Research Collective on the Organization of Primary Care Services in Québec

Detailed Report

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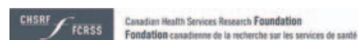

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Key messages

The research collective provides the messages below for decision makers responsible for the ongoing and future reorganization of primary healthcare services.

1. Continuity of services provided by physicians seems to be central to achieving the desired effects, since it is closely associated with comprehensiveness and accessibility. It has been noted, however, that a high level of continuity can be detrimental to accessibility, and vice versa. Consequently, policies that emphasize, for example, accessibility or a reduction in use of emergency services risk producing adverse long-term effects if they do not include measures to enhance continuity.

2. In the context of reorganizing primary care services, the optimum organizational model to simultaneously achieve continuity and accessibility seems to be one that offers services with and without appointments in a balanced manner.

3. Introducing organizational mechanisms, such as integrated service networks, inter-professional collaboration, and new information and communication technologies, does not appear to reduce the overall cost of services; rather, it contributes to shifting costs from institutional services to the community. Consequently, policies aimed at reorganizing primary care services should target the enhancement of services from the standpoint of continuity, accessibility, and comprehensiveness rather than cost reduction, at least in the short term.

4. In conjunction with implementing these changes, strategies that seek to affect professional practices rather than structures are more promising. The establishment in Québec of health and social services centres will have a limited effect if it does not rely primarily on the transformation of professional practices in the primary care sector.

5. Certain system conditions must be met for successful change, and these must be accompanied by reorganization projects initiated by governments. To successfully carry out the clinical projects of the health and social services centres and heighten the accountability of family medicine groups to their registered patients, we must consider different ways of paying physicians and hospitals. Such measures are the government's responsibility and are essential to creating favourable incentives so that family medicine groups and health and social services centres can assume their responsibilities towards the public.

6. The reorganization of primary care services must not take a single form and must not be independent of the context in which it takes place. There is no single model to be implemented. Consequently, while a general framework is necessary to ensure some degree of coherence throughout Québec, we must allow regional and local agencies considerable latitude to implement these projects.

7. Among the conditions that are essential to the success of these implementation projects, two constantly pose a challenge: participation of physicians who are not part of the public institutional network; and development of trusting relationships between the concerned parties. Special attention must be paid to these two conditions and the incentives or other measures that can facilitate their realization.

Summary

This report presents the findings of a research collective comprising 30 projects now under way or recently completed focusing on primary healthcare services.

Accessibility and continuity of services

Generally speaking, primary care services in Québec are deficient with respect to accessibility. In Montréal specifically, the situation has deteriorated since 1998, despite increased use of services. This lack of accessibility, which is frequently associated with the lack of availability of a family physician, largely explains why people use hospital emergency services for medical conditions that could have been treated elsewhere.

Continuity is also limited when a high proportion of the population does not have a family physician (more than 30 percent of Montréal residents). Continuity is linked to accessibility; it has been noted that a very high level of continuity in the services offered by physicians can be detrimental to accessibility, and vice versa. Moreover, it seems plausible that good continuity of services can favourably affect the perceived accessibility of services, in as much as limited continuity is the common factor that can explain both limited accessibility and undue recourse to emergency services.

Factors associated with effects

Differences respecting accessibility, continuity, and comprehensiveness are observed according to the characteristics of groups of users. The cultural or language barriers that immigrants must overcome make it hard for them to be referred in the service network and adversely affect the accessibility, continuity, and comprehensiveness of services they receive.

Moreover, differences between urban and rural populations appear to be very important. Continuity is more limited in urban areas, where patients tend to present with more complex problems. The more frequent recourse to emergency services noted in rural areas is more in keeping with the continuity of services provided by the family physician; it seems, among other things, that the numerous practice settings of general practitioners in rural areas foster more integrated medical practice than in urban areas, where medical practices tends to function in isolation.

With respect to the supply of services, the availability of physicians to see patients without appointments facilitates accessibility. On the other hand, delivering services to patients with appointments fosters continuity. Thus it appears that the optimum combination is a mixed model offering services both with and without appointments. One study notes that a clinic should not have more than 10 physicians in order to achieve these effects.

The research projects focused, in particular, on three characteristics of the organization of primary care services; these were integration of services, inter-professional collaboration, and the new information and communication technologies.

Integration of services and inter-professional collaboration, essential components of integration, appear to be associated with positive effects respecting accessibility, continuity, and comprehensiveness. This is especially found among more vulnerable clienteles presenting with multiple, complex problems. While many of the research findings are not conclusive, we can nonetheless state that initiatives concerning integration of services and inter-professional collaboration have the potential to achieve these effects.

Integration of services and inter-professional collaboration have other effects, in particular a reduction in institutional confinement, the length of hospital stay, time spent in the emergency room, and repeat visits to the emergency room. However, they have no effect on the overall cost of services. At best, researchers have noted a transfer of the costs of services offered in institutions, which diminish, to the costs of services in the community, which increase.

Introducing these organization service mechanisms appears to have two main effects on health status. First, there appears to be a less pronounced deterioration in the health of individuals already suffering from a loss of autonomy. Second, there appears to be an improvement in the quality of life of individuals suffering from major psychiatric disorders.

The studies report that integration of services and inter-professional collaboration significantly affect the responsiveness of services to patients and their families. Introducing these organizational changes produces greater satisfaction among patients and their families, whose burden is alleviated by the support provided. Professionals are also satisfied, and this effect probably creates a condition favourable to improved quality of care.

New information and communication technologies must be regarded as tools essential to the operation of integrated service networks and inter-professional collaboration. The studies devoted to the new technologies tended to focus more on their implementation than their effects. However, the analysis reveals that the technologies, by acting in synergy with the integration of services and inter-professional collaboration, strengthen their effect on accessibility, continuity, and comprehensiveness. It is readily apparent that their introduction increases the satisfaction of professionals, although no positive effect is discernable on the satisfaction of users of services.

Processes governing the implementation of integrated networks, inter-professional collaboration mechanisms, and the new information and communication technologies

The analysis of the projects reveals certain factors associated with implementing these changes.

First, introducing these changes is facilitated or hindered by the social context in which they occur. Integration of services is facilitated by successful local inter-organizational collaboration and the public's active involvement in the organization of services. Diversified medical practices are also a contributing factor. However, integration is hindered by rivalry between the cultural communities or between organizations and the limited availability of resources at the local level. The development of inter-professional collaboration is closely linked to pre-existing inter-professional collaboration in the community. This development is also facilitated by the firm determination of local organizations to work towards it.

Implementing these organizational mechanisms is also affected by the characteristics of the healthcare system into which they are integrated. In the projects analysed, the implementation of mechanisms is hindered, in particular, by the structure and method of budgeting adopted by establishments, the method of remunerating physicians, and by information systems that do not foster an integrated, comprehensive approach to patient follow-up and case management.

The analysis reveals four key conditions that are important in the processes governing the implementation of these changes. Together, these conditions define a promising strategy for successful implementation.

1. The implementation of integrated networks, inter-professional collaboration, and the new information and communication technologies is, first and foremost, a professional matter, one that demands unfailing administrative support to be achieved. The most successful experiments are those that emphasize professional practices over structures.

2. There is no single model for successful implementation of such changes. Each project must adapt to the specific characteristics of the context in which it is carried out. Certain contexts offer conditions that make these changes easier, such as rural as opposed to urban areas.

3. The precise form that a project takes must emerge from a participatory negotiating process that involves all of the concerned parties. Since it involves changes in professional practices, the process comprises iterative steps and is non-linear. Time (sometimes a great deal of time) is needed to achieve it.

4. Certain conditions facilitate implementation of the changes: a shared vision of the change to be introduced and the goals pursued and shared values underlying these goals; sufficient resources to allow for the introduction of change, including clear financial or

other incentives that are compatible with the desired change; organizations that emphasize the desired change and support the professionals responsible for achieving it; and the development of a relationship of trust between the professionals and managers involved.

Detailed Report

I. Introduction

The importance of primary care services in our health care system has been emphasized repeatedly in the reports of recent committees and commissions of inquiry in Canada.[1-4] These reflections and observations reveal that shortcomings in the co-ordination and integration of services are the leading causes of problems in terms of continuity, accessibility, and comprehensiveness of service delivery. They are also a source of dissatisfaction to the population, because the services received do not satisfy health needs to the extent that we might expect in an efficient healthcare system.

The need to transform and reorganize the service network and, in particular, primary care services to solve these problems, is now widely recognized.[1-5] Consequently, it seems important 1) to determine how and to what extent different modes of organizing primary care services can affect service delivery; and 2) to understand the change processes involved in order to facilitate the implementation of primary care practices likely to better satisfy population needs in different contexts.

These are the questions the research collective addressed. More specifically, in light of research under way or recently completed in Québec, the collective sought 1) to describe the situation regarding the accessibility, continuity, and comprehensiveness of primary care services; 2) to identify organizational and other factors related to the effects on those dimensions of utilization as well as on responsiveness, costs and health; and 3) to analyse the processes associated with the implementation of these organizational modes in order to open promising avenues for research and draw from them useful lessons for decision makers.

Four research groups, one of whose responsibilities is to disseminate among decision-makers useful research findings, agreed to pool their resources to produce this research collective. These groups are the Groupe de recherche sur l'équité d'accès et l'organisation des services de santé de 1e ligne (GRÉAS 1), the Groupe interuniversitaire de recherche sur les urgences (GIRU), the Réseau d'appui aux transformations des services de première ligne (RATSPL) and the Réseau de recherche en santé des populations du Québec (RRSPQ) (primary care sector).

II. Approach

The approach adopted reflects the nature of a research collective, which differs from a litterature synthesis as 1) it involves active participation by the researchers and authors throughout the process; and 2) it focuses on the findings of research under way or recently completed and unpublished.

Initially, researchers - whose work focuses on the organization of health and social services - were asked to submit research projects that would be of interest to the research collective.

More than 90 projects were received. To be selected, a research project had to:

1. focus on primary care services in the broadest sense (projects devoted to hospital care or long-term care facilities were excluded);
2. examine questions pertaining to the organization of primary care services;
3. cover healthcare services (projects confined to social or community services were excluded);
4. be recent, that is, still under way or completed within the past three years; and
5. include findings.

Thirty projects that satisfy these criteria were selected. The researchers involved in the projects were asked to participate in an initial information and discussion meeting on April 29, 2004 focusing on the research collective's objectives, processes and dissemination strategies. The participants also agreed on a model of project description sheet to summarize their research. A copy of the project description sheet adopted appears in section VI of this report.

The project description sheet includes descriptive aspects of the projects such as the objectives, context, research designs, and so on. It also contains the dimensions of the organization of primary care services on which the projects focus, i.e. vision, organizational structure, resources, practices and effects. The key components of these dimensions are also listed to help better specify the objective of the research. Special emphasis is placed on convincing, relevant findings and their consequences for decision-makers or their usefulness in planning and decision-making.

The researchers subsequently made brief presentations of their projects during an information sharing session on June 17, 2004 at which decision-makers were asked to react and comment. Below is a list of the participants at the meeting.

Researchers

- **Alex Battaglini**, Direction de santé publique de Montréal
- **Marie-Dominique Beaulieu**, Département de médecine familiale, Université de Montréal
- **François Béland**, Département d'administration de la santé, Université de Montréal
- **Marie Clément**, CLSC-CHSLD Haute-Ville-Des-Rivières
- **André-Pierre Contandriopoulos**, Département d'administration de la santé, Université de Montréal
- **Danielle D'Amour**, Faculté des sciences infirmières, Université de Montréal
- **Marie-Josée Fleury**, Douglas Hospital Research Centre, McGill University
- **Jean-Paul Fortin**, Unité de recherche en santé publique, Centre hospitalier universitaire de Québec
- **Alex Guttman**, Emergency Department, Sir Mortimer B. Davis Jewish General Hospital, McGill University
- **Robert Geneau**, ministère de la Santé et des Services sociaux
- **Jeannie Haggerty**, Département de médecine familiale, Université de Montréal
- **Raluca Ionescu-Ittu**, Department of Clinical Epidemiology, St. Mary's Hospital, McGill University
- **Lise Lamothe**, Département d'administration de la santé, Université de Montréal
- **Nicole Leduc**, Groupe de recherche interdisciplinaire en santé (GRIS), Université de Montréal
- **Ruth Léger**, Emergency Department, Sir Mortimer B. Davis Jewish General Hospital, McGill University
- **Jane McCusker**, Department of Clinical Epidemiology, St. Mary's Hospital, McGill University
- **Hung Nguyen**, Agence de développement des réseaux locaux de services de santé et de services sociaux de la Montérégie
- **Léo-Roch Poirier**, Institut national de la santé publique du Québec
- **André Tourigny**, Institut national de la santé publique du Québec
- **Bernard Unger**, Emergency Department, Sir Mortimer B. Davis Jewish General Hospital, McGill University
- **Nassera Touati**, Centre de recherche Hôpital Charles LeMoyne

Decision-makers

- **Léonard Aucoin**, InfoVeille Santé ltée, former director of a CLSC and a member of the Commission d'étude sur les services de santé et les services sociaux (Clair Commission)
- **Mike Benigeri**, information management, Agence de développement des réseaux locaux de services de santé et de services sociaux de Montréal
- **Pierre Bergeron**, Direction des systèmes de soins et services, Institut national de santé publique
- **Louise Lapierre**, Canadian Health Services Research Foundation
- **Denis Roy**, Direction de la planification et des affaires publiques, Agence de développement des réseaux locaux de services de santé et de services sociaux, Montérégie

- **Lysette Trahan**, Service de l'évaluation, ministère de la Santé et des Services sociaux

Other participants

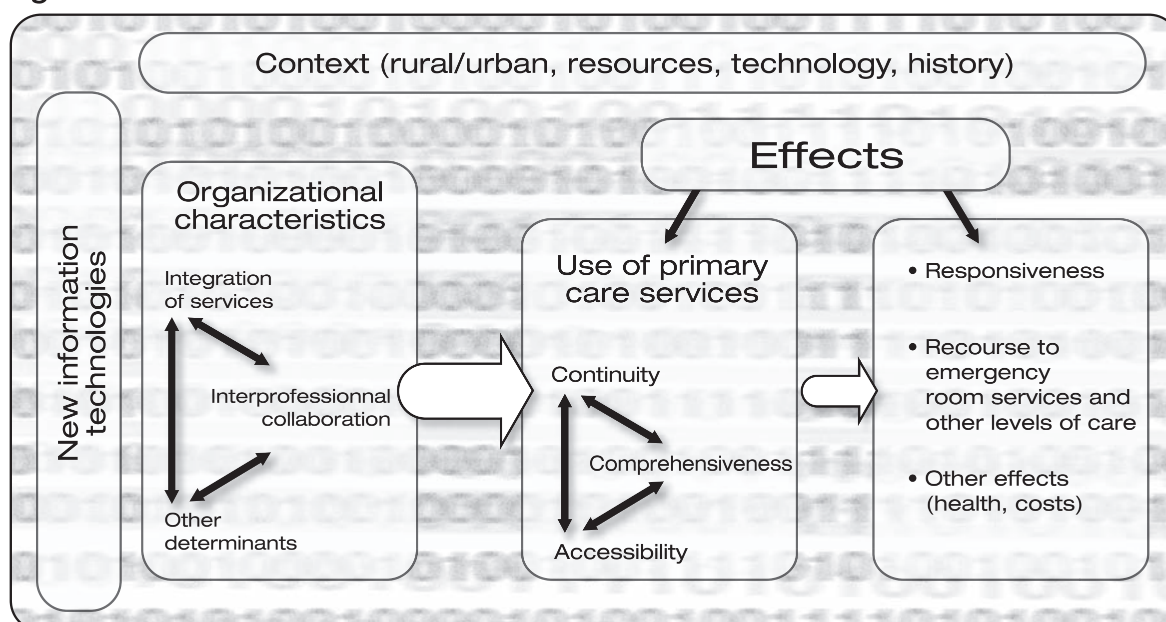
- **Marjolaine Hamel**, panel secretary, Planning Officer, Direction de santé publique de Montréal
- **Éric Hamel**, panel secretary, Coordinator, Réseau d'appui aux Transformations des Services de Première ligne (RATSPL)
- **Linda Cazale**, panel secretary, postdoctoral trainee, Centre de recherche Hôpital Charles LeMoyne
- **Nadine Sicard**, panel secretary, Community Health Resident, Direction de santé publique de Montréal
- **Mylaine Breton**, panel secretary, PhD student
- **Roxane Borgès Da Silva**, panel secretary, PhD student
- Members of the SPSS team at the Direction de santé publique de Montréal and GRÉAS1 and GIRU student members.

The material used to prepare this research collective's report is drawn from the description sheets completed by the researchers, their presentation material, and notes taken during the June 17, 2004 discussions. An initial version of the report was submitted to the researchers participating in the collective and was enriched with their comments and suggestions.

III. Analytical framework

An initial examination of the 30 description sheets revealed that some themes appeared frequently and seemed to refer to concepts and phenomena that are especially relevant to ongoing reflection on primary care services. The recurring themes are 1) integration of services; 2) inter-professional collaboration; 3) new information and communication technologies; 4) the use of services with its dimensions (continuity, accessibility, and comprehensiveness); and 5) the consequences of the modes of organization on recourse to emergency room services, responsiveness, health, and costs. These themes are interrelated, as shown in Figure 1, which illustrates the analytical framework adopted. A brief explanation follows of each of the components indicated there.

Figure 1



Integration of services is the focal point of several health reforms and policies, and it is perceived as a promising strategy for finding solutions to failures in healthcare systems. The terminology of integration is rich and varied, depending on the perspectives adopted.

The best known typology of integration is based on levels of care. When integration occurs at the same level, for example between primary care professionals and organizations, we speak of horizontal integration. The objective of this type of integration is to improve the comprehensiveness of services. When integration ensures better co-ordination to facilitate the patient's progression through levels of care, we speak of vertical integration.[6] The objective pursued by this type of integration is to improve the hierarchical organization of services and enhanced continuity, also called secondary accessibility. According to another typology, integration can take two main forms: the clinical integration of practices and services is closely associated with health professionals, and administrative or functional integration is more closely associated with managers and governance.[7] This typology is based on the recognition of the professional and administrative duality of healthcare organizations. Consequently, co-ordinating the two types of integration becomes an important subject for analysis, especially as a factor for change when introducing new organizational structures and governance.

Inter-professional collaboration, the second component of our analytical framework, is closely linked to integration of services. It is part of the new knowledge that shows medical services represent only a partial response to users' often complex needs. Therefore, it is essential to take it into account if we wish to guarantee services that offer continuity and comprehensiveness.

Moreover, inter-professional collaboration, following the example of inter-organizational collaboration, underpins the concepts on which the reforms under way in Québec are at

least formally based. Indeed, implementing family medicine groups and health and social services centres is intended to introduce an array of services centred on broader co-ordination of the resources available with a view to enhancing the continuity and comprehensiveness of services.

The ability to **exchange information** is a prerequisite to optimizing primary care services based on collaboration, not only between organizations but between health professions, which helps satisfy users' varied needs and thus ensures the comprehensiveness and continuity of services.

However, the exchange of information, despite making good sense, poses a challenge. Indeed, it implies an important change of paradigm, that is a shift from an institution-focused logic to a patient-focused logic in terms of services offered to users. The challenges are immense, since information technologies seek to transform an entire healthcare culture. To envisage the new information and communication technologies as a form of support for healthcare processes implies that we must focus on change in organizations and practices.

In addition to organizational factors pertaining to the integration of services, inter-professional collaboration, and information and communication technologies, we found other factors related to both organizational and individual characteristics grouped together in the "other determinants" category in the analytical framework.

All of these characteristics affect the use of services in terms of continuity, accessibility, and comprehensiveness. Continuity is a coherent succession of services linked to the needs and life context of individuals.[8] It includes three dimensions: informational continuity, relational continuity, and continuity of co-ordination (clinical management).[9] Accessibility is defined by the ease or difficulty of establishing contact with primary care services.[8] It encompasses geographic, organizational, economic, social, and cultural dimensions. Comprehensiveness expresses the ability of the services to respond to the entire range of individual needs.[10] These three characteristics of the use of primary care services in turn affect recourse to emergency room services and other levels of care as well as responsiveness, which is defined as the ability of services to take into account service users' and providers' expectations and preferences.[8] Other results stemming from service delivery are effects on health and costs.

All of these components represented in Figure 1 and their inter-relationships are affected and shaped by contextual elements such as the setting (rural or urban), resources, the availability of technology, and so on.

IV. A description of the 30 projects

First, this chapter lists the selected projects. It then presents certain descriptive data drawn from the description sheets, that is aspects of the organization of primary care services on which the projects focus, the research designs adopted, sources of funding, knowledge transfer strategies and key areas for further research.

1. Projects selected

The researchers and the titles of the 30 selected projects are indicated below. The numbers to the left are used to identify the project when it is mentioned in the report.

1 J. Afilalo,[1] A. Marinovich, M. Afilalo, A. Colacone, R. Léger, B. Unger
Characteristics of non-urgent patients who go to emergency services and obstacles to primary care services

2 A. Battaglini,[2] P. Tousignant, L.-R. Poirier, M. Désy, H. Camirand
Matching primary care social and health services to the needs of immigrant populations: Impact of multiethnicity on the organization and delivery of services

3 M. Demers[3]
Primary care services in Québec in 2000 - Organization, utilization and changes in general practice

4 N. Leduc,[4] J. Ricard, L. Farand, D. Roberge, A. A. Gbaya
The outpatient services centre as an alternative to hospital emergency services

5 N. Leduc,[4] F. Champagne, S. Bergeron, M. Lafrance, G. Ste-Marie
Study of recourse to emergency paediatric services as a substitute for primary care services

6 L.-R. Poirier,[5] R. Pineault , D. Ouellet, J. Gratton
The reorganization of Montréal's health services network - Long-term impact

7 C. Wolfson,[6] L. Lévesque, H. Bergman, F. Béland, L. Trahan, A. Perrault
Longitudinal study of the unfulfilled needs for assistance and community services among individuals 75 years of age or over

8 M. Clément,[7] D. Aubé, C. Beaucage, M. Tremblay
The continuity of care among individuals affected by the dual disorders of mental illness and drug addiction: Users' responsibility and organizational perspective

9 R. Geneau,[3] R. Pineault, P. Lamarche, P. Lehoux
The structuration process of general practitioners' primary care practice: a qualitative study on the constraining and enabling properties of organizational modes

[1] Emergency Department, Sir Mortimer B. Davis, Jewish General Hospital, McGill University
[2] Direction de santé publique de Montréal
[3] Ministère de la santé et des services sociaux
[4] Groupe de recherche interdisciplinaire en santé (GRIS), Université de Montréal
[5] Institut national de la santé publique du Québec
[6] Department of Epidemiology and Biostatistics, McGill University
[7] CLSC-CHSLD Haute-Ville-Des-Rivières

10 J. Haggerty,[8] R. Pineault, M.-D. Beaulieu, Y. Brunelle, F. Goulet, J. Rodrigue, J. Gauthier (main project); J. Haggerty, D. Roberge, R. Pineault, D. Larouche, N. Touati (hospital emergency services project)

The impact of the organization of primary care medical services on accessibility and continuity. Factors associated with differences in the use of hospital emergency services in rural and urban

11 R. Ionescu-Ittu,[9] J. McCusker, N. Dendukuri

Continuity of primary care and return visits to emergency departments (ED): based on administrative data

12 J. McCusker,[9] J. Verdon, P. Tousignant, L. Poulin de Courval, N. Dendukuri, P. Jacobs, E. Latimer

Rapid two-stage emergency department (ED) intervention for seniors: impact on continuity of care.

13 L.R. Poirier,[5] M. Caulet, L. Fournier, C. Mercier, A. Lesage, D. White

The impact of service integration on maintenance in the community of individuals affected by major psychiatric disorders who have just experienced a crisis situation

14 A.-.P Contandriopoulos,[10] M.-A. Fournier, C. Dassa, R. Latour, F. Champagne, H. Bilodeau, N. Leduc

Practice profiles of Québec general practitioners

15 M.-D. Beaulieu,[8] J.-L. Denis, D. D'Amour, J. Goudreault, L. Lamothe, G. Jobin, J. Haggerty, É. Hudon, R. Geneau, R. Pineault , R. Lebeau

The implementation of family medicine groups: the challenge posed by the reorganization of practice and interprofessional collaboration

16 D. D'Amour,[11] L. Goulet, R. Pineault, J.-F. Labadie

The effect of interorganizational collaboration on perinatal services, health and responsiveness

17 J.-P. Fortin,[12] L. Lamothe

Québec networked computerized file in oncology (DRIOQ)

18 A. Guttman,[1] M. Afilalo, R. Guttman, A. Colacone, C. Robitaille, E. Lang, S. Rosenthal

An emergency department based nurse discharge coordinator for elderly patients: Does it make a difference?

[8]Département de médecine familiale, Université de Montréal
[9]Department of Clinical Epidemiology, St-Mary's Hospital, McGill University
[10]Département d'administration de la santé, Université de Montréal
[11]Faculté des sciences infirmières, Université de Montréal
[12]Unité de recherche en santé publique du CHUQ

19 E. Lang,[1] M. Afilalo, J. F. Boivin, R. Léger, A. Colacone, X. Xue, A. Vandal, S. Rosenthal, B. Unger

An Internet-Based Standardized Communication System (SCS) Linking the Emergency Department with Primary Care Physicians (PCPs): A Randomized Clinical Trial Measuring Continuity of Care

20 A. Tourigny,[5] L. Bonin, D. Morin, M. Buteau, L. Mathieu, L. Robichaud, A. Vézina, P.-J. Durand, R. Hébert

Interdisciplinary, interestablishment geronto-geriatric information system: perceived usefulness and use in real time

21 L. Trahan,[3] M. Demers, R. Geneau, H. Guay, M. Bowen, J. Tremblay

Evaluation of family medicine groups

22 F. Béland,[10] H. Bergman, P. Lebel, A.-P. Contandriopoulos, J.-L. Denis, P. Tousignant, J. Monette, F. Ducharme

System of integrated care for the frail elderly (SIPA): Evaluation of phase I, June 1999 to May 2000

23 J.-L. Denis,[10] A.-P. Contandriopoulos, C. Sicotte, N. Touati, C. Rodriguez, H. Nguyen

Evaluation of the Capitation Haut-Saint-Laurent project: an integrated care and services network

24 M.-J. Fleury,[13] A. Lesage, C. Mercier, M. Perreault, D. Aubé, L.-R. Poirier

Integrated service networks and response to the needs of individuals affected by acute mental health disorders

25 M.-J. Fleury,[13] C. Mercier, J. Caron

The integration of mental health services. Comparison of the propensity of different strategies to integrate services in mental health networks

26 M.-J. Fleury,[13] L. Cazale, M. Perreault

Evaluation protocol respecting the mental health service network demonstration project in the territory of the Centre local de services communautaires (CLSC) Longueuil-Ouest

27 J.-P. Fortin,[12] L. Lamothe

The CLSC of the Future: Home support and tele-care

28 P.-A. Lamarche,[10] L. Lamothe, C. Bégin

Effects of emerging modes of integration of services in the Laurentian region, Québec

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[13] Douglas Hospital Research Centre, McGill University

29 P.-A. Lamarche,[10] L. Lamothe, M. St-Pierre
Concerted action in a territory project (PACTE): Local management of services in the health and social services network in response to the needs of the elderly

30 A. Tourigny,[5] P.-J. Durand, A. Tourigny, L. Bonin, R. Hébert, M. Paradis
Evaluation of the efficacy of an integrated service network for vulnerable elderly people in a semi-urban territory

2. Aspects of the organization of the primary care services on which the projects focus

Table 1 summarizes the aspects of the organization of primary care services examined by the research projects. When a project examines descriptively a specific aspect, an asterisk appears in the appropriate box. When a project examines the association between two or more aspects, they are identified by a grey circle. When a grey circle appears on a line describing a grouping of aspects such as resources, the association between several components of resources, e.g. type and level, and another aspect or group of aspects is studied.

The last column of the table indicates the number of projects analysing the association between at least two aspects of the organization of primary care services. Eleven projects study the association between organizational structure (or some of its components) and the components of another dimension of the organization of primary care services. Relatively few projects specifically examine resources: three centre on several components and one examines the type of resources. Fourteen projects analyse practices: six projects examine several components, one project targets multidisciplinarity and interdisciplinarity, one analyses the services offered, and six study the mechanisms aimed at fostering continuity, accessibility or comprehensiveness. These projects typically examine the influence of emergency discharge planning or information systems interventions.

Most of the projects mentioned above investigate the influence of structures, resources or practices on effects. Out of 21 projects, 11 attempt to measure multiple effects, three focus on service utilization patterns and six, on continuity, accessibility, comprehensiveness or responsiveness. Only one project attempts to measure the effects on health.

Ten projects provide essentially descriptive information on one or more components of the dimensions of the organization of primary care services and typically analyse implementation.

Table 1: Aspects of the organization of primary care services on which the projects focus

	Project[1]																														
Organizational aspect	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	T
Vision or organizational culture		*[2]	*		*		*		*	*				*	*	*	*				*		*	*			*	*	*	*	
Organizational structure									●[3]	●			●								●			●			●	●	●	●	9
• Governance		*				*			*	*				*	*	*	*				*		*	*	*	*	*	*	*	*	
• Integration/coordination		*		*	*	*		*	*	*			*		*	●	*	*	*		*		*	*	*	*	*	*	*	*	1
• Other	●		*													*		*												*	1
Resources																					●	●		●							3
• Type		*		*		*	*	*	*	*		*	*	●	*	*	*	*	*		*	*	*		*	*				*	1
• Level						*			*								*				*		*	*	*	*					
• Substitution					*	*						*				*			*			*	*			*					
• Other					*																										
Practices															●						●	●		●			●		●		6
• Multi/interdisciplinarity							*			*					*		*		*	●		*	*	*	*	*	*		*	*	1
• Interprofess., interorg. collaboration.		*		*	*		*	*				*	*		*	*	*	*	*		*	*	*	*	*	*	*		*	*	
• Services offered		*	*	*		*		*	*	*	*	*	*	●	*	*	*	*	*		*	*	*	*	*	*	*		*	*	1
• Mechanisms towards cont., access. and comprehens.		*		*				*	*	*	●	●	*		*		●	●	●	●	*	*	*		*	*	*		*	*	6
• Other		*	*																												
Effects									●	●		●	●		●	●		●				●					●	●		●	11
• utilization	●	*				*	●	*	*	*	●	*	*		*	*	*	*	*		*	*		*			*	*		*	3
• Cont., access., comprehens., respons.		*				*		*	*	*				*	*	*	●	*	●	●	●	*		●		*		*	●	*	6
• Health							●			*		*	*			*		*				*									1
• Other						*						*	*					*				*					*	*		*	

[1] See the list of projects in Chapter IV, section 1.
[2] Examines this aspect in a descriptive manner.
[3] The project analyses the association between this aspect and at least on other one, also identified by a circle.

3. Research designs

Table 2 indicates the frequency of each type of research design adopted in the projects referred to in collective. Case studies are by far the most frequent and account for over half of the projects.

Table 2: Research designs	
Research design	**Number of projects**
Case study (interviews with patients and professionals)	18
Survey of users	4
Population-based study	1
Cohort analysis	2
Analysis of data banks	1
Before-and-after analyses	2
Randomized trial	2
Total	30

4. Funding

Table 3 indicates the relative frequency of the research projects' sources of funding. They are numerous and varied. It should be noted that most of the projects have several funding sources. Organizations whose key mission is to support research funded the greatest number of projects, led by the Canadian Health Services Research Foundation (CHSRF), the Fonds de la recherche en santé du Québec (FRSQ), the Health Transition Fund (HTF) and the Canadian Institutes of Health Research (CIHR). Organizations that are responsible for the management of health services also participated extensively in supporting the research. The ministère de la Santé et des Services sociaux supported the largest number of projects. The agences de développement de réseaux locaux, the directions de santé publique and establishments also contributed significantly to these research initiatives.

Table 3: Funding sources

Organization	Number of projects
Conseil québécois de la recherche sociale (CQRS)	3
Canadian Health Services Research Foundation (CHSRF)	10
Fonds de la recherche en santé du Québec (FRSQ)	10
Health Transition Fund (HTF)	7
Canadian Institutes of Health Research (CIHR)	6
National Health Research and Development Program (NHRDP)	2
Canada Health Infrastructure Partnerships Program (CHIPP)	1
Agences de développement de réseaux locaux de santé et de services sociaux	9
Directions de santé publique (DSP)	2
Establishments	2
Ministère de la Santé et des Services sociaux (MSSS)	12
AÉTMIS	1
Institut national de santé publique du Québec (INSPQ)	2
Association des médecins d'urgence du Québec (AMUQ)	1
Collège des médecins du Québec (CMQ)	1
Fédération des médecins omnipraticiens du Québec (FMOQ)	1
Chaire Docteur Sadok Besrour de recherche en médecine familiale	1
Groupe de recherche interuniversitaire sur les urgences (GIRU)	1

5. Knowledge transfer strategies

Table 4 indicates the strategies adopted to exchange knowledge in conjunction with the projects and includes the number of projects that relied at least on a given strategy. However, most of the projects relied repeatedly on certain strategies, e.g. several presentations to decision-makers or at symposia, which the table does not show. Presentations at symposia, conferences or scientific meetings are the most frequent and most often repeated strategy. One-third of the projects led to publications in scientific journals. The dissemination of research findings among decision-makers was most often achieved by means of presentations, their involvement in steering committees and the distribution of documents and reports. Only 20 percent of the projects involved decision-makers as co-researchers. It should be noted, however, that several projects have yet to be completed and that, consequently, the situation summarized in table 4 could change.

Table 4: Knowledge transfer strategies

Strategy	Number of projects
Involvement of decision-makers in research	6
Steering committee (including decision-makers)	11
Presentation to decision-makers	16
Documents targeting decision-makers	10
Documents targeting researchers	2
Presentations at symposia, conferences and scientific meetings	19
Publications in scientific journals, books	11
Establishment of a web site	3
Information bulletin	1
Consulting	1

6. Research avenues

The researchers listed numerous areas for further research concerning either the same research problem or a new one. The information is grouped together depending on whether the avenues suggested focus on conceptual aspects or methods, strategic aspects or specific research objectives.

Conceptual aspects and methods

- Modeling of integrated networks according to different contexts

- Adaptation and application of methods to analyse social networks to the study of service networks

- Development of performance indicators (quality, satisfaction, management, use, costs, health effects) for the analysis of integrated networks

- Development of a bidirectional, standardized information system both between professionals and between organizations, especially hospitals

- Conceptualization of accessibility for immigrant populations and inventory of adaptations made to take into account the beliefs and practices of such populations

- Conceptualization of continuity for clienteles suffering from mental illness and drug addiction

- Development of more precise indicators to take into account the context of research (rural-urban, socioeconomic status, characteristics of communities and hospitals as predictive factors of the use of resources)

Strategic aspects

- Adoption of a collaborative approach between the research teams in various fields for the analysis of integrated networks

- Use of the new information and communication technologies, especially computerized files, and existing administrative databases as a tool for better understanding the system's operation, defining the clientele and measuring the impact of interventions

- Recourse to and utilization of emergency room as an indicator of the impact of implementing an integrated service network or other types of community care restructuring.

- Long-term evaluation of these new organizational modes

Research objective

- The clientele's perception of what is an appropriate degree of integration and what are sound integration practices

- The actors' strategies in the absence of a consensus on the methods of integration to be adopted

- Experimentation and assessment of population-based per capita funding

- The perception of family physicians, especially in the area of mental health, and that of other professionals of their role, the sharing of responsibilities and the coordination of their activities in conjunction with integrated service networks

- Practice models adopted by physicians and other professionals in new contexts, especially family medicine groups, local networks and the implementation of an ambulatory centre

- Determinants of physicians' practices

- Factors and processes that foster changes in the practices of professionals and organizations

- The impact of professional practices of physicians and other professionals on the accessibility of care

- The roles played by community agencies in integrated service networks

- Experimentation and evaluation in various contexts (territories) of the new organizational modes

- The impact of recourse to emergency room services in non-urgent cases (costs, frequency, outcomes)

- The study of implementation in various contexts of the impact of emergency room discharge planning in relation to community resources and frailty of the elderly screening in the emergency room

V. Findings of the analysis

We first discuss the organizational characteristics: integration of services; inter-professional collaboration; and new information and communication technologies. Next, findings regarding accessibility, continuity, comprehensiveness, responsiveness, and other effects are examined, first to describe the current situation when data make it possible to do so, and second to examine their relationship with organizational and other characteristics that explain their variability. We conclude by examining the key points raised during the exchanges held on June 17. Throughout the report, the projects are referred to by the number between parentheses they were assigned for the meeting (see Section IV of this report for corresponding project numbers).

1. Organizational characteristics

In this section we present the findings of studies focusing on integration of services, inter-professional collaboration, and new information and communication technologies. Generally speaking, these studies were long enough to observe the implementation processes but not to discern important changes regarding effects.

1.1 Integration of services

We first present a brief description of the integration experiments studied. Next, we examine three key aspects of integration: 1) the strategies adopted to foster collaboration; 2) contextual factors that foster and constrain integration; and 3) change processes.

1.1.1 Description of integration projects

Thirteen research projects covering 36 integration experiments focus directly or indirectly on integration of services (13, 16, 17, 18, 22, 23, 24, 25, 26, 27, 28, 29, 30). Most of them centre on integration experiments intended for vulnerable clienteles. Four of them concern frail elderly people or individuals at risk of becoming so (22, 28, 29, 30), and four others deal with mental health problems in the community (13, 24, 25, 26). Two others are concerned with organizational models pertaining to perinatal care (16) and an initiative to implement, in a specific area, an innovative integration model for local service networks that is about to be introduced throughout Québec (23). With the exception of mental health, no project deals with integrated service networks by disease. Most of the integration experiments concern situations in which the targeted clienteles have multiple, complex health problems. Diverse geographic settings (urban, semi-urban, and rural) are represented. Half of the projects stem from the Canadian initiative to enhance health interventions supported by the Health Transition Fund.

All of the integration experiments are rooted in primary care services, mainly in the CLSCs (local community service centres), and they imply the development of inter-professional and inter-organizational collaboration. In most instances, a wide array of health and social services is offered.

1.1.2 Strategies adopted to foster collaboration

A broad range of strategies has been adopted to foster collaboration between individuals and organizations. Few of the strategies selected are of a structural or administrative nature. They involve, for example, legal and administrative changes in order to merge establishments or their boards of directors (23, 24, 28). However, a significant proportion of the strategies focuses on practices, such as appointing a key professional like a case manager or a liaison nurse who co-ordinates care, services, and follow-up (18, 22, 23, 25, 27, 29, 30); sharing of common tools such as clinical care protocols (16, 22, 23, 24, 25, 26, 29, 30); establishing forums that allow professionals and organizations to engage in discussions through interdisciplinary meetings, clinical and administrative committees, and consultation committees (16, 22, 23, 24, 25, 26, 30); elaborating institutional agreements (16, 18, 22, 23, 25, 28); establishing 24/7 telephone services (a single point of entry and reference) through which a professional is constantly available and supported by the relevant clinical information (18, 22, 23, 27, 29, 30); and establishing special channels

between levels of care (13, 18, 22, 23, 27, 29, 30). Assigning a CLSC nurse to a hospital (29) or private physicians' offices (22, 23) appears to be a favoured strategy to foster the creation of referral channels.

1.1.3 Contextual factors

Analysis of various studies reveals that integration of services appears to be affected by the specific traits of the environment in which it occurs. More specifically, clinical integration seems to be facilitated in territories where there is a history of collaboration (23, 27, 28, 29), when primary care medical practice is diversified and co-ordinated (23), and when the population contributes to the organization of services (23). These findings suggest that integration is facilitated in rural areas, where ties between primary care physicians and healthcare institutions are better established; in urban areas, primary and specialized care facilities tend to function more independently (24).

Organizational factors also seem to come into play. The dynamic of collaboration that is developing between organizations appears to be largely affected by rivalries between the cultural communities (23) and institutions (16, 28). When such entities perceive a threat to their survival or autonomy, they apparently tend to fall back on their corporate identities and elaborate strategies that serve their own interests, to the detriment of the network's interests (23, 28).

There are other contextual factors. Those of a systemic nature hinder the introduction and continuation of service integration projects. The structuring of health care organizations often seems poorly adapted to operation in a network because of the current budgeting scheme applicable to healthcare establishments (25) or the limited adoption of a program-centred logic (25, 29). The methods of remunerating professionals discourage the demands of collaboration (22), and clinical and management information systems do not allow for a horizontal reading of events (22, 25, 27, 29). The limited availability of resources in the community hinders implementation and jeopardizes the continuity of integrated networks for the frail elderly and patients suffering from mental health problems (24, 25, 29). Some projects emphasize the diversity of forms that networks take in light of sociopolitical, geographic, and demographic contexts (25, 28).

1.1.4 Change management processes: lessons learned

The integration of services implies that professional practices change and relations between organizations change simultaneously and repeatedly. Several lessons concerning change management can be drawn from the integration experiments studied.

1.1.4.1 Human and clinical issues are foremost

Networks are usually more extensively developed when professionals emphasize, first and foremost, the creation of alliances to ensure service delivery (16, 23, 27, 28). Recourse to merging or integrating institutions appears to delay the emergence and implementation of networks (28). The experience of implementing a local service network similar to those that are about to be established in Québec shows that it is only when progress has been made in the realm of clinical integration that professionals and managers have been convinced of the importance of grouping institutions (23). These observations lead the authors to conclude that the factors are more human and clinical than administrative (23, 28).

Developing collaboration or alliances between several professional and institutional partners participating in an integration project poses significant challenges (29). It implies that harmonizing practices depends on negotiation and learning processes, which are affected by several factors, including the history of relations between partners (16, 23, 28, 29), existing standards, and corporatism (29). The relationships of trust prevailing at the outset and those that are established subsequently are key factors in collaboration between individuals and organizations (16, 23, 27, 28, 29). These findings reveal that the processes leading to changes in professional practices vary constantly in a non-linear manner, and they often take a long time (28, 29).

1.1.4.2 Lessons drawn concerning management and governance

There are several kinds of lessons that can be drawn regarding management and governance. First, change management must foster a sharing of values inherent in collaboration between actors (organizations) and provide an incentive to do things differently (25, 28). Second, the conduct of change must rely on a participatory process and be accompanied by considerable flexibility and a concern for mobilizing the actors involved (17, 23, 25, 27, 28, 29). Studies have found that changes in practices are more likely to occur if collaboration is achieved among the rank and file (16, 23, 27, 28, 29) and if it centres on natural networks (23, 28, 29).

Various strategies to facilitate change emerge from the studies, which emphasize mobilizing actors at the strategic, tactical, and operational levels (17, 23, 26, 27) and establishing clear policy directions (26). Since changes at the local level have limitations, it is important to complement them through systemic changes, such as amendments to legislative, regulatory, and financial measures (22, 23, 25, 26, 27). From a tactical standpoint, various levers facilitate change: financial incentives that are compatible with network operations (23, 28); convincing

authority or leadership (16, 17, 23, 26, 27); expertise (23); and initiatives to promote collaboration values (23, 25, 28). Training professionals and clinical coaching appear to foster the harmonization of practices and the development of collaboration (23, 26, 29).

Some studies emphasize the important role played by community groups in the realm of perinatal care (16) and intersectoral intervention in follow-up devoted to patients suffering from acute, persistent mental illness (13, 23, 24, 25, 26). Reconciling the logic of complementarity of the institutional network and the logic of autonomy of community organizations is necessary to foster the continuum of services required (23, 25).

The difficulty of interesting and involving primary care physicians in networks is emphasized (16, 25). Integration in rural areas stands out from integration in other areas in this respect (9). The authors emphasize the following conditions that enhance physicians' interest: physicians being part of the hospital's council of physicians, dentists, and pharmacists; participating in the organization of services in the territory; and being remunerated for their contribution to governance.

1.1.5 Key observations

To summarize, the following key observations emerge from the studies devoted to the integration of primary care services.

1. The experiments that produced the best results are those that emphasized practices over structures.

2. Integration factors are, first and foremost, clinical and human in nature; consequently, administrative mergers based on structures often hinder the development of networks.

3. Conditions specific to the contexts in which the experiments are implemented facilitate or hinder development: prior collaboration; the quantity and type of resources; the existence of rivalries or alliances; budgeting and remuneration methods; and the adoption of financial and non-financial incentives.

4. Effective strategies to introduce such changes must rely on a shared vision and on values associated with collaboration and participatory processes.

1.2 Key observations specific to inter-professional collaboration

Among the 30 projects selected, 11 focus more specifically on inter-professional collaboration (2, 15, 16, 17, 18, 21, 22, 27, 28, 29, 30). Four key observations emerge from these projects.

1. Collaboration is a process that takes time. It requires negotiation and a structuring of relationships between individuals in the field that takes into account professional logic (16, 17, 21, 27, 28, 29). Indeed, it has been noted that new structures are not sufficient to encourage professionals to collaborate. Inter-professional collaboration stems from mutual learning of respective skills, which is necessary to overcome the major obstacle of disciplinary and institutional allegiance. The main conclusion that can be drawn from this observation is that establishing collaboration requires time, approaches likely to foster points of convergence, and the development of a shared vision of outcomes, including services centred on patients' varied needs.

2. The key factors that drive inter-professional collaboration in the primary care sector are the determination to reduce reliance on hospital services (17, 18, 22, 29, 30) and the need to replace these services by equivalent services in the community. However, it has been noted that economic gains for the system are not guaranteed; methods of offering integrated services in the community are not necessarily less costly than the services hospitals offer (22).

3. Collaboration must be envisaged in response to specific problems (2, 16, 27, 28). The result is a great variety of modalities, depending on whether collaboration focuses on specialized medical services at one extreme or psychosocial services at the other. The pivotal point of collaboration varies, since a physician, another professional, or a team may assume responsibility. Collaboration is not necessarily synonymous with interdisciplinarity.

4. Inter-professional collaboration in the realm of primary care services is inextricably linked to inter-organizational collaboration, whether between primary care institutions or between the primary and secondary care sectors. The main obstacle to be overcome is thus tied to the institutional allegiances that still significantly shape professionals' practices (16, 17, 29). To surpass these allegiances and develop a common vision with a view to fulfill a mission that is more disciplinary than institutional demands institutions display a clear determination to participate in developing collaboration. Consequently, collaboration involves both professionals and managers (2, 17, 27, 28).

1.3 New information and communication technologies: key observations

Among the 30 projects selected, four focus specifically on this field of research (17, 19, 20, 27). Two of them are evaluation projects devoted more specifically to the anticipated effects of technology (19, 20), and two are action-research projects that examine the use of technology to support the establishment and integration of networks (17, 27). They also centre on innovation and the adoption of technology. However, the four projects are similar in terms of their conclusions. Four key observations emerge from the studies devoted to the use of new information and communication technologies in primary care services.

1. These technologies are one of the tools most likely to help the healthcare system transform itself in keeping with the objectives of the current reforms, that is, to establish a healthcare system centred on primary care services. Moreover, it has been emphasized that the circulation of information is better organized in the medical field than in the psychosocial field or between the medical and psychosocial fields. By enabling primary care actors to be better informed about their patients, these technologies also make it possible to manage the complementarity of the entire array of services required and to effectively and efficiently replace secondary care services to manage complex cases (19).

2. The technologies that support practices likely to ensure better continuity and the enhanced comprehensiveness of services must be designed with the context in mind; specifically, the nature and work methods of the disciplines concerned and the information management systems with which they are aligned, especially when these systems involve several organizations (19). It is processes more than structures that must be thought out. Considering the interplay between the actors is at the heart of useful, successful reliance on new technologies. Inter-professional negotiations are inherent in the successful implementation of technology (17, 19, 20, 27).

3. The technologies reflect the paradigm change associated with the search for better integration. They cannot be implemented without a commitment from institutions to support a client-based rather than an institutional logic. All decision-making levels are concerned. Moreover, when private firms participate in the development of technologies, factors associated with public-private partnerships are raised (17, 27).

4. Last, but not least, the new information and communication technologies, because they need to be developed in collaboration with their future users and with representatives of different decision-making levels, question traditional ways of doing things. They foster creativity and innovation in practices, and they play an active role in the dynamics of integration between professionals and organizations (17, 19, 27).

2. Effects and related factors

This section presents the findings of studies on the indicators of effects, that is, accessibility, continuity, comprehensiveness, responsiveness, recourse to other services, and health. First, when data are available, we describe the current situation and its consequences, particularly regarding recourse to emergency room services. Next, we present these indicators from the standpoint of their associations with the organizational characteristics discussed earlier and other factors identified in the studies.

2.1 Accessibility

2.1.1 What did the studies reveal about accessibility in Québec and what are the consequences, especially concerning recourse to emergency room services?

Generally speaking, the researchers noted a lack of accessibility regarding primary care services (1, 2, 3, 4, 5, 6, 10). In most of these studies, accessibility is expressed in terms of waiting time to see a physician. The situation in Montréal seems to have deteriorated since 1998 with respect to perceived accessibility, as expressed by waiting time to see a general practitioner, while an improvement has been noted regarding blood sampling, which is now done in CLSCs (6).

However, the lack of accessibility of family physicians in Montréal has apparently neither adversely affected access to medical services, since utilization rates increased between 1998 and 2003, nor unmet needs (6). Paradoxically, in Québec overall, excessive accessibility could jeopardize continuity, and vice versa (10). The optimum combination appears to be the medical clinic, which offers - in a balanced manner - medical services both with and without appointments (10).

The lack of availability of a family physician or overly long waiting times to have access to such a physician are mentioned as factors that explain recourse to emergency room services (1,4, 5,10). Both among adult and pediatric patients, consultations with family physicians are the first choice, although difficult access to a family physician (1) or overly long waiting times (4, 5) lead to the decision to resort to emergency rooms. The researchers also noted more extensive visits to emergency rooms among individuals whose needs for home care are not satisfied (7).

2.1.2 What accounts for this lack of accessibility and how can it be remedied?

Organizational factors are associated with broader accessibility, especially inter-professional collaboration in the realm of perinatal care (16), along with the integration of services regarding the general public (28) and the elderly (22, 29), which also allows for easier access to specialized services through a single point of entry and reference (29). It should be noted that two-thirds of Québec medical clinics offer walk-in services, which, from the outset, fosters accessibility (3).

Immigrant populations experience greater difficulty gaining access to services, in particular because of linguistic factors and a lack of knowledge of the services available (2). Moreover, accessibility, which is inadequate throughout Québec, takes different forms in rural and urban areas; the proportion of the population that does not have a family physician is higher in urban areas than in rural ones (10).

Moreover, recourse to emergency room services is almost twice as high in rural areas as in urban ones (10). In rural areas, the organization of primary care centres more on practice diversity and affiliations of physicians to multiple health organizations, while in urban areas primary medical care is less extensively integrated into a network (9, 10). Patients who go to emergency rooms also present more complex problems in urban areas than in rural areas (11). One study is particularly revealing in this respect (14). Primary care physicians in rural areas engage in more diversified practices characterized by a high volume of clinical activities, while in urban areas there is a greater concentration of practices, whether in emergency room services or private physicians' offices, associated with varied volumes of activity (14).

2.2 Continuity

2.2.1 What do the studies reveal about the continuity of care in Québec and what are the consequences, especially concerning recourse to emergency services?

Some 16 percent of users of primary care services in Québec do not have a family physician; the situation is worse in urban areas such as Montréal where 20 percent do not have a family physician (10). A population survey revealed that one Montrealer in three did not have a family physician in 2003 (6). Even so, confidence in medical clinics and, in particular, the CLSCs, increased between 1998 and 2003 (6). The degree of patient loyalty to the clinics is low and the clinics' clienteles are dispersed (3). Walk-in clinics are the usual source of care for 60 percent of service users (10).

It has also been noted that among certain clienteles suffering from mental illness and drug addiction, there is no formal link between the entities providing services to treat the two problems. No facility is accountable to these clienteles, with the result that serious shortcomings occur regarding continuity and coherence in service delivery (8).

The absence of a regular source of care, which is a prerequisite for continuity, explains recourse to emergency room services, especially in non-urgent cases (4, 5), even though individuals prefer to rely on their regular physician (5). Recourse to emergency rooms is a means of ensuring continuity between levels of care and secondary accessibility to specialists (5). Individuals who do not have a regular physician not only have more limited access to services but also experience more limited continuity of service and rely more extensively on emergency rooms (10).

One study, however, did not demonstrate a link between relational continuity and repeated visits to emergency rooms among elderly people older than 65 years of age (11). It should be noted the study reveals that in 2001, 90 percent of patients older than 65 who visited emergency rooms had a family physician (11).

The difficulty of obtaining access to primary care services does not fully explain the decision to resort to emergency room services. The manner in which responsibility for managing primary care patients is assumed also appears to affect recourse to emergency rooms. A significant proportion of patients, whether non-urgent, semi-urgent, or urgent, attempted to reach a healthcare resource (1,4) and even consulted a primary care physician before going to the emergency room (4,5).

2.2.2 What explains this lack of continuity and how can it be remedied?

In addition to the problems of access mentioned earlier, immigrants have a hard time finding their way around the network, especially because of communication barriers, which lead to continuity problems (2).

The clinics that achieve the best continuity are those that offer consultations with and without appointments, have fewer than 10 physicians, and maintain links with other organizations in the network (10).

The extent to which physicians are integrated into their organizations makes them more sensitive to their colleagues' practices, which in turn leads to more homogeneous practices (9). Moreover, some physicians find a multiple affiliation strategy, such as a clinic/hospital/CLSC, a way to satisfy the varied needs of their clienteles and, consequently, to ensure better continuity, especially in rural areas (9).

Certain procedures adopted in emergency rooms enhance post-emergency continuity (19), especially among the elderly (12) and clienteles suffering from complex psychiatric problems (13), where continuity cannot be achieved independently of comprehensiveness (13). Such procedures, while they favour continuity, do not appear, to reduce return visits to emergency rooms (19) if ties with the family physician are not established beforehand (12).

Organizational characteristics are associated with continuity. Interprofessional collaboration enhances continuity in the delivery of perinatal services to the extent that an excess of continuity, reflected in overlapping, occurs in the region in which the broadest collaboration has been observed between the CLSC and the hospital (16). The integration of physicians is problematic in all instances (16).

Information systems that facilitate communication between primary care professionals and various levels of care appear to offer worthwhile potential to enhance the continuity of service (19,20) especially for complex, chronic problems, although

their evaluation is incomplete and inconclusive.

The integration of services as it occurs in integrated network projects fosters continuity in primary care services and between these services and specialized care (27, 28, 29). The organization in networks of health care services in the community appears to provide worthwhile avenues for vulnerable clienteles, such as individuals suffering from chronic problems (27), the frail elderly (22, 29), and individuals suffering from acute mental disorders (13). Researchers believe that, above all, it is by enhancing continuity that these experiments made it possible to avoid visits to emergency rooms (27), reduce the duration of stays in emergency rooms (22), and facilitate the patient's return home (22, 29). More limited co-ordination measures initiated by emergency room services had more mitigated, less conclusive results (17, 18, 19), especially when, as we noted earlier, links with physicians in the community are not established beforehand (12).

2.3 Comprehensiveness

With respect to comprehensiveness, the studies do not present any findings concerning the current situation. Researchers acknowledge that comprehensiveness is closely tied to continuity, especially in terms of prevention (10). Comprehensiveness problems are linked to the fragmentation of services, especially in the case of complex problems such as mental disorders and drug addiction where practices are vertically integrated and the absence of accountable individuals has been noted (8). In most of the studies, it is often hard to distinguish comprehensiveness from continuity because of the imprecise measurements used.

Some studies reveal certain organizational characteristics associated with the comprehensiveness of services. It seems clear that institutional resources alone are insufficient to satisfy the array of needs presented more specifically by clienteles with complex problems, such as individuals suffering from acute mental disorders (8) in a state of crisis (13). The multiple affiliation strategy adopted by some physicians is a means of ensuring that patients obtain a fuller range of services (9). Family medicine groups, through the addition of experienced nurses from CLSCs, should make it possible to better take into account the psychosocial dimensions of patients' needs (21). The experience of integrated networks (21) seems to reveal a greater capacity to foster comprehensiveness by making available a wider range of services (28, 29). Changes in professional practices stemming from the integration of services allow for a comprehensive range of services (13, 26, 24). Selective measures involving a limited number of organizations, such as crisis management, do not seem sufficient to satisfy the range of needs (13).

2.4 Responsiveness of health care services from the standpoint of patients and professionals

The studies do not report findings on the current situation as far as responsiveness is concerned. However, they do provide findings that show a link between responsiveness and organizational characteristics. Inter-professional collaboration in the realm of perinatal care appears to promote responsiveness to patients, as revealed by the mothers' assessments of the services received (16). The same is true of telecare, as revealed by the users' evaluation of the care and services received (27). Similarly, co-ordination procedures, aimed at enhancing continuity between the time patients are released from the emergency room and when they return to their family physicians, are also a source of greater satisfaction among patients (18).

Generally speaking, establishing integrated networks engenders greater satisfaction regarding the services received, especially among non-professional caregivers whose burden is alleviated by the support the network provides (22, 29, 30). The studies also show the impact of integration on the satisfaction of clienteles (13, 16, 18, 22, 24, 27, 29, 26) and professionals (27, 29).

Moreover, both patients and professionals say they are satisfied with services organized to support collaboration between professions (21, 29). Responsiveness with respect to professionals reveals itself through satisfaction with the implementation of information systems linking establishments and different levels of care (19, 27). The professionals who benefit from this system are highly satisfied with it, since the information transmitted by means of the new information and communication technologies allows them not only to perform their duties better (19, 20) but also to assess the collaboration stemming from broader interdisciplinarity (20). Moreover, users do not deem technology to be an obstacle to the development of sound relationships with their professionals (20).

2.5 Are there other effects?

Are there other effects on use and health? Various types of effects on the use of institutional resources and in the community have been reported regarding organizational characteristics. Establishing an integrated network contributes to a reduction in stays in emergency rooms and the more extensive release of patients who return home (22). It reduces the length of hospital stays among elderly people with serious clinical conditions and who are at high or extreme risk of death (29), and it also reduces institutional confinement (30). An increase in the use of home psychosocial and paramedical services has been observed (22). Total costs remain unchanged, with costs in institutions replaced by the cost of services in the community (22). Establishing a network also fosters more extensive service delivery through ambulatory rather than institutional care (22, 27, 28, 29, 30). Recourse to caregivers (29) and their burden (30) are reduced. However, little effect on the use of health care services was observed in a network for elderly people in which intervention was largely of a social nature (30). On the other hand, in this instance researchers observed increased recourse to in-home

psychosocial services and a reduction in institutional admission (30). In the realm of perinatal care, overlapping of postnatal services was observed when collaboration between hospitals and CLSCs was more extensive (16).

Information on the impact of establishing networks on public health or the health of targeted clienteles is limited. The proportion of frail elderly people decreased without any observed deterioration in their medical conditions (30). Service networks dedicated to individuals suffering from acute mental disorders appear to foster improved well-being among patients, higher quality of life, and more extensive satisfaction of needs (13). As for the effects of organizational characteristics on health, the studies did not show that broader integration enhances the health of mothers and babies (16) or elderly people (30).

2.6 Key observations

To summarize, eight key observations emerge concerning effects and associated factors.

1. There are serious problems regarding the accessibility and continuity of primary care services in Québec.

2. A high proportion of Quebecers do not have a family physician; in Montréal, it is even higher, at more than 30 percent. To have a family physician is deemed to be a prerequisite to continuity in service delivery.

3. Accessibility, continuity, and comprehensiveness of services are interrelated and interdependent. The achievement of one may occur to the detriment of the others, which explains the importance of finding systematic rather than selective solutions. However, continuity appears to be central in care delivery since it determines, by and large, accessibility, and comprehensiveness, and, consequently, recourse to emergency room services.

4. Recourse to emergency room services is attributable both to a lack of accessibility and a lack of continuity in primary care services, especially in urban areas, where patients who resort to emergency rooms present with more complex problems.

5. Integration of services as it has been achieved in integrated service networks seems to offer greater potential to enhance continuity, comprehensiveness, and, accessibility than selective measures adopted within organizations and without a link to the community.

6. Generally speaking, the studies that report the findings of experiments devoted to service integration, inter-professional collaboration, and the introduction of information and communication technologies emphasized continuity more than accessibility in their findings. This appears to underscore, at least implicitly, the importance of

continuity as an objective to be achieved in the changes introduced. The same studies often simultaneously examined accessibility, comprehensiveness, and continuity. It may well be that the measurement of these concepts is imprecise in the studies or that continuity is recognized as a precondition to attain the other two.

7. Service integration is a source of considerable satisfaction to professionals, whose collaboration is largely facilitated by information technologies, which patients appear to accept readily.

8. There are three reasons why it is hard to discern clear, specific effects on population health or the health of users stemming from the implementation of integrated networks, inter-professional collaboration, and information technologies: 1) many of these studies focus more extensively on the implementation of organizational changes, and while the methods used are sufficiently robust to analyse the implementation process they are less able to ascertain effects (for example, there are no repeated measurements before and after and of control groups); 2) the indicators used to measure effects often lack precision and are not always drawn from valid instruments; and 3) the length of time after implementation is often too brief to discern measurable effects on continuity, accessibility, comprehensiveness, responsiveness, and health.

3. Highlights of discussions

On June 17, 2004, the points raised during discussions with the invited decision-makers clarified and sometimes confirmed or bolstered the points that the researchers broached in their presentations (the research collective's detailed report provides more extensive information on the day-long event).

Below are highlights of the discussions.

1) **Balance between accessibility and continuity**: Several participants noted, in support of the findings presented, that while problems of accessibility receive widespread media coverage, they can probably be better explained by an array of factors, including the lack of continuity. Consequently, solutions that seek to solve problems of accessibility alone are bound to fail.

2) **The integration of physicians**: The participants emphasized the importance of considering the physician to be a key actor regarding the success of the changes introduced. Mention was made of some institutional factors that can hinder the integration of physicians, especially the absence of a strong organizational link and the method of remuneration. Several researchers expressed the opinion that integration of physicians had not received sufficient attention both in projects dealing with the integration of services and in the changes under way. This point is a source of considerable concern, all the more so as establishing local networks does not guarantee their formal integration.

3) **Primary care services are not adapted to complex problems**: Demographic and epidemiological changes stemming from the aging of the population and the growing prevalence of chronic diseases mean that primary care services, developed to treat brief episodes of acute diseases, are less suited to the management of complex problems, which, moreover, call for the collaboration of several professionals sometimes attached to different organizations. This question also raised another one, that of the organizational model of primary care services to be adopted.

4) **The organizational model of primary care services**: Several participants asked themselves the following question: Which clinical model can best satisfy Quebecers' needs? They wondered whether more extensive investment should be made in specialized services, which in their view are more productive and efficient, than in primary care services that are overwhelmed. In other words, the hospital-centred model, based on specialized care and emphasizing disease management was contrasted with the community model centred on primary care services and inspired by case management. Might the hospital-centred model be better adapted to the urban environment where specialized care is abundant but primary care services are less readily available, while the community model might be better adapted to rural areas?

   Since the two types of networks, centred on diseases or populations, must co-exist, a more basic question is to ascertain how they will co-exist and, above all, be co-ordinated to facilitate the treatment of patients.

5) **Differences between urban and rural areas**: The discussion confirmed and amplified the points raised in the presentations to the effect that the multiple affiliations of physicians in rural areas and their presence in hospitals ensure continuity that is not found in urban areas, where primary care physicians tend to concentrate their practice in such contexts as private offices, walk-in clinics, and emergency rooms. They do not contribute to the vertical integration of services as do physicians in rural areas. Primary care medical practice in rural areas centres on care trajectories that make it easier to manage complex cases, while in urban areas medical practice is more limited to treating acute episodes.

VI. Project description sheets

Projects description sheets are available on the report's CD.

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