

# **Interpretative monitoring of the impact on Montrealers of the Reorganization of Primary Care Services**

## **Executive summary**

AGENCE DE DÉVELOPPEMENT DE RÉSEAUX LOCAUX DE SERVICES  
DE SANTÉ ET DE SERVICES SOCIAUX DE MONTRÉAL - DIRECTION DE SANTÉ PUBLIQUE

INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC

# **INTERPRETATIVE MONITORING PLAN OF THE IMPACT ON MONTREALERS OF THE REORGANIZATION OF PRIMARY CARE SERVICES**

## **Executive Summary**

ÉQUIPE SANTÉ DES POPULATIONS ET SERVICES DE SANTÉ  
DIRECTION DES SYSTÈMES DE SOINS ET SERVICES  
INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC  
AND THE  
SECTION SERVICES PRÉVENTIFS EN MILIEU CLINIQUE  
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## Foreword

Over the last few years, many problems have been identified in the way health services are delivered: fragmentation of services, insufficient access or continuity, inefficient coordination and poor communication related to inadequate information systems. In Quebec, to alleviate these problems, many changes are initiated by decision-makers at the local, regional or provincial levels.

Ongoing changes in the organisation of health services, including the creation of local health and social services networks, aim to improve integration of primary care services to increase access, continuity and quality of care, and to respond to the needs of all the population.

The “Équipe Santé des Populations et Services de Santé (ESPSS)”, a joint “Institut national de santé publique du Québec” and “direction de santé publique de Montréal” team, shares the responsibility of public health in being accountable for the health status of the population. In this context, ESPSS is getting ready to answer the following question: Will the changes to the organisation of primary care services influence the health status of the population?

To answer this question and inform decision-makers, many research approaches and sources of information need to be used. The interpretative monitoring plan is one of these approaches. The following document describes its content and the steps taken to put it together.



## Executive Summary

Health services in general and primary care services in particular are experiencing numerous problems, i.e. shortcomings from the standpoint of accessibility, continuity of care, patient management and the coordination of various interveners. Various transformations of primary care services are planned or even under way, e.g. family medicine groups, local service networks or integrated service networks to deal with specific health problems.

The Équipe Santé des populations et services de santé (ESPSS), which is attached to the Institut national de santé publique (INSPQ) and the Direction de santé publique de Montréal (DSP), has set up a program to monitor and assess the reorganization of primary care services. This program seeks to ascertain the effect of such reorganization on Montrealers' health and well-being and to inform decision-makers<sup>1</sup> in the health care system. In conjunction with this program to assess and monitor the reorganization of health services, our field of interest centres on the health care system, more specifically on primary care services provided by physicians and nurses, where most of the problems pinpointed and the changes being contemplated are found. Below is an executive summary of a report outlining the monitoring plan adopted by the ESPSS. The full report (in French) is available on the DSP ([www.santepub-mtl.qc.ca](http://www.santepub-mtl.qc.ca)) and INSPQ ([www.inspq.qc.ca](http://www.inspq.qc.ca)) Web sites.

The interpretative monitoring plan is a component of the ESPSS follow-up program. This program's key objectives are to understand and measure the impact of the changes implemented or planned on the accessibility,<sup>2</sup> continuity,<sup>3</sup> comprehensiveness,<sup>4</sup> adequacy<sup>5</sup> and responsiveness<sup>6</sup> of primary care services and Montrealers' state of health and well-being.

Results from the interpretative monitoring, combined with those from research projects, will provide unique and relevant information for decision makers in the health care system concerning the contribution of primary care health services to the health status of Montrealers.

We call our monitoring interpretative since it involves a logical analysis of system transformations with the contribution of experts and key observers. Such an analysis identifies a priori links between system transformations and indicators, an approach used in evaluative research. Also, the interpretation of results call upon a systematic process of

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<sup>1</sup> Broadly speaking, this can include elected officials, planners, managers, health professionals and even patients. This monitoring plan targets the first four groups of decision-makers.

<sup>2</sup> The promptness of the primary care physician's visit and ease of access to specialized and diagnostic services (Lamarche *et al.*, 2003).

<sup>3</sup> The services are offered as a coherent series of events stemming from the patients' service needs and life settings (Lamarche *et al.*, 2003).

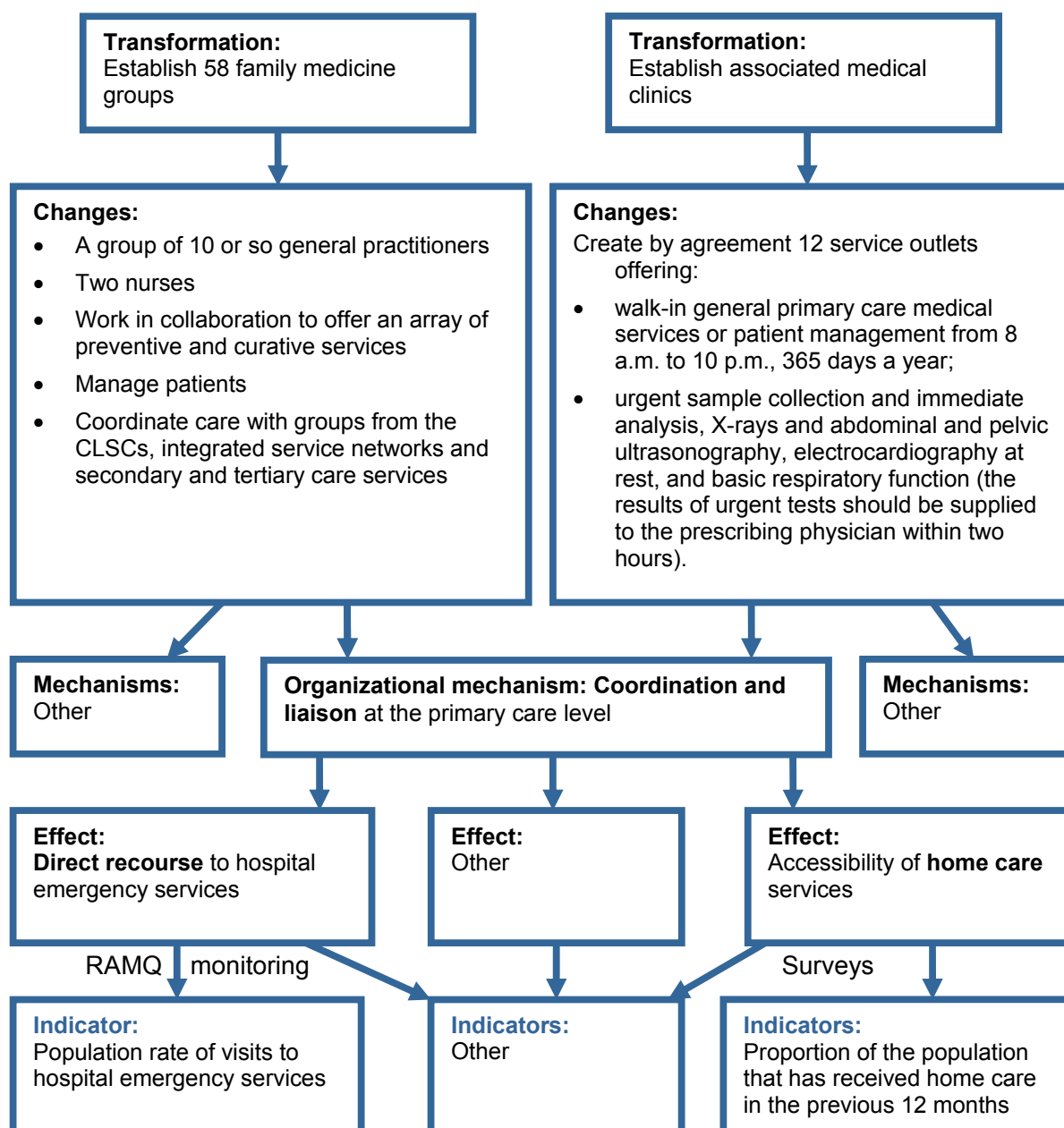
<sup>4</sup> The array of services required to satisfy most current health care needs in a community is offered on the spot or by referral (Starfield, 1998).

<sup>5</sup> The services offered, available or used reflect the population's health needs (Hurst, 2002).

<sup>6</sup> Consideration of and respect for the users' and service providers' expectations and preferences (Lamarche *et al.* 2003).

triangulation. In the following pages, when we mention monitoring, we refer to this interpretative monitoring.

**Chart 1: Illustration of the approach**



Specifically, the monitoring plan describes the approach that begins with a description of the transformations contemplated by managers in the organization of primary care services and ends with the plan to collect data and analyse targeted indicators. The approach adopted has

contributed beyond its main objective, which was to pinpoint the indicators relevant to monitoring. It also identifies relevant indicators that cannot be measured through monitoring but that will be measured in a population-based study conducted by the ESPSS.

Chart 1 very succinctly describes this approach. We first pinpointed 14 key transformations, e.g. family medicine groups and associated medical clinics,<sup>7</sup> then obtained a detailed description of all of the changes stemming from these transformations (second row) not only based on official documents but also in light of discussions with the key decision-makers involved in planning and implementing them. We then reviewed the literature and consulted health professionals active in the field in order to ascertain the impact of these changes. Since the 14 transformations were associated with numerous changes, which in turn engendered extensive impact, we noted that the link between the changes and impact often went through the same common organizational mechanisms. These organizational mechanisms, e.g. coordination and liaison at the primary care level, allowed us to simplify our approach. Once we had pinpointed the effects, e.g. direct recourse to hospital emergency services and the accessibility of home care, our research group converted them into indicators that enable us to monitor changes in them. To measure the effect of coordination and liaison on use of hospital emergency services, we plan to use the “Rate of visits to hospital emergency services in the population” indicator based on monitoring by means of RAMQ data banks. To measure the impact of coordination and liaison on the accessibility of home care services, we plan to use the “Proportion of the population that has received home care in the previous 12 months” indicator measured in population-based surveys.

Among the numerous indicators obtained, we selected those that are most relevant to the attainment of our objectives and those that could be generated with a satisfactory degree of validity. The relevant, valid indicators that can be measured without recourse to specific research projects, i.e. by means of Statistics Canada administrative data banks and official surveys, for example, are part of the monitoring plan. The others serve as a starting point to plan the research projects that will round out the follow-up program.

Table 1 provides six examples of indicators that reveal the impact on each of the parameters that warrants being documented. These examples are drawn from the 30 indicators selected through our selection process. We also adopted other indicators in order to describe the degree of implementation of the transformations and to provide contextual information that will help us to interpret the findings on impact. Details of all of the indicators considered in conjunction with this project, whether or not they were adopted, are presented at greater length in the full report.

While the examples of indicators provided in Table 1 represent only a tiny portion of the indicators used in this monitoring plan, they identify the resulting type of information, i.e. on

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<sup>7</sup> It should be noted that transformations pinpointed in respect of the Montréal area are similar to those adopted in other regions of Québec. It is therefore plausible that our monitoring plan might be of use to other regions interested in ascertaining the impact of the transformations on their territory. In addition, as transformations will not necessarily unfold as intended by decision makers, we consider them as moving targets and indicators should be adapted to them on an ongoing basis.

the accessibility, continuity, comprehensiveness, adequacy and responsiveness of primary care services and on public health.

**Table 1: Examples of indicators to ascertain the impact of transformations through monitoring according to the parameter in respect of which it provides information**











Indicator - Impact	Denominator
<b>Continuity</b>	
Proportion of population that claims to have a family physician	Population 18 years of age or over residing in Montréal
<b>Comprehensiveness</b>	
Rate of consultation of specialists by patients suffering from diabetes, heart failure, rheumatoid arthritis and asthma (patients in the 5-18 age group)	(1) population from Montréal; (2) population from each local network; (3) vulnerable patients registered with family medicine groups; (4) vulnerable patients not registered with family medicine groups
<b>Adequacy</b>	
Hospitalization rates for certain avoidable causes (heart failure, bacterial pneumonia, chronic obstructive lung disease, asthma, kidney/urinary infections, diabetes, dehydration, cellulitis, convulsions and angina)	(1) population from Montréal; (2) population from each local network; (3) vulnerable patients registered with family medicine groups; (4) vulnerable patients not registered with family medicine groups
<b>Accessibility</b>	
Proportion of patients hospitalized for chronic sentinel conditions who undergo a follow-up examination within 30 to 60 days of release from hospital	Patients suffering from chronic obstructive lung disease, heart failure, asthma and diabetes released from hospital during the reference period: (1) population from Montréal; (2) population from each local network; (3) vulnerable patients registered with family medicine groups; (4) vulnerable patients not registered with family medicine groups
<b>Responsiveness</b>	
Proportion of users who say they are dissatisfied with the quality of health care that their regular family physician provides	Individuals 15 years of age or over residing in Montréal who received care from their family physician during the 12 previous months
<b>Morbidity</b>	
Readmission rates to general and specialized hospital centres (GSHCs) within 42 days of giving birth (postpartum)	<i>Women admitted to GSHCs to give birth:</i> (1) population from Montréal; (2) population from each local network; (3) vulnerable patients registered with family medicine groups; (4) vulnerable patients not registered with family medicine groups

Decision-makers can rely on the production of information that describes changes in respect of crucial parameters to fully ascertain how primary care services contribute to the enhancement of the state of Montrealers' health.

Table 2 indicates the chronology of the key transformations contemplated or under way, the means envisaged for collecting data, and the frequency of production of information depending on the means considered.

The realization of this monitoring plan demands a firm, long-term commitment from the Direction de santé publique de Montréal to ensure the availability of staff, expertise and information (access to data banks). Such a long-term commitment is unusual in the health care network. In this monitoring plan, access and the processing of information are especially important since they are very complex: there are numerous sources of information managed by numerous interveners whose primary mission is not research or monitoring. Moreover, the type of information varies depending on the source and its content refers to individuals, above all when information from several sources is linked. In addition, permission to access personal information must be obtained from the Commission d'accès à l'information du Québec and exemplary security and confidentiality must be maintained when such information is processed. A number of the indicators in the monitoring plan were developed and validated by experts in the network and university researchers. To ensure that we benefit from this work we must ensure long-term collaboration with these experts and researchers. An important part of the information that is essential to a broad interpretation of the findings comes from decision-makers in the health care network, which implies the maintenance of ongoing ties with the network's managers.

**Table 2: Chronology of transformations and data collection**

Transformations	Local networks <sup>a</sup>									
										
Follow-up plan										
										
										
	2000				2003			2006		2009
Banks	X	X	X	X	X	X	X	X	X	X
CCHS <sup>8</sup>		X		X		X		X		
Omnibus <sup>9</sup>			X			X				X
DSP <sup>10</sup>						X		X		
Dissemination					 <sup>11</sup>		 <sup>12</sup>		 <sup>13</sup>	
<sup>a</sup> Local health and social services networks established by the MSSS. <sup>b</sup> Associated medical centres planned by the Agence de Montréal. <sup>c</sup> Integrated service network to treat patients with chronic obstructive lung disease. <sup>d</sup> Family medicine groups planned by the MSSS.  Monitoring plan.										

<sup>8</sup> Enquête sur la santé dans les collectivités canadiennes.

<sup>9</sup> Enquête Omnibus réalisée périodiquement par la Direction de santé publique de Montréal.

<sup>10</sup> Enquête réalisée par l'équipe SPSS spécifiquement pour la réalisation du plan de suivi.

<sup>11</sup> Court rapport portant sur un aspect spécifique du plan de monitoring.

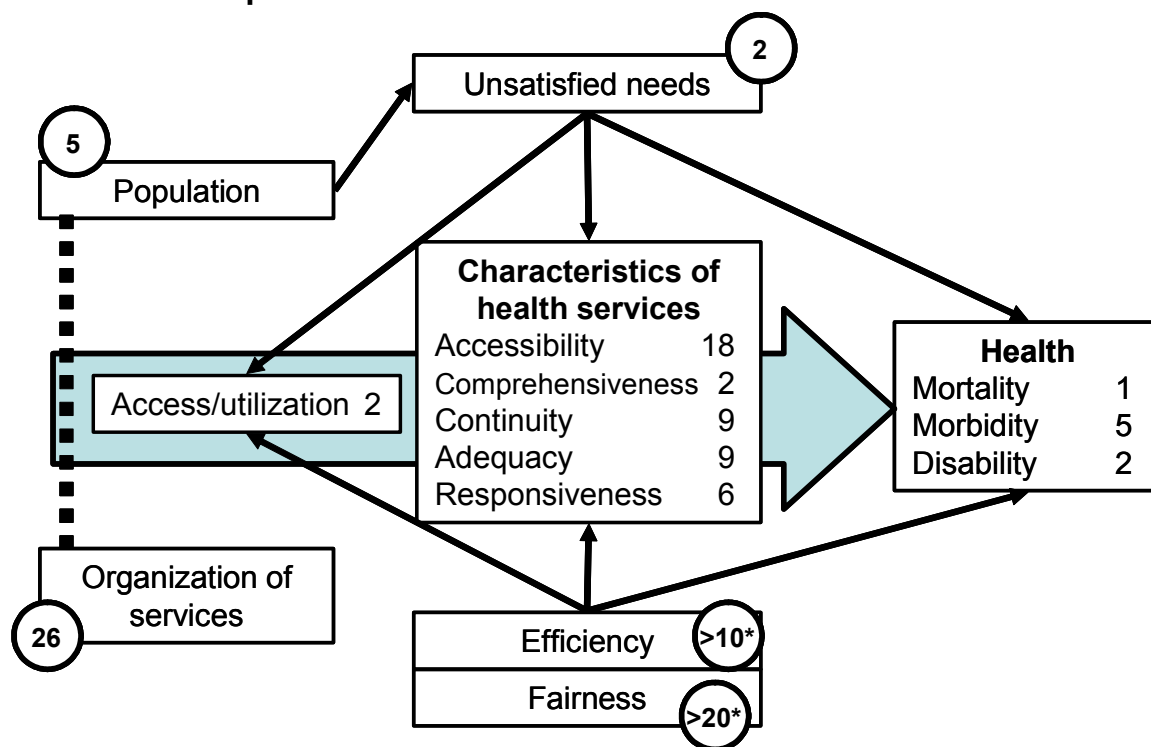
<sup>12</sup> Rapport intérimaire sur le monitoring.

<sup>13</sup> Rapport final sur le monitoring.

To the information produced by the monitoring plan will be added information stemming from the population-based study conducted by the ESPSS. Chart 2 broadly summarizes the number of indicators (numbers in bold face) that we have available to inform decision-makers with respect to various facets of the follow-up plan from the standpoint of the impact of the transformation of primary care services.

Moreover, to these sources of information will be added information from a research collective on the organization of primary care health services in Québec. This collective is calling upon researchers and decision-makers from all over Québec to broaden the interpretation of the findings from the overall research effort, whether or not in collaboration with the ESPSS.<sup>14</sup> The pooling of information obtained through monitoring and research makes it possible to collect all of the information available on the topic and to pass it on to decision-makers during periodic exchanges.

**Chart 2: Concepts and number of related indicators**



\* The sign « > » indicates a minimal number bearing in mind that efficiency and fairness are estimated in light of groups of several indicators.

<sup>14</sup> The ESPSS is already collaborating with researchers from McGill University, the Université de Montréal, the ministère de la Santé et des Services sociaux and research groups such as the Groupe Interuniversitaire de Recherche sur les Urgences (GIRU).