary healthcare across Canada;
- special attention be paid to its shortcomings in the areas of accessibility and responsiveness; and
- practical measures be implemented to resolve these shortcomings.

However, if the context, preferences, or implementation problems favour the selection of the professional vision of primary healthcare, it is incumbent on leaders and healthcare system officials to pursue the development of the professional co-ordination model, because this model achieves better accessibility (especially to primary healthcare), service effectiveness, substitution of primary healthcare for care at other levels (such as specialized and ultra-specialized care), and responsiveness to patients. It should be noted that the model does not perform as well as the integrated community model in terms of health effectiveness, costs, continuity, equal access, and quality.

**IT IS RECOMMENDED THAT:**

- preference be given to the professional co-ordination model in cases where the professional vision of primary healthcare is adopted.
2. Implementing models of primary healthcare

There is currently a window of opportunity in Canada that allows for the promotion of the changes to primary healthcare advocated in this policy synthesis. The federal healthcare transition fund has allocated $800 million to transitional costs for implementing major projects for renewal of primary healthcare. In this context, the federal government and several provinces and territories are soon expected to devote additional funding to healthcare services in general and to primary healthcare in particular.

IT IS RECOMMENDED THAT:
➤ the funding provided through the healthcare transition fund, as well as other new funds from the federal, provincial, and territorial governments, be used to fund projects for organizing primary healthcare. The first priority should be projects that use the integrated community model, and the second priority should be those using the professional co-ordination model.

For the integrated community model and the professional co-ordination model to produce the best possible effects, their specific characteristics must lend themselves to integration into Canada’s healthcare systems. Many of these characteristics differ from those of the dominant model in Canada, the professional contact model. Four, in particular, may present difficulties: funding for services; physician compensation; multidisciplinarity; and technological support (diagnostic, therapeutic, and information technology).

Funding for primary healthcare
Implementation of these two models is largely based on powerful financial incentives that consider the following factors:
• responsibilities to registered patients (subscribers in the case of the professional co-ordination model) and to the population of a given territory (in the case of the integrated community model);
• the comprehensive needs of subscribers and the populations served; and
• co-ordination of services with those provided by other authorities working throughout the current healthcare system.

In order for the professional co-ordination model and the integrated community model to be implemented in the Canadian context, it should be possible to fund primary care services on a per capita basis by subscribers for the professional co-ordination model and by population members for the integrated community model.

The services funded in this manner should also exceed the traditional boundaries of primary medical services to include non-medical primary healthcare, specialized medical and hospital services, drugs, diagnostic and therapeutic services, homecare, and palliative care. In the cases analysed, we find that this funding is integrated in two ways: locally and regionally.

This method of funding these models may, however, negatively affect the clinical decisions of primary care professionals. It may provide an incentive to balance the financial risks against the severity or the complexity of people’s health problems in the selection of clients or in the delivery of services. In order to minimize this risk, it is critical to:

• maintain a strong relationship between the per capita amount and the anticipated costs for care of the subscribers or population being served; and
• establish risk-sharing systems in order to avoid having the financial viability of a primary care model being threatened by an unforeseen or complex health problem by a minority of patients.

IT IS RECOMMENDED THAT THE PROVINCES BE ENCOURAGED TO:
➤ fund primary healthcare models on a per capita basis by subscriber or by population member, depending on whether services are organized under the professional co-ordination model or the integrated community model, respectively;
➤ encompass all services delivered to subscribers or the population served within this funding formula;
➤ closely link the amount of the per capita to the anticipated costs for care by the subscribers or the population; and
➤ establish risk-sharing mechanisms between primary care organizations that have per capita funding.
Physician compensation
Introduction of a method for organizing primary healthcare based on the professional co-ordination model or the integrated community model also depends on the ability to compensate the physicians who deliver primary healthcare in ways other than solely fee-for-service. Compensation of physicians working under the integrated community model is by sessional payments based principally on the time required to accomplish their professional responsibilities — clinical management, administration, teaching, or research. Physicians working under the professional co-ordination model are compensated on a per capita formula or a mixed method combining per capita, sessional payments, and/or fee-for-service; the relative mix of these payment methods varies by context.

In an organization of primary healthcare based on the professional co-ordination model, funding of services and compensation of physicians can overlap. Sometimes both the funding and the payment of physicians are on a per capita basis. This overlap of funding and payment mechanism can pose a dilemma for physicians, caught between their clinical responsibilities to subscribers and their financial accountability. There are two choices to reconcile these opposing forces:

• establish close links, as mentioned previously, between the per capita amount and the anticipated cost of care to subscribers, and match the per capita formula to a risk-sharing system; or

• separate the method for funding primary healthcare from physician compensation. Funding will then be based on a per capita formula per subscriber, and compensation of physicians will be by some form of sessional payment linked to the extent and complexity of their professional responsibilities.

IT IS RECOMMENDED THAT:
➤ the provinces permit and encourage compensation of physicians by sessional payment, per capita formula, or a mix of payment methods in order to facilitate the development of integrated community models and professional co-ordination models in Canada.

Multidisciplinary care
The practices observed in the two recommended models for organizing primary healthcare are based to varying degrees on multidisciplinary teams. Professional co-operation is based on several conditions: a common vision, trust, and mutual respect among professionals, as well as recognition of particular areas of competence. These skills, attitudes, and behaviours are acquired through a lengthy learning process that begins with training and extends into practice settings. However, these skills are quickly lost if trainees do not find a receptive environment in which to express their values and put their attitudes and behaviours into practice. Work is also required to reduce structural obstacles that adversely affect interprofessional co-operation.

IT IS RECOMMENDED THAT:
➤ appropriate funding be provided, as well as interdisciplinary training projects (such as programs, internships, etc.) and experience with multidisciplinary practices, to promote and reinforce long-term stability; and

➤ obstacles (legislation governing professional regulations and collective agreements) to working in multidisciplinary teams be identified and eliminated.

Technological support
One major constraint to achieving several objectives of a primary healthcare network is the absence of suitable information, diagnostic, and treatment technology. The establishment of better information systems would ensure better patient monitoring within the organization delivering care and among various caregiving organizations and levels. The use of technological support is more noticeable in the professional co-ordination and integrated community models than in the others.

IT IS RECOMMENDED THAT:
➤ integrated information systems be promoted and funded that are capable of accommodating complete clinical data and of serving various groups of professionals delivering services;

➤ the use of such systems for management and planning purposes be promoted and funded, while guaranteeing the privacy and confidentiality of the parties involved; and
the development of diagnostic and therapeutic technology within organizations delivering primary healthcare be promoted and funded.

3. Strategies for change

The analysis of change strategies reveals that the transition from one primary healthcare model to another is always demanding, since it requires a rethinking of the professional approach and enhancement of both organizational approaches and co-operation among professionals and organizations. Such changes take time. An enforced change does not allow professionals and organizations to institute the necessary change of practices. A change tailored to the challenges faced by players and organizations must acknowledge the significant scope of change.

Any strategy for transforming the organization of primary healthcare requires:
1) adoption of a clear direction of change; and
2) allowing time for the emergence of models suited to the various settings and to initiate professionals and organizations into the new processes inherent in the changes.

IT IS RECOMMENDED THAT:
- healthcare managers and policy makers communicate clearly and quickly the preferred primary healthcare model.

Each model has its own characteristics, and the coherence between these must be maintained in order to produce the observed or anticipated impacts.

IT IS RECOMMENDED THAT:
- when developing primary healthcare based on the co-ordinated professional or integrated community model, consideration be given to the distinctive characteristics described in this report; and
- the pace of change allow players and organizations to become familiar with the new processes and obtain the required training.

4. Research priorities

This policy synthesis identifies research priorities focused on research methodologies linked to healthcare systems assessment, and on implementation of models.

Observations on research methods:
- It is important to conduct systematic comparative studies based on qualitative and quantitative methods.
- Despite the scarcity of Canadian data, healthcare systems in Canada incorporate methods for organizing primary healthcare based on various models included in the taxonomy, a little-studied domain.
- There is a lack of information on certain indicators and measurements of major outcomes in primary healthcare systems, especially for accessibility, equity, and responsiveness.
- There is a shortage of data for monitoring the implementation of reforms.

Observations on models:
- Models with a greater focus on the provision of care by more formal organizational framework settings (the community models) encounter difficulties preserving the individual relationship between the user/patient and the mostly responsible professional.
- This situation generates poorer responsiveness and limits access, an outcome that raises concerns.
- Organizational changes may require a degree of development that hinders this relationship.

To maximize the anticipated impacts of primary healthcare, we recommend implementation of a combination of models. The co-existence of models from two different approaches (community and professional) should be studied, as should the conditions facilitating or preventing the creation of interorganizational links between them. In this policy synthesis, the impacts have been measured model by model, on the assumption that the models were relatively pure. In fact, all healthcare systems use other models in addition to a dominant model. It is important to develop population-wide research to be able to assess the outcomes of various configurations of models.
Given that there is no optimal model (i.e., superior to the others in all anticipated impacts of primary healthcare), it should be determined, in consultation with various groups of primary healthcare workers, whether a hierarchy of effects can be defined. This would provide a better understanding of areas of resistance and opportunities for change, as well as strategies to enhance the quality of primary healthcare in Canada.

IT IS RECOMMENDED THAT:

➤ research funding agencies place priority on the following research activities:

1) conducting comparative studies of various models for organizing primary healthcare that take a population perspective and rely on quantitative and qualitative methods to reflect the complexity of the systems studied;

2) developing more appropriate process and outcome indicators to monitor primary healthcare changes in terms of accessibility, responsiveness, and equity;

3) establishing how to support integration of the professional and organizational approaches within the most-structured models, such as the professional co-ordination model and the two community models;

4) determining the relative importance that groups of players involved in primary healthcare place on the anticipated effects of these services; and

5) assessing the potential for co-existence of models based on the community and professional approaches within a given healthcare system, especially the factors that promote or limit interactions between these two models, based on the results observed for populations.
Overview of the Three Appendices

The main report is accompanied by three appendices that describe in detail the work conducted by the research team to produce the report. These appendices are available on the web site of the Canadian Health Services Research Foundation at www.chsrf.ca, and a limited number of printed copies are also available, on request, from the foundation.

Appendix 1: Taxonomy of Models for Organizing Primary Healthcare

Appendix 1 examines the three parameters used to classify the various methods for organizing primary healthcare. It describes the methods in four steps used to draw up the taxonomy: selection, description, synthesis, and grouping of cases. Finally, it thoroughly analyses the four existing community and professional models for organizing primary healthcare, with supporting examples, and their application to the Canadian context.

Appendix 2: Analysis of the Impacts Associated with Models for Organizing Primary Healthcare

Appendix 2 discusses the effects associated with models for organizing primary healthcare. After establishing the six types of effects sought, it assesses them with two main measuring tools: empirical observation and expert opinion. Based on the approach and the strength of the evidence, it also provides a synthesis of the effects associated with the models. Finally, the empirical observation and expert opinion are integrated, and the findings are presented in terms of effectiveness, productivity, continuity, accessibility, and quality. Finally, the results are presented in terms of the models taken individually and in combination.

Appendix 3: Process for Changing Primary Healthcare

Appendix 3 covers the process for converting primary healthcare, including the problems generated. It examines in detail the major principles underlying this change and the three types of representations considered. The appendix then examines the methodology used and thoroughly analyses the various change processes. Several assumptions are also made for changing the organization of primary healthcare, based on the three aspects that characterize the very nature of the change. This results in three scenarios that describe the potential outcomes linked to the change considered.
In Pursuit of Primary Healthcare
Reactions to the report submitted by Paul Lamarche et al.

Personal opinion
by Yvon Brunelle

Medical and University Affairs Branch
Quebec Ministry of Health and Social Services

November 2003
1 Introduction

A recurring theme in recent policy documents produced throughout Canada is the need to establish primary healthcare capable of responding to the needs and demands of the public, and directing them to healthcare in a co-ordinated way. The report produced by Paul Lamarche et al., Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada, arrives at just the right time. It continues the various international efforts in this direction. The report also provides other valuable contributions, some of which are specific to Canadian or simply Quebec settings.

Some topics discussed in the report appear to be purely descriptive, but provide a contrast with the situation in Canadian provinces, as opposed to other societies with effective primary healthcare. We are no longer dealing with a new quest for the “primary healthcare holy grail.” And as the conveniently utopian nature of this quest tends to disappear, so also goes the de facto justification for political and administrative organizations failing to achieve that goal.

In addition, perhaps under the influence of the lead researcher, the report leads to results stated in forms with a high potential for generating a passionate debate. The authors force the analysis by separating the winning models from the losing ones, based at least on the primary effects officially sought by public healthcare systems.

2 Characteristics of the Taxonomy

The researchers developed a taxonomy polarized into two axes, one ranging from community to professional and the other from non-integrated to integrated. This produces four organization models known as the “professional contact,” “non-integrated community-based,” “professional co-ordination” and “integrated community-based” models. Anyone familiar with the healthcare systems compared can fairly easily identify the dominant axis for each national system, lending empirical validity to the taxonomy. As such, this section will definitely remain a reference tool.

The first lesson is that all Canadian provinces are focused primarily on the “professional contact” model, which is non-integrated. The “non-integrated community-based” model reflects the vast majority of CLSCs in Quebec. Ultimately and by default, it can be maintained that the integrated community-based model is found in some rural areas served by health centres or health co-operatives (e.g., Saskatchewan) and a few CLSCs in Quebec. Finally, the “professional co-ordination” model is now emerging, but very timidly, in a number of provincial variants on family medicine groups (FMG).

Characteristics presented as typical of a particular model are used to distinguish the models. Two examples are the method of compensation and the vision. While the method of compensation is quick to ignite passions, the vision rarely does. Yet the Lamarche et al. report does manage this. The extent of the consistency between the vision AND the required characteristics, for one model over another, raises the real challenges of a vision. It then becomes clear that pompous discourse has long been the alternative to characteristics that would have been required to make this discourse tangible.

Some traditional effects (e.g., accessibility, equity), sought by public healthcare systems, are advanced by the authors. The list itself does not raise major problems. All are eminently desirable. To the best of my knowledge, in fact, no one has seriously claimed to be against quality. This leads to regular references to other “sure” themes, often in the form of a mantra. In the long term, this unfortunately proves a cure for insomnia. This is a trap carefully avoided by these authors, for which we can thank them.

3 Towards Discussion and Debate

The first area to generate passionate debate is the crossover between the four models of the taxonomy and their respective potential to achieve certain desired effects, to varying degrees (e.g., efficiency, productivity). This results in a ranking where two models emerge as “winners” and the two others as “losers.” Since this classification is based on lessons gained from the literature selected, this
discussion will initially be methodological, and thus reserved for experts rather than lay readers.

Second, although the authors avoid the reality of rationing, they show that various effects can be sought by a healthcare system, but that choices must be made. A remarkable diagram in the form of a spider web illustrates this. Consistent with the spectacular 2000 WHO report, we note that gains in some effects, such as accessibility and responsiveness, tend to be “paid for” by poorer performances in other areas. Why these findings do not clash with the experts’ methodological world, they do create a second level of debate that in this instance involves political and administrative organizations.

4 "Winning" and “Losing” Models

Canada’s provinces appear to be focused primarily on the “professional contact” model, which should surprise no one. The shock comes when we find that of the four models, this one is the big loser. Quebec differs somewhat due to its CLSCs, most of which reflect the “non-integrated community-based” model. It therefore uses the two losing models!

The winning models play only a marginal role in the current Canadian context. This may account for the problems establishing “genuine” primary healthcare. Not so very long ago, people said sheepishly “We have the best healthcare system in the world, and it only need fine tuning.” Following the WHO’s ranking of Canada’s healthcare system 30th, this is yet another bitter pill to swallow.

The spotlight placed on characteristics (e.g., clinical and financial responsibility) of each model just magnifies the shock. It must first be acknowledged that despite more than 15 years of wide-ranging reforms, all provinces remain focused on an unmoveable set of characteristics as decisive as they are inadequate to ensure tangible, non-mythical attainment of primary healthcare. Admittedly, some structural aspects were changed, and happily so (e.g., regionalization, amalgamations). Unfortunately, these are not among the characteristics presented as vital. Did we miss the boat? This is a troubling question as we read further through the report and come to understand it more fully.

5 One Source of the Domination by a Losing Model

It is rather unfortunate that the authors draw no link between domination by the losing model and the five principles of the Canada Health Act. These principles (e.g., portability) tend to mould a Canadian system, specifically by distinguishing the healthcare systems of Canadian provinces from other public systems. We have the only western system **simultaneously** characterized by:

- “instant” mobility for users, who in principle are able to consult any physician (including various specialists) and can go to any hospital (including university hospitals);
- a total lack of any form of direct participation in costs, including user fees, at least for physician and hospital services; and
- great freedom for physicians to practise wherever they like, at least in the usual private practice. What is much less common, however, is the ipso facto right to bill the public system, except in New Brunswick, primarily on a fee-for-service basis and with few restrictions.

Since any system rations healthcare, the form of rationing induced by Canada’s system operates through a particularly severe strangling of public supply (e.g., physician ratio, type of professionals insured, exclusion of primary healthcare: vision, drugs, etc.). The lack of user fees and controlled access (registration) to manage demand means that it is more compartmentalized (silos), blocked (wait lists) or denied (no insurance coverage of primary healthcare). This situation contrasts with that of various northern healthcare systems, which correspond to the “integrated community-based” model, the winning model in Lamarche et al.

In fact, the two winning models require characteristics that can only coexist with the five principles with difficulty, at least as understood and applied to date. The “professional contact” model appears to perform the best. This is also the dominant model. I also find that the Lamarche et al. report poses a direct challenge to the Canadian system, despite the efforts in the last part of the report to “limit the damage.”
6  Two Obstacles or Even Barriers

The authors have pushed the controversial nature of their research very far. By ranking each of the four models on each desired effect, from 1 (genius) to 4 (dunce), they play up the perceived differences between each model’s respective virtues. Our “professional contact” model comes out badly battered.

Yet the authors referred to a limited number of studies, because many were excluded by various criteria. In addition, only a small proportion of experts took part in a parallel validation exercise for the Canadian context. These factors should have dictated a cautious approach with a more “educational” than “prescriptive” approach. Ranking may not have been the best way to achieve this. At the other extreme, the authors admittedly could have fallen into a trap, for example, by making abusive use of an easy ranking based on a weighted, subjective, approximate score, all with reassuring intervals of confidence, (e.g. 8.1-8.7/10, 7.8-8.3/10, etc.). But these authors chose to forge ahead.

The specific results of the taxonomy are jarring. The rank obtained by the “professional contact” model for some effects, especially quality, can only elicit a hue and cry as well as strong professional or even methodological indignation. This often has the regrettable consequence of absolving the political and administrative mechanisms of the obligation to question the status quo. Presented in conjunction with use of capitation as a method of payment or compensation, the entire approach will raise a red flag for many, especially since the authors advance the most provocative component of capitation, the per capita formula, not the specific links or clinical responsibility.

7  Some Unspoken Factors

The report does not address every aspect of the debate over primary healthcare reform. It may be because there were already enough controversial elements in the report. Nonetheless, I find two omissions particularly unfortunate.

First, the authors do not discuss the implications of any potential adaptation of the winning models, especially for users. The “instant” user mobility currently prevailing in Canada would be challenged by adaptation of either of the two winning models. This mobility currently leads to clinical responsibility that tends to be only sporadic, limited to a healthcare episode or visit. Yet continuous clinical and financial responsibility are the underlying foundation of the proposed winning models. It requires a form of precise / specific / unique (fairly) permanent link, the leading characteristics of a capitation system. The research team’s undeniable knowledge of the literature and multiple references to other healthcare systems, primarily in northern countries, would suggest that the authors could not have been ignorant of this fact.

Furthermore, the silence surrounding the issue of rationing allows the authors, in the conclusion, to develop a surprising proposal for which the most obvious immediate benefit is the ability to sit on the fence. The report shows that the “professional contact” model is currently dominant in Canada and, at least in principle, scores high on accessibility and responsiveness. Overall, however, this model is THE biggest loser. On the other hand, the big winner, the “integrated community-based” model, dominates in the other effects (e.g., quality) but performs very poorly in terms of accessibility and responsiveness.

Thus, Lamarche et al. propose combining the two models. Eureka! No more need to lay out the consequences of choosing one of the four models. The main stumbling block of any political and administrative organization is avoided. In addition, more research is required, a fringe benefit.
The authors acknowledge that this combination does not exist anywhere for the moment, at least as the central thrust of a system. And there is no “evidence” that this is the result of chance or intellectual laziness. Further research certainly may clarify this, but the inevitable rationing mechanisms for either model are not the same. There still must be agreement to recognize and discuss them.

8 Conclusion

Political and administrative mechanisms often chastise researchers for the ethereal, convoluted, ambiguous or equivocal nature of their work, resulting in indigestible “bricks” for “insiders” and coming at the wrong time. Furthermore, virtually all research ends with the happy if somewhat corporatist conclusion that further research is required! Except for this last remark, none of these apply to the present case.

Admittedly, there remain the always enjoyable methodological spats between experts, which may provide a convenient refuge for political and administrative organizations to sit comfortably waiting for a consensus, which will never come. However, it is also possible that the qualities of the Lamarche et al. report may be able to overcome this inertia. It is easy to read and concise, which increases the number of potential readers. It often produces a face validity, sometimes open to challenge, admittedly, but generating discussions and raising questions. Finally, it is current, clearly linked to decision-making and can be supported by the recognized ability of several of the authors to communicate.

In brief, I find the Lamarche et al. report to be one of those rare papers that challenges decision-making, is thought-provoking, generates discussion and in 10 years will still serve as a valuable reference. We can always hope that it will not also be a lost opportunity.

NOTE: I wish to thank Michel Clavet and Marie Demers for their valuable comments.

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Commentary on Choices for Change: The Path for Restructuring Primary Healthcare Services in Canada

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**Introductory remarks**

The research team deserves to be congratulated on the quality of this synthesis. The report is well-written with a clear logic and structure and it should make a significant contribution to policy development. For the sake of brevity, this commentary does not deal in any detail on the strengths of the report. Instead, the focus is on more problematic issues and possible future directions.

**Method**

The strength of this synthesis is that it has drawn together the key features of primary care and developed a helpful taxonomy with only four models. Each of the four models is defined by a combination of attributes (goal, organizational arrangements, funding mechanisms and so on). It has then defined seven desirable impacts and assessed each model against these seven impacts.

This methodology inevitably leads to a set of recommendations to adopt one or more of the models in its entirety. Implicit in this methodology is an assumption that all of the attributes of the model are essential and equally desirable.

**The evidence on single attributes**

While the methodology used in the analysis is its key strength, it is also its weakness. Because each model is defined by multiple attributes, the primary evidence as presented on any single attribute is not always clear or strong.

Evidence on a single attribute (such as the relative strengths and weaknesses of different payment models) is best assessed by examining the particular attribute of interest. However, as the policy synthesis rightly notes, these attributes do not stand in isolation and their effects are interactive.

**Funding and payment models**

The evidence on these issues is not strong. Funding and payment are two separate, but related, issues and they are confused in the models. The recommendations on fundholding have significant implications that go well beyond primary care. Given the scope of the synthesis, it was not possible to assess the broader system-level impact. Unfortunately, without doing so, the evidence to support fundholding is lacking.

There is a growing literature on funding and payment system design (including financial levers and incentives) that extends well beyond primary care. Evidence beyond primary care would be required to strengthen the case made in favour of capitation. However, this was beyond the scope of the review. Evidence beyond primary care may also strengthen the case for fundholding, although this is doubtful because it was beyond the scope of the synthesis to examine system-level impacts.

**The evidence on the complementary nature of the community integrated model and the co-ordinated professional model**

The evidence on this issue is also not strong. The researchers conclude that it is not possible to optimally achieve all seven desired impacts. This is a reasonable conclusion and it has strong supporting evidence. However, that evidence does not extend to a conclusion that the implementation of two models would achieve the best of both worlds.

**From policy synthesis to policy debate**

This report demonstrates the strengths, but also the limitations, of using evidence alone to drive policy. Policy is not driven solely by evidence, but also by values and realities. This policy synthesis provides an important platform to take the work further into a policy debate in which both values and realities are recognized. Both the synthesis and the debate would then contribute to any policy changes.

The policy synthesis used a multivariate approach. The next stage is best undertaken stepwise with the aim of developing policy priorities rather than a model that attempts to achieve all things equally well. Key questions for examination and possible approaches include:

- Given that it is not possible to optimally achieve all seven impacts, what are the key goals that Canada wishes to achieve?
- It would be helpful to start by redefining the seven impacts into two levels. At one level are the impacts that are primarily directed at maintaining and improving the health of communities (effectiveness, productivity, equity and quality). At another level are the
impacts that are primarily directed at maintaining and improving the health of individuals (availability [defined as ‘accessibility’ in the report], continuity and satisfaction [defined as ‘responsiveness’ in the report]). This allows the question to be re-framed to become one of deciding whether the priority is to improve the health of communities or the health of individuals.

- The evidence as presented suggests that, overall, the community models are better at achieving community-level impacts. The professional models are better at achieving most individual-level impacts. From a personal perspective, the key task is to improve the health of whole communities and not just presenting or enrolled individuals, and I would give priority to achieving effectiveness, productivity, equity and quality over individual patient-level availability, continuity and satisfaction. But others would take a different view.

- However, for illustrative purposes, imagine that agreement could be reached that community-level impacts have priority over individual-level impacts. The next step becomes one of assessing the feasibility and desirability of achieving an integrated community approach within the Canadian context. This step requires an analysis that goes well beyond primary care, because it is not possible to have an integrated community model unless other levels of the health system are also better integrated. It would also require some tighter definitions of levels and types of ‘integration,’ teasing out the differences between formal and informal integration, virtual integration, integration versus co-ordination and so on. Key issues include (but are not limited to) population needs-based planning and funding, area responsibility, incentives and opportunities for substitution (service substitution and not just generalist/specialist substitution), the optimum size for an integrated service or system, ownership of capital and production and risk management.

- Having decided what type and level of integration is both desirable (values) and possible (realities), the next issue to explore is how weaknesses in the emerging model can be overcome. This might include weaknesses in relation to individual patient-level availability, continuity and satisfaction.

- Having agreed on the type of system that will best meet the future needs of Canada, the next step is to determine how such organizations would best be funded. My knowledge of the international literature and my own experience suggest that the answer is probably some type of population needs-based funding. But this cannot be determined until the previous issues have been resolved.

- The final issue is to determine how providers working in or for or on behalf of the primary care organization (or a broader area or regional health authority in a formally integrated model) would be paid. The options here are not limited to either capitation or fee for service. They include a blend of both, plus options for incentive payments for achieving desired outputs and/or outcomes (potentially including individual patient-level availability, continuity and satisfaction).

Conclusion

This synthesis makes an important contribution to the development of a coherent policy framework. However, a policy synthesis is only one part of the process. Values and realities also have a legitimate and critical part to play. Evidence in a policy synthesis is rarely strong enough to support the wholesale reorganization of healthcare services. This synthesis is no exception. As the synthesis so elegantly illustrates, the achievement of successful cultural and organizational change is difficult. Evidence alone, whether strong or weak, is not enough.

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