

Report of the Expert Panel for Patient-Based Funding

MONEY FOLLOWS THE PATIENT

The Implementation
of Patient-Based Funding
in the health sector

February 2014



Report of the Expert Panel for Patient-Based Funding

MONEY FOLLOWS THE PATIENT

The Implementation
of Patient-Based Funding
in the health sector

February 2014

Report of the Expert Panel for Patient-Based Funding

MONEY FOLLOWS THE PATIENT

The Implementation of Patient-Based Funding in the health sector

Legal deposit – Bibliothèque et Archives nationales du Québec

July 2014

ISBN 978-2-550-70935-0 (PDF)

© Gouvernement du Québec, 2014

LETTER OF TRANSMISSION FROM THE THREE MEMBERS OF THE EXPERT PANEL

Québec City, February 20, 2014

Mr. Réjean Hébert

Minister of Health and Social Services
Minister responsible for Seniors

Mr. Nicolas Marceau

Minister of Finance and the Economy
Chair of the Ministerial Committee on Prosperity
and Regional Development

Dear Ministers,

Having concluded its work, the Expert Panel for Patient-Based Funding is submitting its report to the government on the implementation of patient-based funding in the health sector, **Money follows the patient**. It is a unanimous report of the Expert Panel's deliberations in response to the stimulating mandate entrusted to it by the government.

The Expert Panel would like to acknowledge the quality of the support received from officials from the Ministère de la Santé et des Services sociaux, the Ministère des Finances et de l'Économie and the Ministère du Conseil exécutif.

Thanking you for the trust the Government of Québec and yourselves have placed in us, please accept the assurance of our highest consideration.



Wendy Thomson
Chair of the Expert Panel for Patient-Based Funding



Roger Paquet
Member of the Expert Panel for Patient-Based Funding



Pierre Shedleur
Member of the Expert Panel for Patient-Based Funding

MESSAGE FROM THE EXPERT PANEL FOR PATIENT-BASED FUNDING

By asking us to plan the gradual implementation of patient-based funding, the government entrusted our panel with a far-reaching mandate.

The funding method is indeed a powerful lever for bringing about change in a system as vast and complex as the health care system. For this reason, it must be seen as one of the components of a much broader strategy to reform the system.

❑ A mandate that is both strategic and operational

The mandate entrusted to us by the government was therefore strategic.

Patient-based funding is a powerful tool that can ultimately bring about significant changes in the health care system. It is based on a clear and explicit philosophy, namely, that priority be given to patient needs and choices. On a strategic level, patient-based funding forces us to develop a better understanding of the costs and outcomes of interventions.

The mandate was also operational.

The mandate comprised a component to be applied directly in the field, namely, the selection and implementation of concrete initiatives.

The Expert Panel therefore had to simultaneously reflect on the overall implications of patient-based funding and on its introduction in institutions for certain specific services.

❑ The proposal submitted to the government

*Having concluded its work, the Expert Panel proposes an **overall strategy** to the government that relies on patient-based funding to tackle the challenges Québec's health care system is facing, namely, access to care, expenditure pressures in a difficult budget context, uncertainties regarding quality and appropriateness of care and questions concerning the equitable distribution of funding. Many developed countries are already using this tool to address similar challenges.*

*On the operational level, the Expert Panel recommends moving beyond simple pilot projects and initiating the application of patient-based funding in **three priority areas**, namely, access to surgery, quality of care and chronic disease management.*

*To support these efforts, the Expert Panel has identified **clinical and financial information** requirements as well as the steps that need be taken to meet these requirements.*

❑ Two caveats

To avoid confusion and ambiguity, the Expert Panel would like to add a first caveat: patient-based funding must be clearly distinguished from a sensitive issue, namely, the role of the private sector. The implementation of patient-based funding is by no means a tool for privatizing health care.

A second caveat: nor is the implementation of patient-based funding intended to cut resources allocated to health. On the contrary, its objective is to enhance the value of resources dedicated to health while serving patients better.

❑ Reform the system by making the patient the focus of concern

The Expert Panel's reviews and recommendations are submitted to the government and to all citizens in the report and the three accompanying papers.

The Expert Panel is convinced that the time has come for Québec to make full use of patient-based funding to improve the health care system by making the patient the focus of concern.

Despite the increased resources dedicated to health and the progress achieved, the reforms implemented and expert recommendations, maintaining an accessible system that provides quality and efficient health care services requires constant efforts.

The Expert Panel is convinced that patient-based funding is the best tool the government can use to maintain and improve the quality of care provided to Québec's population and ensure the sustainability of the health care system, while at the same time managing public funds responsibly.

*With the report **Money follows the patient**, the Expert Panel proposes a pragmatic approach and three priority areas for action to the government in order to reform the health care system by making the patient the focus of concern.*

TABLE OF CONTENTS

Summary	1
Introduction	11
PART ONE: The challenges.....	17
1. Problems with accessibility	19
1.1 Wait time for a consultation with a physician.....	20
1.2 Wait time for an appointment with a specialist	21
2. Expenditure pressures	23
2.1 A larger share of the economy allocated to health	24
2.2 A growing share of the provincial budget	25
2.3 Underlying trends.....	28
3. Questions about quality of care	29
3.1 Safety of care.....	30
3.2 Appropriateness of care	31
3.3 The patient's experience of care	32
3.4 Quality of health care delivery	33
3.5 An evaluation of overall performance	34
4. Concerns about equity	37
PART TWO: Why patient-based funding?	45
1. What is patient-based funding?	47
1.1 A direct link between the patient, the care provided and funding.....	48
1.2 The objectives.....	53
2. What changes can patient-based funding bring to Québec's health care system?	55
2.1 The challenges facing the health care system: The very ones patient-based funding is designed to address	57
2.2 Patient-based funding is a powerful incentive to change	60
3. How should we go about implementing patient-based funding?	63
3.1 The conditions to be met	65
3.2 Risk management.....	71
3.3 The implementation strategy is key	72

PART THREE: The objective and the recommended approach 75

1.	The vision and the principles: Reform the health care system by making the patient the focus of concern	77
2.	The objective: Implement and extend the use of patient-based funding in Québec's health care system	79
3.	The recommended approach: A pragmatic approach, three priority areas	83
3.1	A pragmatic approach spanning several years	84
3.2	Three priority areas	86
4.	Better access to surgery: An expanded activity-based funding program	89
4.1	The starting point: The Access to Surgery Program	90
4.2	Access to surgery: An expanded activity-based funding program	97
5.	Quality of care: an approach to reward best practice	105
5.1	The Québec Colorectal Cancer Screening Program	106
5.2	The province-wide deployment of the Québec Colorectal Cancer Screening Program	111
5.3	A best practice funding program	113
6.	The management of people with chronic diseases: A funding method that promotes the integration of care	121
6.1	The challenge of chronic disease	122
6.2	Applying patient-based funding to chronic disease management	129

PART FOUR: The conditions to be met and how to manage the change 137

1.	Clinical and financial information	139
1.1	Information resources	140
1.2	Clinical and financial data	144
1.3	Using information to support the implementation and development of patient-based funding: determining case costs	149
2.	Tariff and budget rules	155
2.1	Tariff rules	156
2.2	Budget rules	160
3.	How to manage institutions: Bridges between the clinical and administrative sectors	163
3.1	The concept of medical accountability and organizational logic	164
3.2	Develop a widely shared vision	165
3.3	The practical implications	166

4.	How to manage the change	167
4.1	Clear objectives	168
4.2	A shared understanding of the objectives	169
4.3	A dedicated team.....	170
4.4	Information systems.....	171
4.5	A communication plan	172
5.	A timeline.....	173
PART FIVE: Recommendations		175
Appendices.....		181
Appendix I – The Expert Panel.....		183
Appendix II – The people met with and the reports commissioned		187

LIST OF GRAPHS

GRAPH 1	Wait time for a consultation with a physician following identification of a need in several jurisdictions, 2010	20
GRAPH 2	Average number of days waiting for an appointment with a specialist in several jurisdictions, 2010	21
GRAPH 3	Public health spending, 2011	24
GRAPH 4	Share of health and social services expenditures and other consolidated expenditures in total consolidated expenditures, 1983-1984 to 2013-2014	25
GRAPH 5	Readmission rate within 30 days after surgery in large community hospitals in Québec in 2010-2011	30
GRAPH 6	Overall opinion of the health care system by country and province, 2013	32
GRAPH 7	Changes in average wait times by specialty between between 2008-2009 and 2011-2012	90
GRAPH 8	Changes in average length of stay by specialty between 2002-2003 and 2010-2011	91
GRAPH 9	Changes in the number of patients waiting more than one year between 2008-2009 and 2012-2013	92
GRAPH 10	Proportion of patients waiting more than six months for hip or knee replacement surgery	93
GRAPH 11	Changes in volumes of colonoscopies between 2009-2010 and 2012-2013	108
GRAPH 12	Changes in wait times for a colonoscopy between 2010-2011 and 2012-2013	109

LIST OF TABLES

TABLE 1	Number of physicians per 100,000 population, 2011	22
TABLE 2	Average annual growth in health and social services expenditures by socioeconomic factor between 2003-2004 and 2013-2014.....	28
TABLE 3	Health care system performance in Canada	34
TABLE 4	Overview of wait times for hip or knee replacement surgery.....	38
TABLE 5	Proportion of people with multiple chronic diseases by age group, in 2005, in Québec	122
TABLE 6	Recommendations from expert reports on information resources and management mechanisms and the findings of the Auditor General of Québec.....	141
TABLE 7	Advantages and disadvantages of using types of costs as a basis for setting tariffs	157

LIST OF ILLUSTRATIONS

ILLUSTRATION 1	Timeline for the implementation of patient-based funding 2014-2018	9
ILLUSTRATION 2	Changes in patient-based funding models for an episode of care	49
ILLUSTRATION 3	Summary of the gradual implementation of the new Access to Surgery Program (ASP+)	101
ILLUSTRATION 4	Summary of the proposal for colonoscopy	112
ILLUSTRATION 5	Summary of the recommended approach: a best practice funding program	117
ILLUSTRATION 6	Five-year work plan for establishing consortia for the treatment and support of people with multiple chronic diseases	132
ILLUSTRATION 7	Case costing	149
ILLUSTRATION 8	Timeline for the implementation of patient-based funding 2014-2018	173

SUMMARY

The Expert Panel for Patient-Based Funding, chaired by Wendy Thomson and composed of Roger Paquet and Pierre Shedleur, was created in March 2012 to make recommendations to the government for the implementation of patient-based funding in the health and social services sector. This mandate was confirmed and clarified by the newly elected government in fall 2012.

In the report **Money follows the patient**, the Expert Panel describes the work it carried out to fulfill its mandate. The Expert Panel presents its conclusions and makes 15 recommendations to the government. The report is accompanied by three technical papers in which the Panel elaborates on the more operational dimension of its work. The Expert Panel also makes a number of additional recommendations in these papers.

❑ What is patient-based funding?

In its report, the Expert Panel explains what differentiates and characterizes patient-based funding compared with other resource allocation methods in the health care system.

■ A direct link between the patient, the care provided and funding

Patient-based funding is a method of allocating resources that directly links the patient, the care provided and funding.

Resources are allocated based on the type and volume of services provided, adjusted to take into account the complexity of care, the patient's health condition and characteristics such as age and gender.

With a patient-based funding system, the aim is for **the money to follow the patient**. Patient-based funding means that institutions receive funding on the basis of the tariff set for the services they provide to patients.

■ A family of resource allocation methods

The term “patient-based funding” refers to a set of resource allocation methods that share a common underlying philosophy.

- Activity-based funding involves allocating resources to institutions based on the volume of services provided.
- Performance-based funding goes one step further than activity-based funding by linking funding to the achievement of specific outcomes.
- Best practice funding is another type of patient-based funding where the emphasis is on adherence to a clinical procedure – a care protocol and health outcome – that is recognized to deliver quality and efficiency.

In all three cases, funding may apply to different durations of care – an intervention, a longer episode of care or a complete care pathway.

■ One central idea

In all cases, patient-based funding involves introducing new methods of paying for services compared with the traditional allocation system.

- In the traditional system, resources are allocated on a global and historical basis. Managers must provide care while remaining within available budgets. This system often means that patients have to wait to obtain the desired service. In this system, patients are a cost. To stay within available budgets, the system must delay or restrict the delivery of services to patients.
- In patient-based funding, clinical and administrative sectors rely on information regarding the services provided to patients to achieve outcomes that justify their funding. The outcomes achieved allow them to receive the resources they need to fund them. The priority shifts from controlling inputs and processes to responding to financial incentives that reward and closely monitor outcomes. Patient-based funding makes it more worthwhile for institutions to invest in quality of care and patient safety in order to provide appropriate care.

In patient-based funding, as in the traditional system, resources are allocated within a closed budget.

As its name suggests, patient-based funding is largely shaped by a philosophy in which patient choice influences health care delivery and the allocation of resources.

Patient-based funding has been introduced in most developed countries. The Expert Panel focused on six jurisdictions with health care systems similar to Québec's in order to learn from their experience, namely, Alberta, England, Australia, British Columbia, France and Ontario.

□ The challenges

The Expert Panel recognizes the challenges facing Québec's health care system – challenges that give full meaning to the initiative to implement patient-based funding.

- The health care system is facing problems with accessibility that the various reforms of recent years have not succeeded in resolving fully.
- The health care system is also a repeated source of major pressure on public expenditure, as it continues to increase both as a proportion of spending on all government-funded programs, and relative to the size of Québec's economy as a whole.
- In Québec, as in all developed countries, there is growing concern about quality of care.
- Equity in health care delivery also raises questions.

In its report, the Expert Panel provides an overview of the reforms and improvements made to Québec's health care system since 1960. Since it was established in 1971, Québec's health care system has undergone many changes to the benefit of patients. The answers to today's challenges must have the same purpose in mind.

The fundamental objective remains the same: the health care system must provide citizens with quality care at the best possible cost. Achieving this objective is key to the sustainability of the system.

The Expert Panel believes this process of adaptation must continue in order to address the current challenges facing the system and not wait until we find ourselves in a crisis situation.

❑ **The objective and the recommended approach**

The Expert Panel is convinced of the value of extending the use of patient-based funding in the health care system.

In the report, the Expert Panel explains the changes that this new funding method can bring about in the health care system as well as the conditions that will have to be met and the risks that will have to be managed when it is implemented.

■ **The vision**

Québec's health care system has evolved in recent years. This must continue: patient-based funding is a lever and an agent of change, a tool in an ongoing process of reform designed to ensure the system continues to improve and respond to new circumstances.

The system's sustainability depends on the quality of care and the delivery of efficient, effective services. The patient is the focus of the system's concern and participates in the system. Patient-based funding is a lever that is part of an overall strategy where quality of care is of key importance.

The objective is to ensure that Québec's health care system is able to tackle the main challenges it is facing, namely:

- accessible care;
- cost control;
- quality of care;
- compliance with equity criteria.

When making the necessary changes, the patient must be the focus of concern.

Overall, the implementation of patient-based funding is part of a vision of a health care system where changes are determined by patient needs and technological capabilities. A health care system that is oriented towards the volume and quality of services is a system that adapts to needs more easily, that is able to pursue innovation and embrace change.

Such a health care system is driven by clearly defined objectives and incentives and focuses on performance rather than on controlling inputs. This type of system would make the patient and his care the focus of concern.

■ The objective

The implementation of patient-based funding will bring about a major change in how the system is managed. It will introduce a new management culture and practice in Québec's health care system. Controlling inputs will be replaced with service- and results-based management. Patient-based funding will also provide greater insight into costs.

The plan for the sector involves:

- shifting from controlling means to controlling results;
- adapting management and information tools to do so.

Patient-based funding will allow decisions to be based on:

- better information on the use of resources allocated to health care;
- a better estimate of the value of the care provided to patients.

The new method of allocating resources will give health care professionals new opportunities to undertake initiatives in order to provide patients with the right services. It will bring about a new management culture built on a funding method that is based on patient services and outcomes rather than on global budgets.

The Expert Panel recommends that the government make a major change to resource allocation methods in Québec's health care system by extending the use of patient-based funding.

The Expert Panel believes that patient-based funding must be used as a lever in a process of reform to:

- increase access to care;
- improve cost control;
- enhance quality of care;
- respect principles of equity.

The implementation and expansion of patient-based funding in Québec's health care system are fully in keeping with the government's autonomy insurance project. The basic philosophy is the same. Autonomy insurance can therefore be considered a form of patient-based funding.

❑ **The recommended approach**

The implementation of patient-based funding must be part of an overall strategy which the Expert Panel considers key to the success of its recommendations.

■ **A pragmatic approach spanning several years**

The Expert Panel recommends that the government's strategy rely on a pragmatic approach spanning a period of three to five years.

We must start to implement the method even if all the conditions are not in place at the outset. Experiences in other health care systems as well as the opinions of experts and people consulted by the Expert Panel concur on this point.

The Expert Group proposes proceeding in stages, building on experiences already underway. A pragmatic approach, spanning several years, will allow initiatives already underway to be consolidated and next steps to be taken to put the necessary conditions in place for the future.

■ **Three priority areas**

As part of this pragmatic approach, the Expert Panel has identified three concrete areas where patient-based funding should be implemented as a priority. In all three cases, it involves going beyond pilot projects and starting to use patient-based funding to consolidate initiatives already underway or to meet growing needs in the future.

The three priority areas recommended by the Expert Panel are as follows:

- improve access to surgery through an expanded activity-based funding program;
- enhance quality of care by introducing best practice funding, starting with colonoscopy;
- manage patients with chronic diseases using a funding method that promotes the integration of services.

❑ **Access to surgery: an expanded activity-based funding program**

The Expert Panel proposes implementing patient-based funding in the surgical sector.

- The starting point is the existing Access to Surgery Program, which has allowed Québec to become familiar with patient-based funding methods.
- Building on its strengths, we must take the program one step further by implementing an expanded activity-based funding program in the surgical sector in order to improve performance.

The Access to Surgery Program, introduced in Québec in 2004-2005, is an activity-based funding program. It has achieved the objectives set out at the time of its implementation. However, it has been observed that the program has now reached certain limits.

The Expert Panel proposes expanding and integrating the existing Access to Surgery Program by applying patient-based funding to all surgeries in institutions that treat at least 1,000 weighted cases per year and introducing performance-related payments for the achievement of specific results.

The Expert Panel carried out a detailed, practical review of the steps to be taken to implement this proposal. The result of this review is presented in Paper 1, a companion document to the report. The main proposals that resulted from this review are presented in the report.

The Expert Panel makes recommendations regarding:

- the procedures covered;
- eligible institutions;
- the episode of care covered;
- the funding of surgeries;
- quality and access to care considerations;
- the development of clinical and financial information systems;
- the communication and collaboration strategy;
- monitoring and evaluation;
- risk management.

□ Quality of care: an approach to reward best practice

The Expert Panel proposes a second application of patient-based funding, focusing on quality of care.

The Québec Colorectal Cancer Screening Program already promotes best practices. Drawing on the Québec Colorectal Cancer Screening Program, the Expert Panel proposes extending the initiative already underway to the entire province of Québec and making it a funding approach that truly promotes best practices.

At the same time, the government would extend best practice funding to other priority clinical sectors.

The Expert Panel carried out a detailed review of the steps to be taken to implement this proposal. The result of this review is presented in Paper 2, a companion document to the report. The report provides a recapitulation of the characteristics of the pilot project as well as the main proposals that resulted from this review.

■ The province-wide deployment of the Québec Colorectal Cancer Screening Program

The Expert Panel makes recommendations regarding the province-wide deployment of the Québec Colorectal Cancer Screening Program, namely:

- upgrading;
- activity- and performance-based funding;
- best practice tariffs.

■ A best practice funding program

The Expert Panel recommends implementing a best practice funding program in priority clinical sectors and makes proposals regarding:

- the criteria for selecting clinical services;
- clinical leadership;
- a cost-benefit analysis;
- the process.

□ Chronic disease management: a funding method that promotes the integration of care

The Expert Panel proposes a third application of patient-based funding, namely, in the management of patients with multiple chronic diseases.

Chronic disease is a real challenge for the health care system. The treatment of chronic disease will be the source of significant clinical and financial pressure on the health care system. This pressure must be anticipated and far-reaching changes made to how patients with chronic diseases are treated.

The Expert Panel recommends that the government use patient-based funding to support and promote the integration of services for people with chronic diseases in order to expand community and home care services.

The Expert Panel commissioned a paper on the management and funding of care for people with chronic diseases. This paper was published at the same time as the report.

The Expert Panel carried out a practical review of the steps to be taken to apply patient-based funding to chronic disease management in order to promote the integration of services. The proposals that resulted from this review are presented in the report.

The Expert Panel makes recommendations regarding:

- the creation of the starting conditions;
- the formation of health care consortia;
- the development and introduction of financial incentives to promote integration;
- the adoption of a specific work plan.

□ **The conditions to be met and how to manage the change**

Along with the three priority areas for action, the Expert Panel recommends that the government undertake initiatives to create the necessary conditions and manage the change. More specifically, the Expert Panel reflected on the content of the multi-year strategy that it encourages the government to adopt regarding:

- clinical and financial information;
- tariff and budget rules;
- the bridges to be built between the clinical and administrative sectors in managing institutions;
- risk management;
- the timeline for implementing these various initiatives.

■ **Clinical and financial information**

The Expert Panel conducted a thorough review of the steps and initiatives to be undertaken to improve clinical and financial data. The result of this review is presented in Paper 3, a companion document to the report. The main proposals that resulted from this review are presented in the report.

The effort recommended with respect to clinical and financial information will serve to both implement patient-based funding and generate efficiency gains for the entire system, which will have an impact on quality of care and access to services.

The Expert Panel makes recommendations regarding:

- information resources;
- the actual clinical and financial data;
- how information should be used to support the implementation and development of patient-based funding, in particular to determine case costs.

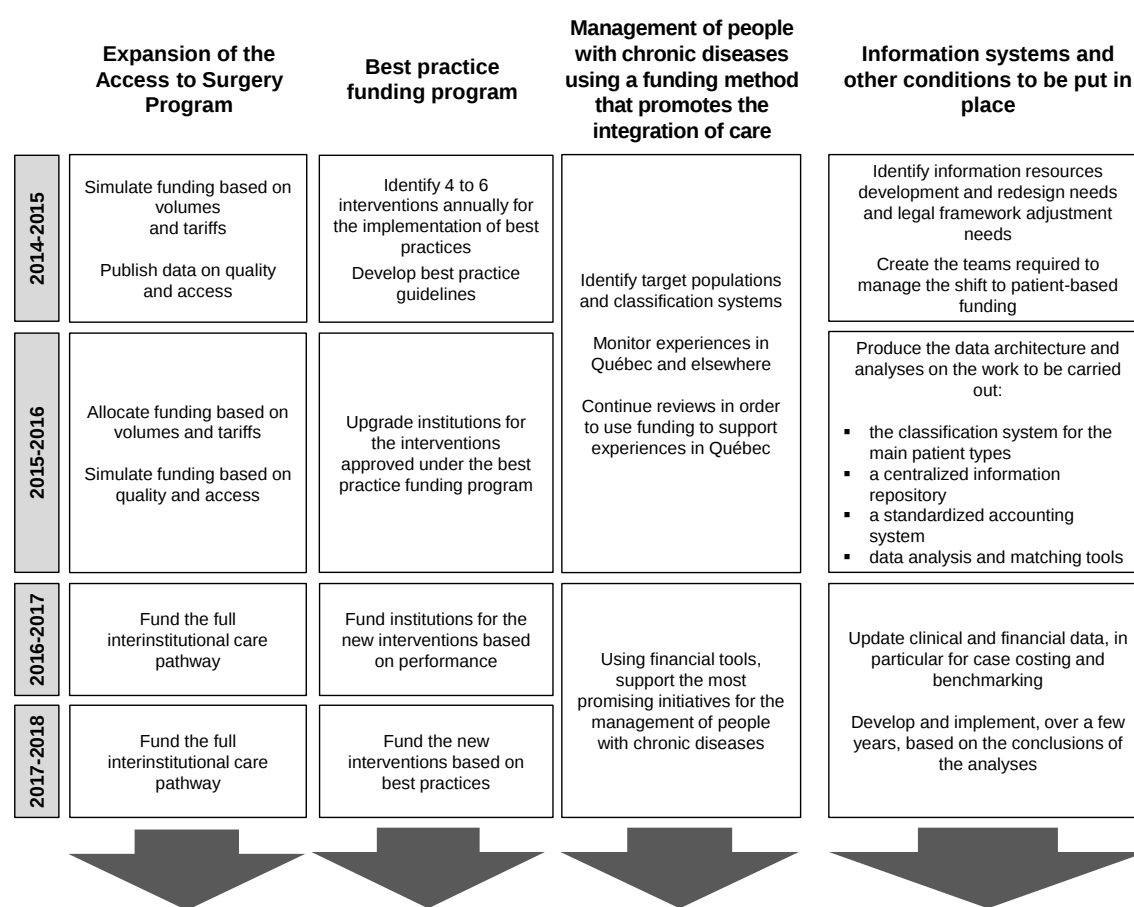
□ A timeline

At the end of its report, the Expert Panel proposes a timeline to the government that spans a four-year period with the implementation of patient-based funding starting in 2014-2015.

The objective of this timeline is to simultaneously undertake the initiatives in the three priority areas – namely, the expansion of the Access to Surgery Program, the implementation of a best practice funding program and the management of people with chronic diseases using a funding method that promotes the integration of care – and make the first investments in information systems and the other conditions to be met to ensure the successful implementation of the new method of resource allocation.

ILLUSTRATION 1

Timeline for the implementation of patient-based funding 2014-2018



INTRODUCTION

The creation of an Expert Panel to plan the gradual implementation of activity-based funding methods was announced in March 2012 as part of the 2012-2013 Budget Plan.¹ The Panel, chaired by Ms. Wendy Thomson and composed of Mr. Roger Paquet and Mr. Pierre Shedleur,² began its work on April 30, 2012.

In July 2012, the Expert Panel published an information document³ explaining the mandate it had been given, its main characteristics and the approach that would be adopted to fulfil it.

In fall 2012, the new government confirmed the importance of the Expert Panel's work. The newly elected government also clarified the objectives and the nature of the initiative.

The government's commitment to moving forward with a new method of funding services – and to mandating the Expert Panel to produce a report on the issue – was announced in the 2013-2014 Budget Plan.⁴ To reflect the adjustment of its mandate, the Expert Panel's name was changed.

□ The Expert Panel's mandate

Renamed the "Expert Panel for Patient-Based Funding", the Expert Panel was mandated to:

- Make recommendations to implement patient-based funding in order to improve the quality, accessibility and efficiency of health care services. The Expert Panel will study patient-based funding formulas that offer the greatest potential for transformation to effect the desired changes.
- Make recommendations in the following areas:
 - payment mechanisms to support the development of primary care, in particular its ability to improve the continuum of care;
 - how to improve knowledge of costs and outcomes;
 - how to improve the funding method for the Access to Surgery Program, in particular to give more consideration to ambulatory surgeries, the continuum of care and the quality of patient services.
- Identify concrete initiatives in the health and social services network where this funding method will be applied, based on clearly defined criteria.

¹ MINISTÈRE DES FINANCES ET DE L'ÉCONOMIE, *2012-2013 Budget Plan*, March 2012, page A.39.

² The biographies of the members of the Expert Panel as well as a list of the various resource people that supported the Panel in its work are provided in Appendix I.

³ Implementation of activity-based funding in the health and social services sector, Expert Panel on Activity-Based Funding, Gouvernement du Québec, July 2012.

⁴ MINISTÈRE DES FINANCES ET DE L'ÉCONOMIE, *2013-2014 Budget Plan*, November 2012, page A.53.

❑ The approach

In accordance with the mandate it was given by the government, the Expert Panel defined an approach comprising the following four phases:

- identify the changes the method can bring to Québec's health care system by reviewing practices in Québec and initiatives in other jurisdictions;
- define objectives to propose to the government;
- identify the conditions to be met;
- develop the approach considered the most appropriate.

❑ A five-part report

The final report is divided into five parts.

- In Part 1, the Expert Panel describes **the challenges** facing Québec's health care system – challenges to do with accessibility, expenditure pressures, quality of care and equity – in accordance with the very terms of the mandate entrusted to it by the government.
- In Part 2, the Expert Panel answers the question "**Why patient-based funding?**". It is essential to have a clear understanding of what patient-based funding is, identify the nature of the changes its implementation can bring to Québec's health care system and determine how to go about implementing it.
- In Part 3, the Expert Panel identifies **the objectives proposed** to the government and **the approach recommended** to achieve them which involves taking immediate action in three priority areas – access to surgery, quality of care and chronic disease management.
- In Part 4, the Expert Panel describes **the conditions to be met and how to manage the change**, focusing on clinical and financial information requirements.
- Lastly, in Part 5, the Expert Panel lists all the **recommendations** made to the government.

The report has two appendices:

- Appendix I presents the **Expert Panel** and its supporting team.
- Appendix II lists the **people met with** and the **reports commissioned** by the Expert Panel during its work.

At the same time as the report, three technical papers were published in which the Expert Panel describes the more operational dimension of its work and recommendations:

- Paper 1 – **Better access to surgery: an expanded activity-based funding program**
- Paper 2 – **Quality of care: an approach to reward best practice**
- Paper 3 – **Clinical and financial information: to better understand costs and services**

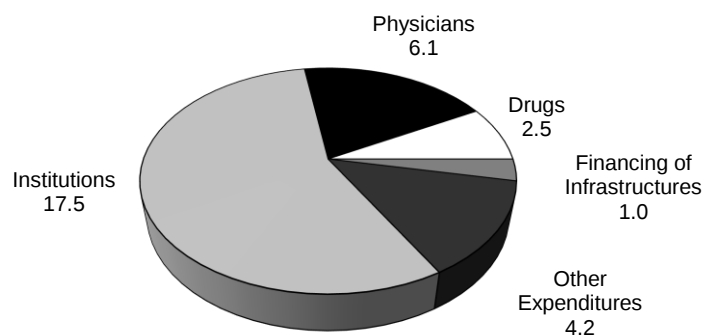
The allocation of resources in the health and social services system

In 2013-2014, the Government of Québec allocated a budget of 31.3 billion dollars to the health and social services system.¹

The breakdown of this total budget of 31.3 billion dollars in the system was as follows:

- health and social services institutions: 17.5 billion dollars;
- physician remuneration: 6.1 billion dollars;
- drugs: 2.5 billion dollars;
- financing of infrastructures: 1.0 billion dollars;
- other expenditures: 4.2 billion dollars, including central bodies (in particular the Ministère de la Santé et des Services sociaux, advisory agencies, the Office des personnes handicapées du Québec, the Public Curator), the remuneration of other health professionals and retirement plans.

Breakdown of the budget of the Ministère de la Santé et des Services sociaux, 2013-2014 (billions of dollars)



Sources: Conseil du trésor, *Expenditure Budget 2013-2014*.

1 Excluding 1.5 billion dollars from the Fonds de financement des établissements de santé et de services sociaux (FINESSS).

The allocation of resources in the health and social services system (cont.)

From this total budget, resources for health and social services institutions are distributed among nine service programs and two support programs.

Nine service programs

A service program is a program that comprises a set of integrated services designed for a specific patient type or population and targeting specific outcomes.

The nine service programs are:

- physical health;
- autonomy support for older adults;
- mental health;
- troubled youth;
- intellectual disability and pervasive developmental disorders;
- physical disability;
- public health;
- addiction;
- general services.

Two support programs

Support programs are programs that support service programs by providing services or infrastructures.

The two support programs are:

- administration and service support;
- building management.

Physical health is the main program concerned by the volume of services and allocation of resources. The objective of this program is to improve and restore health or to resolve specific problems (trauma, cancer, etc.). It alone accounts for nearly 35% of the budget allocated to health and social services institutions. Each program uses a different method for allocating resources.

The Expert Panel's recommendations specifically concern the physical health service program.

The allocation of resources in the health and social services system (cont.)

The allocation of resources to institutions: a two-step process

There is a separate funding method for institutions, the Régie de l'assurance maladie du Québec and the Public Prescription Drug Insurance Plan.

Resources are allocated to health and social services institutions (17.5 billion dollars in 2013-2014) in two steps that involve the three levels of the system – the Ministère de la Santé et des Services sociaux, the regions and the institutions.

The Ministère de la Santé et des Services sociaux uses a varying number of methods to allocate resources to the regions.

- Resources have traditionally been allocated on a global and historical basis, that is, based on the total global and historical budgets of the institutions in a given region.
- In 1994, the Ministère de la Santé et des Services sociaux introduced a population-based method of sharing resources between regions. This sharing method involves distributing resources between regions based on populations' socioeconomic characteristics. The population-based formula varies depending on the program; for example, for the physical health program, distribution between the regions takes into account elements that allow the inclusion of a concern for efficiency.
- In practice, resources are allocated between the regions based on a variable geometry, depending on the type of services funded.

Regional agencies allocate resources between the institutions in their respective regions, mainly using an historical approach.

Additional amounts

Additional amounts are allocated based on regional and provincial production objectives using an activity-based funding approach (funding based on additional surgeries compared with the number of surgeries performed in 2002-2003).

Funding for family medicine groups is allocated partly under a capitation arrangement and is based on registration – allocation on a contractual basis based on the number of people registered.

PART ONE: THE CHALLENGES

First, the Expert Panel describes the challenges facing Québec's health care system – challenges that give full meaning to the initiative to implement patient-based funding.

❑ Four major concerns

These challenges are clearly identified in the mandate entrusted to the Expert Panel by the government. They can be grouped around four major concerns, shared by those responsible for the health care system and all citizens:

- The health care system is facing problems with accessibility that the various reforms of recent years have not succeeded in resolving fully.
- The health care system is also a repeated source of major pressure on public expenditure, as it continues to increase as a proportion of spending on all government-funded programs.
- In Québec, as in all developed countries, there is growing concern about quality of care.
- Equity in health care delivery also raises questions.

1. PROBLEMS WITH ACCESSIBILITY

Quebecers value their health care system and are satisfied with the services received when they are accessible. At the same time, they stress the difficulties they experience in obtaining these services due to problems with accessibility.

In practice, problems with accessibility lead to phenomena that are well known in Québec, namely, surgery wait lists, overcrowded emergency rooms and an inability to respond to newly emerging health problems, including pervasive developmental disorders such as autism.

❑ Primary care

Some of these problems specifically concern primary care, with people having trouble finding a family physician, either in a private office or a family medicine group, which contributes to overcrowding in hospital emergency rooms.

According to data published by the Institut de la statistique du Québec in 2013, 21% of people in Québec aged 15 years and over did not have a family physician in 2010-2011. More specifically, 13% of people aged 15 years and over said they needed a family physician and did not have one, that is, around 870,000 people, while 8% did not feel they needed one.⁵

This proportion varies widely between regions. According to the same data, in 2010-2011, the percentage of people aged 15 years and over who said they needed a family physician and did not have one ranged from 4.2% in the Chaudière-Appalaches region to 19.9% in the Montreal region.⁶

While considerable progress has been made in recent years, difficulties remain. These problems with accessibility specifically concern the continuum of care: the patient does not have access to all the episodes of care of a whole pathway.

❑ Two illustrations of problems with accessibility

Using data from the Ministère de la Santé et des Services sociaux, we can illustrate the accessibility problems currently facing patients in Québec in two ways:

- Quebecers wait longer to see a physician than patients in other jurisdictions;
- wait times to see a specialist are also longer in Québec than in other developed countries.

⁵ INSTITUT DE LA STATISTIQUE DU QUÉBEC, *Enquête québécoise sur l'expérience de soins 2010-2011, Le médecin de famille et l'endroit habituel de soins: regard sur l'expérience vécue par les Québécois*, Volume 2, 2013.

⁶ Ibid.

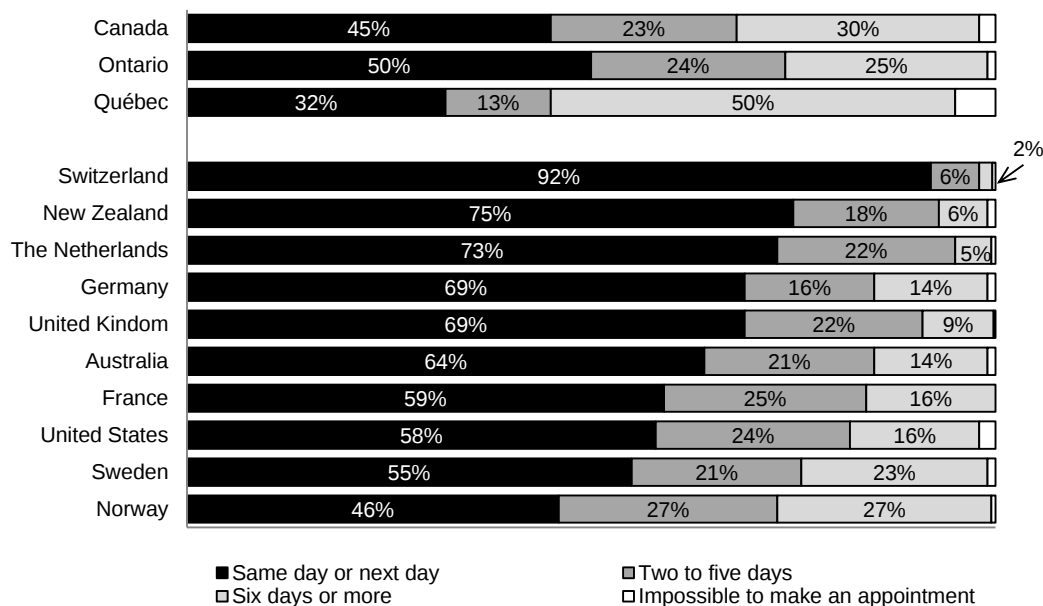
1.1 Wait time for a consultation with a physician

Among developed countries, Québec is one of the places where wait times to consult a physician are the longest.

The data shows that 50% of Quebecers wait six days or more to consult a physician, compared with 30% for Canada as a whole. By comparison, this proportion is 16% in the United States and France and less than 2% in Switzerland.

GRAPH 1

Wait time for a consultation with a physician following identification of a need in several jurisdictions, 2010
(as a percentage)



Source: Le Commissaire à la santé et au bien-être, *L'expérience de soins de la population: le Québec comparé. Résultats de l'enquête internationale du Commonwealth Fund 2010 auprès de la population de 18 ans et plus*, 145 p., May 5, 2011, [\[http://www.csbe.gouv.qc.ca/fileadmin/www/2010/CWF/csbe_CWF2010.pdf\]](http://www.csbe.gouv.qc.ca/fileadmin/www/2010/CWF/csbe_CWF2010.pdf).

1.2 Wait time for an appointment with a specialist

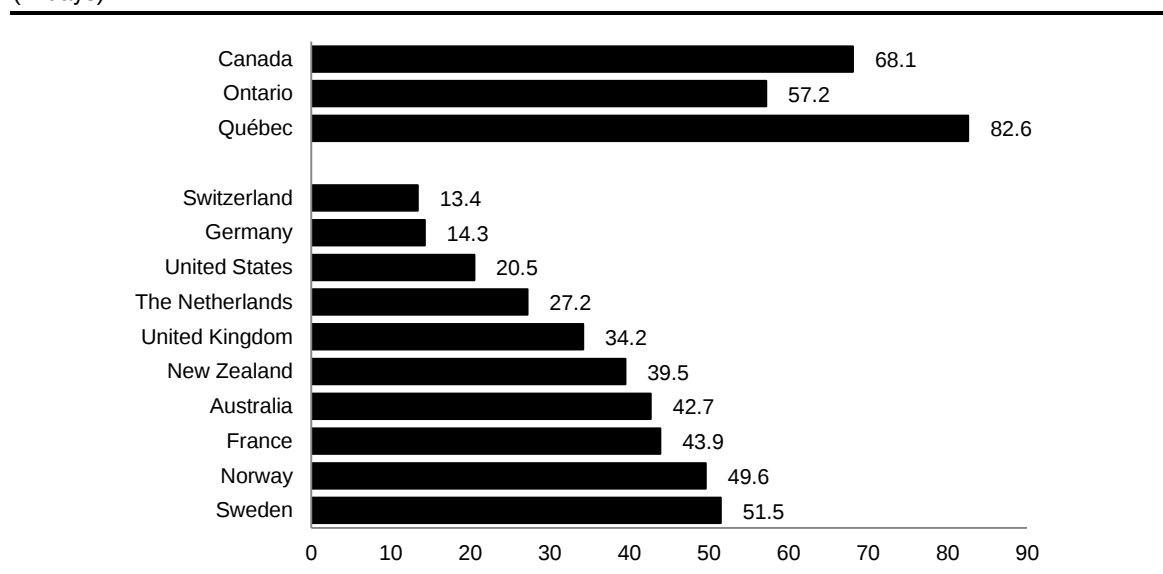
Québec is also one of the places where wait times to consult a specialist are the longest.

The data shows that Quebecers wait an average of 82.6 days to consult a specialist, compared with 68.1 days for Canada as a whole. By comparison, this wait time is 13.4 days in Switzerland, 14.3 days in Germany and 43.9 days in France.

In Québec, progress has been made with respect to access to surgery under the Access to Surgery Program.⁷ However, there is room for further improvement.

GRAPH 2

Average number of days waiting for an appointment with a specialist in several jurisdictions, 2010 (in days)



Source: Le Commissaire à la santé et au bien-être, *L'expérience de soins de la population: le Québec comparé. Résultats de l'enquête internationale du Commonwealth Fund 2010 auprès de la population de 18 ans et plus*, 145 p., May 5, 2011, http://www.csbe.gouv.qc.ca/fileadmin/www/2010/CWF/csbe_CWF2010.pdf.

⁷ See below, page 90, as well as Paper 1, *Better access to surgery: an expanded activity-based funding program*.

❑ Number of physicians

For Canadian jurisdictions, longer wait times are not due to the number of physicians.

In Canada, Québec is one of the jurisdictions with the highest number of professionally active physicians per capita. This is true of both specialist physicians and family physicians.

- In 2011, there were 117 specialist physicians per 100,000 population in Québec, compared with 99 in Ontario and 103 in Canada as a whole.
- Also in 2011, there were 114 family physicians per 100,000 population in Québec, compared with 95 in Ontario and 106 in Canada as a whole.

TABLE 1

Number of physicians per 100,000 population, 2011 (in number)

	Specialist physicians	Family physicians	Total
Nova Scotia	119	122	241
Newfoundland and Labrador	108	123	231
Québec	117	114	231
Alberta	106	111	217
New Brunswick	100	113	213
British Columbia	95	117	212
Canada	103	106	209
Yukon	32	169	201
Manitoba	93	105	198
Ontario	99	95	194
Saskatchewan	80	100	180
Prince Edward Island	80	97	177

Source: Canadian Institute for Health Information, *Supply, Distribution and Migration of Canadian Physicians*, 2011.

2. EXPENDITURE PRESSURES

All the data confirm the pressure of health spending on Québec's economy and public finances.

- The share of health spending in GDP is higher in Québec than in most developed countries.
- The proportion of Québec's provincial budget allocated to health continues to grow.
- The rise in health spending can be explained by a number of measurable underlying trends.

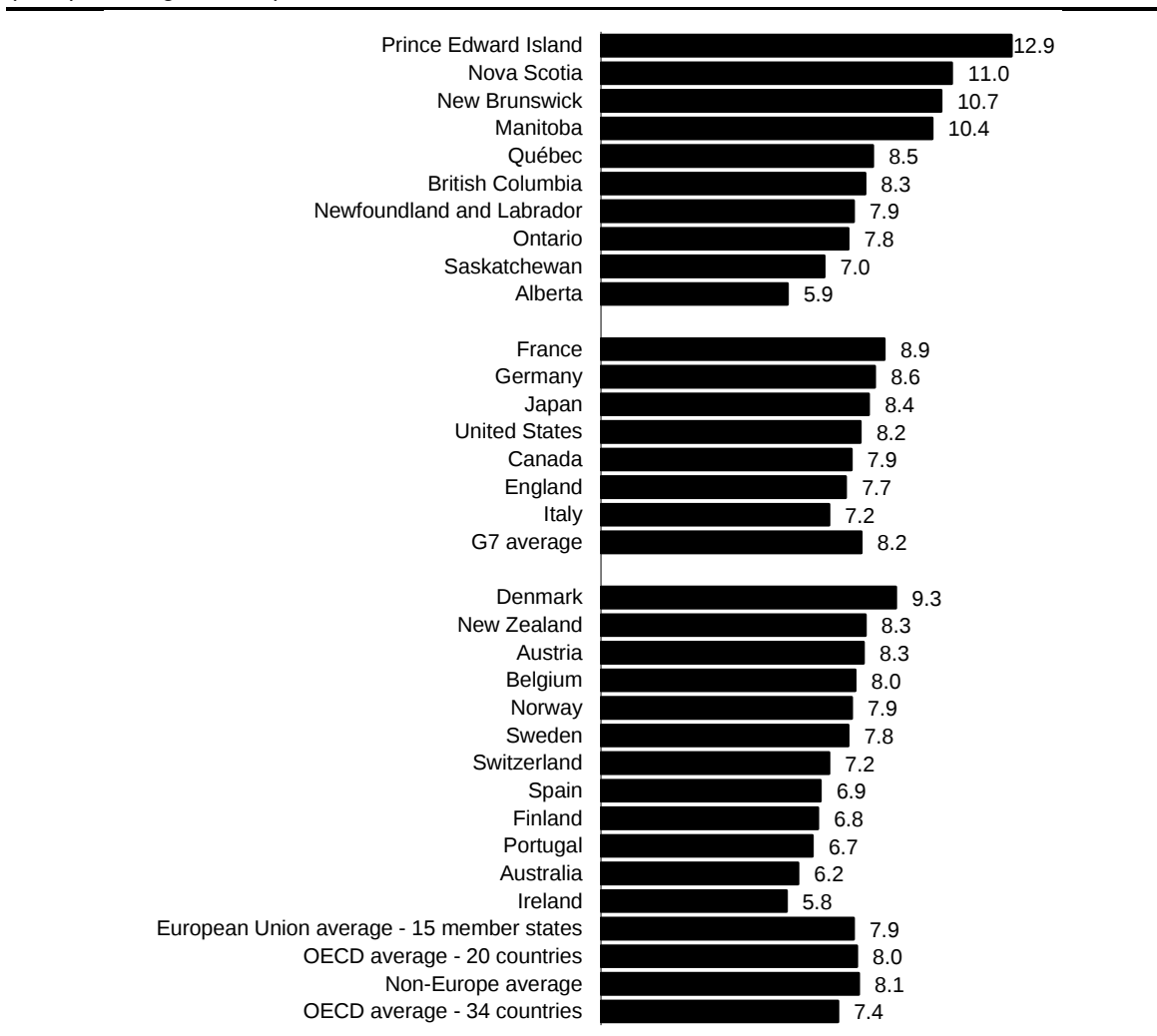
2.1 A larger share of the economy allocated to health

Québec allocates a larger share of its economy to the health sector (excluding social services) than other large Canadian provinces, G7 countries and other European countries.

In Québec, public health spending as a share of GDP is 8.5%. By comparison, this share is 7.8% in Ontario, 8.3% in British Columbia, 5.9% in Alberta and 8.2% on average in G7 countries.

GRAPH 3

Public health spending, 2011 (as a percentage of GDP)



Source: Ministère des Finances et de l'Économie du Québec, based on data from the Canadian Institute for Health Information and the OECD.

2.2 A growing share of the provincial budget

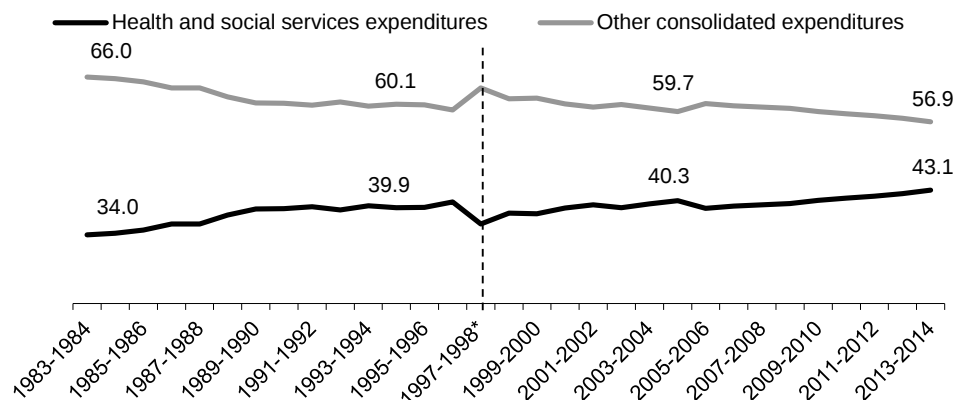
Health spending (including social services) represents a significant share of the Government of Québec's consolidated expenditures and this share continues to grow.

The share of health and social services expenditures in consolidated expenditures (excluding debt service) rose from 34% in 1983-1984 to 43% in 2013-2014. The budgets allocated to other programs (education, transportation, public safety, etc.) represented 66% of program spending in 1983-1984. This share decreased to 57% in 2013-2014.

This share remained relatively stable during the 1990s due to the efforts made to achieve budgetary balance. The achievement of budgetary balance in 1997-1998 and its maintenance until 2008-2009 allowed significant reinvestment in Québec's health care system.

GRAPH 4

Share of health and social services expenditures and other consolidated expenditures in total consolidated expenditures,⁽¹⁾ 1983-1984 to 2013-2014
(as a percentage)



Note: Consolidated expenditures of the health and social services mission. The data for 2013-2014 and the years prior to 2012-2013 were obtained by applying the proportion in 2012-2013 of consolidated expenditures on health and social services relative to health and social services program expenditures (including the Fund to Finance Health and Social Services Institutions [FINESSS]) to the health and social services program expenditures (including FINESSS) of the other years.

* Data for 1997-1998 onwards cannot be adjusted on the same basis as those shown due to a change in government accounting.

(1) Consolidated expenditures excluding debt service.

Sources: Ministère des Finances et de l'Économie du Québec, *Update on Québec's Economic and Financial Situation, Fall 2013*, *2013-2014 Budget Plan*, *2012-2013 Budget Plan*, *Public Accounts 2012-2013*. Expenditure budgets of the Government of Québec. Ministère de la Santé et des Services sociaux, *Health Accounts 2010-2011 to 2012-2013*.

This phenomenon is not unique to Québec. It is seen in all Canadian provinces. According to the 2013 report of the Parliamentary Budget Officer,⁸ the growth in health care spending is the main driver of rising costs for the provinces, territories and local and Aboriginal governments.

The health sector in Québec's economy

The growth in health spending is confirmed when health spending is seen in relation to gross domestic product – which eliminates any bias that could be caused by variations in program expenditures: health care is a source of real and growing pressure on Québec's economy.

In 2013, Québec's public and private health sector¹ (excluding social services) represented 12.2% of Québec's economy.

Out of total spending of 44.9 billion dollars, 71.3% (32.0 billion dollars) came from the public sector and 28.7% (12.9 billion dollars) from the private sector, that is, individuals and companies.

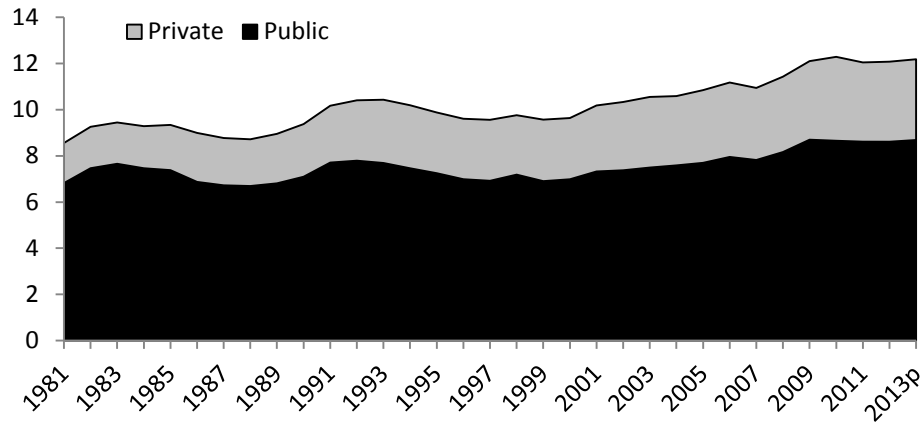
- Public sector spending consists mainly of government spending on hospitals, medical services provided by physicians, drugs, capital investment and health network administration.
- Private sector spending consists mainly of spending on dental services, optometry services and drugs (private plans, deductibles and co-insurance payments under the public plan).

⁸ PARLIAMENTARY BUDGET OFFICER, *Fiscal Sustainability Report 2013*, Ottawa, September 26, 2013.

The health sector in Québec's economy (cont.)

From the early 1980s until the early 2000s, the proportion of the health sector in the economy varied between around 8.5% and 10.5%. From the 2000s on, the weight of health care expenditures in the economy began to grow more rapidly.

Changes in public and private sector health care expenditures in Québec – 1981 to 2013 (as a percentage of GDP)



(1) Social services are not included in the health care expenditures shown above. The 2012 and 2013 data are forecasts.
Source: Canadian Institute for Health Information, *National Health Expenditure Trends, 1975 to 2013* (October 2013).

1. The term "public and private health sector" refers here to public and private health care expenditures compiled by the Canadian Institute for Health Information, while the terms "public health care system" and "health and social services expenditures" refer to institutions and health and social services programs funded and managed primarily by the Government of Québec.

The public expenditures compiled by the Canadian Institute for Health Information are around 2.3 billion dollars (2009-2010) less than the Government of Québec's health and social services expenditures. This is due to certain modifications made by the Canadian Institute for Health Information (CIHI), namely:

- the exclusion of around 3.3 billion dollars of health and social services budgetary expenditures considered social services by the Canadian Institute for Health Information;
- the inclusion of expenditures of around 1.0 billion dollars by other departments considered in its definitions to be health care expenditures (food inspection, compensation to municipalities in lieu of property taxes for the health care institutions on their territory, research funds, etc.).

2.3 Underlying trends

The growth in health spending can be explained by a certain number of underlying trends that affect society as a whole.

Between 2003-2004 and 2013-2014, nearly 75% of the growth in health spending was due to higher prices and population factors, namely, population growth and aging. Other causes of the growth in health spending include changes in medical practice (technologies and drugs) and new developments.

TABLE 2

Average annual growth in health and social services expenditures by socioeconomic factor between 2003-2004 and 2013-2014
(as a percentage)

Socioeconomic factors ⁽¹⁾	Average annual growth	Share of total growth
Population growth	0.8	15
Impact of population aging ⁽²⁾	1.3	23
Inflation ⁽³⁾	2.0	36
Changes in medical practice (technologies), new developments, etc.	1.5	27
TOTAL	5.6	100

(1) Health and social services expenditures comprise health and social services program expenditures and those of the Fund to Finance Health and Social Services Institutions.

(2) The impact of population aging was calculated by the Ministère des Finances et de l'Économie du Québec using demographic data from the Institut de la statistique du Québec and Statistics Canada as well as costs by age group compiled by the Canadian Institute for Health Information.

(3) Inflation is based on the price index for public utilities.

Source: Ministère des Finances et de l'Économie du Québec.

The changing age structure of the population causes the level of health spending to fluctuate. Except for the early years of life, the older we get, the more we rely on health care services. For example, for 2011, public health spending for people aged 45 to 49 years cost the Government of Québec an average of \$2,024, compared with \$15,270 for those aged 80 to 84 years.

In the years ahead, population growth and aging, as well as changes in medical practice and new technologies, will continue to exert pressure on health spending, since growth in health spending exceeds the rate of growth of the economy and government revenues.

3. QUESTIONS ABOUT QUALITY OF CARE

The sustainability of health care systems is not only a financial issue. In Québec, as in all developed countries, there are growing concerns about quality of care.

Quality of care is evaluated to determine the impact of care on patient health in order to verify whether or not the care provided has indeed improved patient health. A high-performing health care system is, first of all, a system that produces quality health care services. Quality of care is therefore vital to the system's sustainability.

The Expert Panel has every reason to believe that the care provided by Québec's health care system is good quality care. However, we must go further and ask ourselves if it could be better. A high-performing health care system is, in fact, a system that provides quality care in the broadest sense of the word, namely, the right service, at the right place and at the right time. Non-quality in the health sector is a topic of constant concern, but could be explored further.

❑ A number of components

When evaluating quality of care, a number of components should be taken into account:

- safety of care, that is, the prevention of complications associated with care or the environment;
- appropriateness of care, that is, the delivery of care based on best practices recognized as beneficial to patients;
- the patient's experience of care;
- quality of delivery, that is, the efficient delivery of care by providers.

The system's overall performance can be evaluated by taking all these components into account.

3.1 Safety of care

Safety of care can be evaluated based on readmission rates. Readmission rates are an internationally used standardized indicator of quality of care.

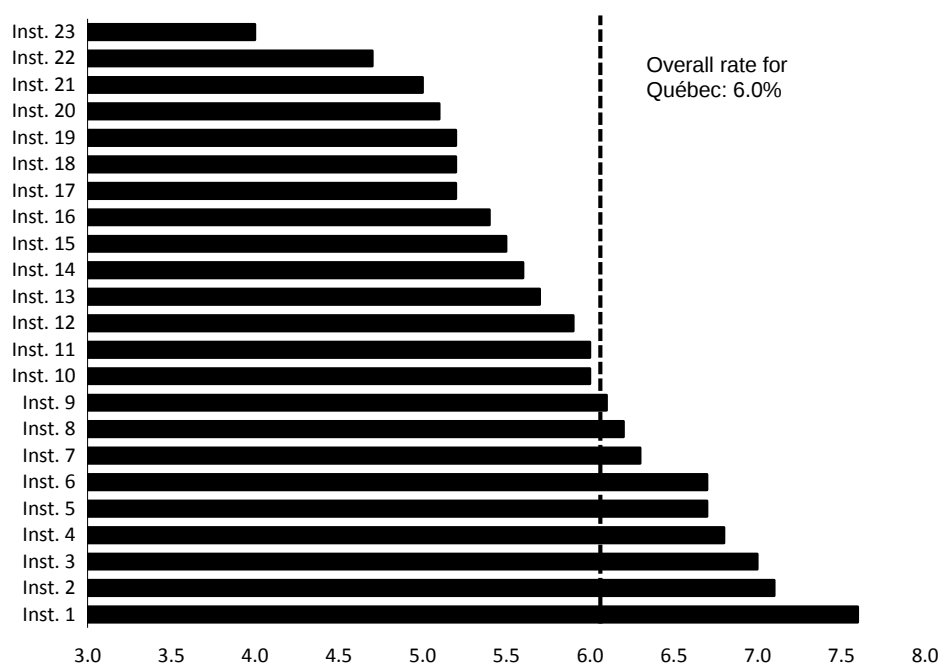
For the Access to Surgery Program, the data collected indicate that readmission rates after 30 days vary widely between hospitals.

— In 2010-2011, the readmission rate within 30 days after surgery ranged from 4.0% to 7.6% in large community hospitals.

The average rate was 6.0%. Some institutions performed well above average, while others were clearly below this result.

GRAPH 5

Readmission rate within 30 days after surgery in large community hospitals⁽¹⁾ in Québec in 2010-2011⁽²⁾
(as a percentage)



Note: To make comparisons easier, the indicator used is a "risk-adjusted" rate, i.e., the results were estimated taking patient characteristics (sex, age and relevant comorbidities) into account.

(1) Large community hospitals are hospitals that meet two of the following three criteria: (1) More than 8,000 inpatients (2) More than 10,000 weighted cases (3) More than 50,000 inpatient days. University hospitals excluded.

(2) The 2010-2011 period was selected due to the availability of data.

Source: Ministère de la Santé et des Services sociaux.

3.2 Appropriateness of care

Appropriateness is an important dimension of quality of care.

Evaluating appropriateness of care means asking very practical questions:

- Is the intervention evidence based? The intervention should be based on the latest knowledge of the most effective treatment for the patient's specific situation.
- Is the intervention clinically appropriate in terms of type, frequency, scope, site and duration? Can it be considered effective for the patient's disease?

When discussing appropriateness of care, an issue that is often raised is where the patient is treated. Is it appropriate to treat the patient in hospital or would another setting be more suitable? Indeed, too often patients receive services in hospital they could receive more appropriately – and at a lower cost – in another facility or at home, with the latter usually being the option the patient prefers.

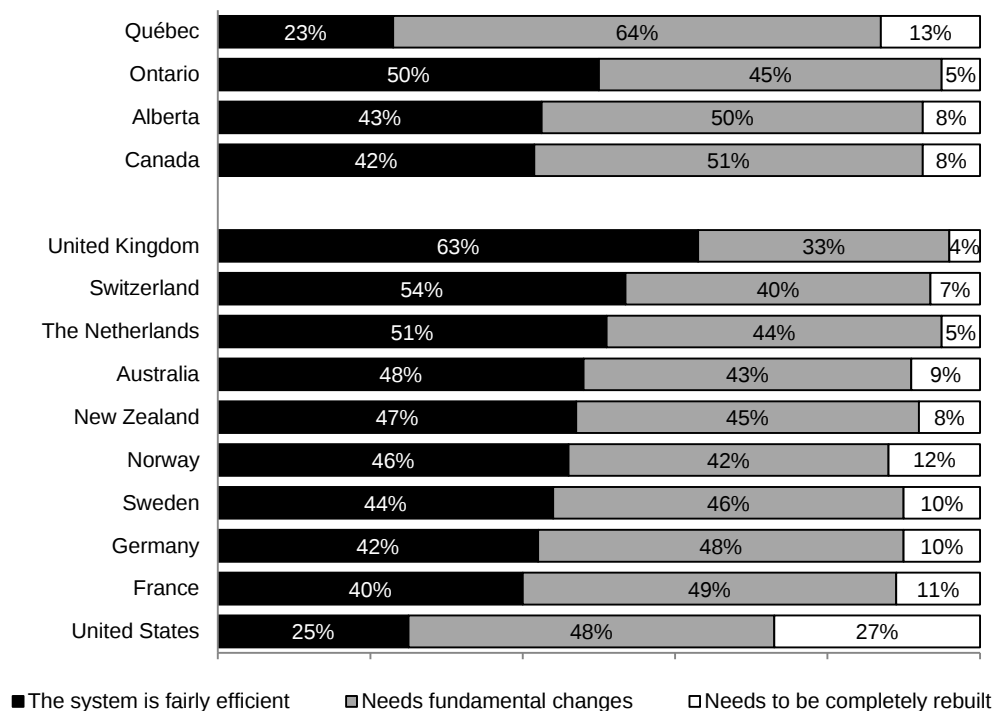
3.3 The patient's experience of care

Another important dimension of quality of care concerns the patient's experience of care.

Quebecers do not have a good opinion of their health care system's efficiency. In Québec, only 23% of respondents believe the health care system is fairly efficient. This is one of the worst results of all countries studied. In Canada, this percentage is 42%, while in the Netherlands, Switzerland and the United Kingdom, it is over 50%.

GRAPH 6

Overall opinion of the health care system by country and province, 2013 (as a percentage)



Source: Le Commissaire à la santé et au bien-être, *Perceptions et expériences de soins de la population: le Québec comparé. Résultats de l'enquête internationale du Commonwealth Fund*, 2013.

3.4 Quality of health care delivery

Quality of health care delivery is evaluated based on the cost of non-quality.

The Québec Medical Association estimated the total costs associated with the non-quality of health care delivery in Québec and the proportion of these costs relative to total health spending.⁹ According to these estimates, the cost of non-quality of care would amount to between 4.7 and 11.7 billion dollars, which represents 18% and 37% of total health spending respectively.

According to a Québec study conducted in 2013,¹⁰ the cost of unplanned readmissions within 30 days after discharge represents more than 15% of institutions' annual costs.

A report published by the Commissaire à la santé et au bien-être in 2013 indicates that more than half of primary care physicians in Québec (57%) believe that the quality of medical care has declined in the last three years.¹¹

⁹ QUÉBEC MEDICAL ASSOCIATION, *Optimisation de la pratique clinique*, April 8, 2013.

¹⁰ MÉDIAMED TECHNOLOGIES - *Projet orange - Comparatifs des coûts par DRG et évaluation du NIRRU*, 2013.

¹¹ COMMISSAIRE À LA SANTÉ ET AU BIEN-ÊTRE, *Perception et expériences des médecins de première ligne: le Québec comparé. Résultats de l'enquête internationale sur les politiques de santé du Commonwealth Fund de 2012-2013*.

3.5 An evaluation of overall performance

Quality of care can therefore be assessed from various angles. We try to evaluate overall quality by examining the performance of the health care system as a whole.

In May 2013, the Conference Board published a report that presented interesting information on the subject.¹² In the report, Québec's health care system was awarded an overall grade of "C" for performance based on indicators that measure screening and prevention, accessibility, effectiveness, appropriateness, continuity, safety and patient centredness.

TABLE 3

Health care system performance in Canada

	B.C.	Alta.	Sask.	Man.	Ont.	Que.	N.B.	P.E.I.	N.S.	N.L.
System performance (47 indicators)	C	B	C	C	A	C	A	D	A	D
Screening and prevention (5 indicators)	D	B	B	A	A	D	A	D	A	D
Accessibility (16 indicators)	A	B	C	D	A	C	B	C	A	C
Effectiveness (8 indicators)	D	A	D	A	C	A	C	C	B	D
Appropriateness (4 indicators)	C	B	B	A	C	A	C	D	C	D
Continuity (7 indicators)	C	D	C	D	B	D	B	D	A	C
Patient centredness (4 indicators)	C	B	B	C	B	D	A	C	A	C
Safety (3 indicators)	C	C	A	C	B	—	A	A	D	C

Source: The Conference Board of Canada.

These findings are consistent with the conclusions of the Commissaire à la santé et au bien-être who indicates, moreover, that the performance of Québec's health and social services system is generally good, but that efforts can still be made to improve its effectiveness.¹³

¹² THE CONFERENCE BOARD OF CANADA, *Paving the Road to Higher Performance: Benchmarking Provincial Health care Systems*, May 2013.

¹³ COMMISSAIRE À LA SANTÉ ET AU BIEN-ÊTRE, *Perceptions et expériences de soins de la population: le Québec comparé. Résultats de l'enquête internationale sur les politiques de santé du Commonwealth Fund de 2013*, 2013.

❑ The Expert Panel's finding

The Expert Panel found that the number of quality, safety and appropriateness of care indicators is very limited in Québec due to the absence of an information and reporting system for these elements.

This shortcoming must be remedied and efforts to improve quality supported, in particular through professional orders and the Institut national d'excellence en santé et en services sociaux (INESSS) as well as the various certification processes. In this regard, the Expert Panel is pleased to note the preparation of a first ministerial policy on quality by the Ministère de la Santé et des Services sociaux.

The international ranking of Canada's health care system

The Commonwealth Fund's 2010 update of the international survey on health care system performance ranked the results of seven countries: Germany, England, Australia, Canada, the United States, New Zealand and the Netherlands.

In this ranking, several dimensions of health care system performance are evaluated:

- quality of care (appropriate care, safe care, coordinated care and patient-centred care);
- accessibility of care (cost-related problem and timeliness);
- efficiency, equity and quality of life of the population.

Canada ranks next to last for overall health care system performance. Canada ranks last for quality of care.

Overall ranking of health care systems by the Commonwealth Fund, 2010

	Australia	Canada	Germany	Netherlands	New Zealand	England	United States
Overall ranking (2010)	3	6	4	1	5	2	7
Quality care	4	7	5	2	1	3	6
Effective care	2	7	6	3	5	1	4
Safe care	6	5	3	1	4	2	7
Coordinated care	4	5	7	2	1	3	6
Patient-centred care	2	5	3	6	1	7	4
Access	7	5	3	1	4	2	7
Cost-related problem	6	4	4	2	5	1	7
Timeliness	6	7	2	1	3	4	5
Efficiency	2	6	5	3	4	1	7
Equity	4	5	3	1	6	2	7
Healthy, long, productive lives	1	2	3	4	5	6	7
Expenditures per capita, 2007	\$3,357	\$3,895	\$3,588	\$3,837 ⁽¹⁾	\$2,454	\$2,992	\$7,290

Note: Expenditures are shown in \$U.S. PPP (purchasing power parity).

(1) Calculated by the Commonwealth Fund.

Source: The Commonwealth Fund, *Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally*, 2010 Update, June 23, 2010, [Online], <http://www.commonwealthfund.org/Publications/Fund-Reports/2010/Jun/Mirror-Mirror-Update.aspx>.

4. CONCERNS ABOUT EQUITY

☐ A definition

According to the most widely used definition, health care is said to be equitable when it is based on clinical need, irrespective of personal characteristics such as age, gender, race, ethnicity, language, socioeconomic status or geographic location, such that health care contributes to reduced differences in health status and outcomes across various subgroups.

By this definition, Québec's health care system, like the systems of various other Canadian jurisdictions, is considered a model of equity.

☐ Equitable access

The difficulties noted in the health care system with respect to equity relate to variations in access times between regions in Québec.

Table 4 illustrates this type of equity problem for hip and knee surgery. An analysis of the situation on January 11, 2014 showed that the proportion of patients waiting more than six months for a hip or knee replacement ranges from 3% in the Saguenay–Lac-Saint-Jean region to 42% in the Capitale-Nationale region, with an average of 19% for Québec as a whole.

The average wait time for cases treated between April 1, 2013 and January 11, 2014 ranged from six weeks in the Gaspésie–Îles-de-la-Madeleine region to 30 weeks in the Abitibi-Témiscamingue region, with an average of 17 weeks for Québec as a whole.

Furthermore, access to surgery appears to vary within regions. For example, in Montreal, 413 (21%) of the 2,008 people on wait lists on January 11, 2014 had been waiting more than six months (26 weeks). Yet, since April 1, 2013, 4,190 people had been treated within an average of 15 weeks, and 85% of those within six months. These figures suggest that access to services favours more recent patients to the detriment of patients who have been waiting longer, for the same level of urgency.

TABLE 4

Overview of wait times for hip or knee replacement surgery
(in days)

	Cases treated between April 1, 2013 and January 11, 2014			Cases waiting on January 11, 2014		
	Number of cases	Average wait time in weeks	% treated within 6 months	Number of cases	Number waiting more than 6 months	% waiting more than 6 months
Bas-Saint-Laurent	457	19	76	276	70	25
Saguenay–Lac-Saint-Jean	649	16	87	264	9	3
Capitale-Nationale	1,168	29	46	1,037	434	42
Mauricie et Centre-du-Québec	1,138	10	93	384	22	6
Estrie	364	11	94	93	2	2
Montréal	4,190	15	85	2,008	413	21
Outaouais	558	9	95	158	12	8
Abitibi-Témiscamingue	293	30	44	172	54	31
Côte-Nord	128	14	85	39	5	13
Gaspésie–Îles-de-la-Madeleine	172	6	99	37	0	0
Chaudière-Appalaches	950	15	89	592	26	4
Laval	276	21	64	227	52	23
Lanaudière	461	13	85	248	29	12
Laurentides	717	22	71	275	50	18
Montréal	2,046	20	73	1 012	137	14
TOTAL	13,567	17	79	6,822	1,315	19

Source: Data from the Système d'information sur les mécanismes d'accès aux services spécialisés (SIMASS)
[<http://wpp01.msss.gouv.qc.ca/appl/g74web/>].

❑ **Equitable allocation of resources**

The concept of equity leads us to go beyond the basic definition and to examine equity in the system with respect to the allocation of resources. Equitable treatment in the allocation of resources for the same service allows institutions to provide comparable services for equivalent funding.

The allocation of budgets using a global or historical approach creates problems with equity: institutions do not always feel they receive adequate funding for cases that they actually treated.

The Expert Panel was made aware of this issue during its consultations. Some institutions believe the population-based formula was specifically introduced to improve equity in the allocation of resources between regions.

An overview of reforms and improvements made to Québec's health care system since 1960

Since December 1960 (adoption of the *Hospital Insurance Act*) and 1970 (adoption of the *Health Insurance Act*), the evolution of Québec's health care system can be summarized in seven key dates or periods.

The founding act

- December 1971: adoption of the *Act respecting health services and social services*.
- Fundamental change: from a system run by volunteer organizations or religious congregations to a government-operated system.
- Rationalization, and definition of a budgetary basis for this new reality.
- April 1, 1984: adoption of the *Canada Health Act*.

Decentralization of the system, regionalization

- 1988: tabling of the final report of the Commission of Inquiry on Health and Social Services, chaired by Jean Rochon (government policy on health and welfare, regionalization, population participation).

Efforts to improve cost control during the 1990s

- Participation in efforts to improve public finances, for health spending exceeds budget envelopes.
- Finding: one of the best ways of controlling costs is discharge from hospital.
- 1995-1998: tightening of spending, transformation of the network (shift to ambulatory care), institution mergers, authorization of early retirement for many professionals and employees in the network.
- 1997: introduction of the Prescription Drug Insurance Plan to correct an element of vulnerability for Québec citizens.

A more comprehensive reflection on primary care, modernization of the system and its cost

- June 2000: creation of the Commission for the Study of Health and Social Services (chaired by Michel Clair).
- Obligation to rethink the allocation of resources between the regions (implementation of a population-based approach instead of a global and historical approach).
- Problem with primary care and lack of access to family physicians: creation of family medicine groups proposed.

An overview of reforms and improvements made to Québec's health care system since 1960 (cont.)

Concern about costs, and integration of the health care structures created

- A desire: to get our money's worth.
- Proliferation of health care structures, and therefore the need to integrate them.
- Implementation of the Clair Commission's recommendations regarding integrated access.
- Chaouli ruling.
- A problem: lack of continuity of care.
- December 2003: integration of services (Health and Social Services Centres, Integrated University Health Networks).
- Streamlining of labour representation structures (efficiency gains in the negotiation of collective agreements).

Funding issue: how can we ensure the money serves the patient better?

- February 2008: tabling of the report of the Task Force on the Funding of the Health Care System, chaired by Claude Castonguay.
- March 2008: following this report, announcement of several initiatives to improve the productivity and performance of the health and social services network, including the purchase of services in three pilot regions, the development of performance and evaluation tools and the creation of a national institute for excellence in health.
- June 2010: creation of the Institut national d'excellence en santé et en services sociaux.
- 2010: introduction of the Lean approach.

Autonomy insurance system

- July 2013: publication of the *White Paper on the Creation of Autonomy Insurance*.
- December 2013: Bill 67 on autonomy insurance tabled by the government.

5. CONTINUE THE REFORM PROCESS

As we have seen, Québec's health and social services system is facing major challenges – challenges related to accessibility, expenditure pressures, quality of care and equity.

Since it was established in 1971, Québec's health care system has undergone many changes to the benefit of patients. The answers to today's challenges must have the same purpose in mind.

□ A fundamental objective

The fundamental objective remains the same: the health care system must provide citizens with quality care at the best possible cost. Achieving this objective is key to the sustainability of the system.

For the Expert Panel, this process of adaptation must continue in order to address the current challenges facing the system and not wait until we find ourselves in a crisis situation.

PART TWO: WHY PATIENT-BASED FUNDING?

In the mandate entrusted to the Expert Panel, the government clearly indicated its intention to rely on patient-based funding to improve the quality, accessibility and efficiency of the health care system.

Patient-based funding will bring about significant changes. It is important to play the role of educator and clearly explain the nature of the method, what this new funding method will mean for the health care system as well as the conditions to be met and the risks to be managed when implementing it.

By asking the question "Why patient-based funding?", the Expert Panel would like to answer three questions:

- What is patient-based funding?
- What changes can patient-based funding bring to Québec's health care system?
- How should we go about implementing patient-based funding?

1. WHAT IS PATIENT-BASED FUNDING?

The Expert Panel will answer this question in two parts:

- First, we must clearly explain what differentiates and characterizes patient-based funding compared with other resource allocation methods in the health care system: patient-based funding is a method of allocating resources that directly links the patient, the care provided and funding.
- Second, it is important to identify the objectives behind the implementation of patient-based funding.

1.1 A direct link between the patient, the care provided and funding

Patient-based funding establishes a direct link between the patient, the care provided and funding. It is a resource allocation method whereby budgets are attributed to institutions based on the patients treated. Simply put, patient-based funding establishes a direct link between the patient, the care provided and funding.

❑ A classification system

Resources are allocated based on the type and volume of services. Patients are classified into diagnostic-related groups using a classification system that groups cases or episodes of care into a limited number of groups with similar clinical characteristics and resource use.

The resources allocated are adjusted to take into account the complexity of care, the patient's health condition and characteristics such as age and gender.

The first classification system, "Diagnosis-Related Groups" (DRGs), was developed in 1970.¹⁴ Other methods for classifying patients into homogeneous groups using the same logic also exist.

❑ The money follows the patient

With a patient-based funding system, the aim is for **the money to follow the patient**. Patient-based funding means that institutions receive funding on the basis of the tariff set for the services they provide to patients.

Patient-based funding is directly influenced by the number of patients – often referred to as volume – the services provided, how these services are provided and patient health outcomes. We can say that the funding allocated is the product of the tariff and the volume, adjusted to take the complexity of cases and quality of care into account.

Thus patient-based funding includes a certain number of incentives to ensure that the care provided is high quality and efficient, with funding based on the results achieved.

¹⁴ Diagnosis-related groups were defined by Bob Fetter, a professor at Yale University, to measure the productivity of hospitals. See: CANADIAN INSTITUTE FOR HEALTH INFORMATION, *The Why, the What and the How of Activity-Based Funding in Canada: A Resource for Health System Funders and Hospital Managers*, 2013.

❑ A family of resource allocation methods

The term “patient-based funding” refers to a set of resource allocation methods that share a common underlying philosophy.

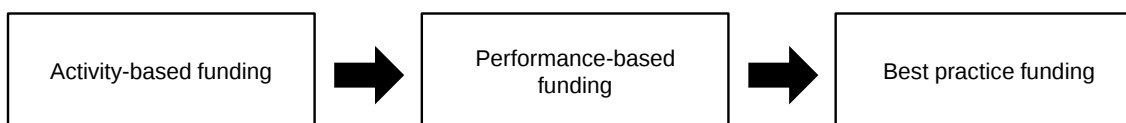
These allocation methods include:

- activity-based funding;
- performance-based funding;
- best practice funding.

In all three models, funding may apply to different durations of care – an intervention, a longer episode of care or a complete care pathway. Ultimately, the procedures reimbursed by patient-based funding cover the entire care pathway and apply to all service providers. This includes pre- and postoperative activities.

ILLUSTRATION 2

Changes in patient-based funding models for an episode of care



■ Activity-based funding

Activity-based funding involves allocating resources to institutions based on the volume of services provided.

■ Performance-based funding

Performance-based funding goes one step further than activity-based funding by linking funding to the achievement of specific outcomes.

Performance is measured using indicators that take into account access to care and quality of care.

■ Best practice funding

Best practice funding is another type of patient-based funding where the emphasis is on adherence to a clinical procedure – a care protocol and health outcome – that is recognized to deliver quality and efficiency.

❑ One central idea

In all cases, patient-based funding involves introducing new methods of paying for services compared with the traditional allocation system.

■ The traditional system

In the traditional system, resources are allocated on a global and historical basis. Managers must provide care while remaining within available budgets. With this system, patients often face long wait times.

In the traditional system, patients are a cost. To stay within available budgets, the system must delay or restrict the delivery of services to patients. This generates savings in the short term, but these restrictions in services often lead to additional costs later on due to complications or the aggravation of the patient's health conditions.

The traditional system focuses on budgetary control rather than on the value of the health care provided and patient outcomes.

■ Patient-based funding

In a patient-based funding system, clinical and administrative sectors rely on information regarding the services provided to patients to achieve outcomes that justify their funding. Funding is allocated based on the outcomes achieved.

The priority shifts from controlling inputs and processes to responding to financial incentives that reward and closely monitor outcomes. Patient-based funding makes it more worthwhile for institutions to invest in quality of care and patient safety in order to provide appropriate care

■ In all cases: a closed budget

In patient-based funding, as in the traditional system, resources are allocated within a closed budget.

❑ The philosophy: the patient influences care and the allocation of resources

As its name suggests, patient-based funding is largely shaped by a philosophy in which patient choice influences health care delivery and the allocation of resources.

Through his choices, the patient influences the allocation of resources. The patient has a certain power in the allocation of resources.

Information on accessibility of care, quality of care and the cost of services is more transparent. This information allows services to be more closely aligned with patient needs and preferences.

Patients are able to choose where they will receive the services they need instead of this being decided by the institutions that administer health care in their territory. Resources follow the patient, irrespective of his choice.

Patient-based funding: a short history

Origins

Patient-based funding was first introduced in the form of activity-based funding with the development of a patient classification system at Yale University in the United States in the late 1970s.

This system defines "diagnosis-related groups". Patients are classified into similar diagnosis or treatment groups. This type of classification system was initially introduced to assess productivity in hospitals.

The 1980s

In the 1980s, based on the work done at Yale University, the diagnosis-related groups classification system was used to calculate reimbursement rates for services covered by the Medicare program. The main objective was to control rising hospital costs which had practically doubled between 1970 and 1982.

In most developed countries

Still in the form of activity-based funding, patient-based funding was then introduced in most developed countries. The details vary between countries, but the core element is always the same, a fixed payment for each medical intervention.

Patient-based funding was introduced successively in Sweden (1992), Hungary (1993), Ireland (1993), Australia (Victoria, 1993), Italy (1995), Spain (Catalonia, 1996), Finland (1997), Norway (1997), Portugal (1998), Austria (1998), Denmark (2000), Belgium (2002), the United Kingdom (England, 2003), France (2004), the Netherlands (2005) and Australia (nationwide, 2012).

Patient-based funding: a short history (cont.)

Variable objectives

The reasons behind the implementation of patient-based funding in the form of activity-based funding vary widely between jurisdictions.

- In Australia, the State of Victoria introduced patient-based funding to support reductions in health spending.
- In the United Kingdom, England wanted to ensure the efficient use of resources in a context of rapid sustained growth in health spending. The same approach is currently being used to achieve significant reductions in health budgets.

The objectives and motivations most often cited are increased efficiency, improved quality, equitable resource allocation and the possibility for the patient to make his own choices in order to obtain better access and improved quality.

Changes in patient-based funding methods

Patient-based funding models are changing. As we have just seen, this funding method initially took the form of activity-based funding, that is, a funding mechanism to reward volume.

The current trend is to expand patient-based funding to cover the patient's care pathway and thus enhance quality of care. With this trend, funding is allocated for the entire episode of patient care, including prehospital, hospital and posthospital care.

This implies that institutions must take into account not only the treatment to be provided to the patient, but also previous treatments (family physician) and subsequent treatments (rehabilitation). It is a shift from volume-based funding to performance-based funding ("moving from volume to value").

Patient-based funding in Canada

In Canada, the implementation of patient-based funding has been very limited, primarily targeting very specific hospital services.

- British Columbia and Ontario have applied patient-based funding to some acute care services. Acute care is a specific type of care that requires rapid, concentrated interventions at varying levels of intensity.
- Québec has introduced patient-based funding for elective surgeries.
- Alberta has implemented patient-based funding for long-term care.

1.2 The objectives

The goal of patient-based funding is to reduce wait times, increase services where wait times are the longest and improve quality of care, with fewer undesirable variations in practice.

The objectives of patient-based funding are to:

- increase the volume of services, provided they are appropriate – and thus improve access to care – while making more efficient use of the resources allocated;
- take quality of care and equity in health care delivery into account.

☐ Four objectives

Patient-based funding has four objectives:

- improve access to health care;
- increase efficiency while staying within budget envelopes (the goal is to allow citizens to get their money's worth);
- support and improve the quality of health care;
- ensure equitable access to care and equitable funding.

☐ A better understanding of value and cost

Beyond these objectives, patient-based funding forces us to develop a better understanding of the value and cost of the services provided by the system. This type of funding requires transparency and accurate information regarding activities and quality of care.

It is a tremendous advantage: the efforts undertaken to meet the requirements of patient-based funding can only improve the way the system is managed. This type of funding is a valuable tool for defining services and the outcomes expected from these services, which results in more appropriate resource allocation.

Patient-based funding facilitates the standardization of approaches with respect to services. It allows better budget planning by managing volumes, encouraging best practices and increasing knowledge of costs.

Patient-based funding: the underlying philosophy and perspective

Two specialists from the health sector, Michael E. Porter (professor at Harvard University) and Thomas H. Lee (chief medical officer at Press Ganey and former network president of Partners HealthCare)¹⁵ proposed an overall vision of the challenges health care systems are facing and how to address them.

This vision, presented some fifteen years ago, has strongly influenced health care network managers around the world. It is based on the conviction that we must increase the value of health care services for patients, that is, the relationship between patient outcomes and the cost of the resources used to achieve these outcomes.

Philosophy and perspectives

The philosophy and the perspectives proposed are consistent with patient-based funding.

Michael E. Porter and Thomas H. Lee propose restructuring the way health care delivery is organized, measured and reimbursed.

They suggest moving away from a supply-driven health care system – organized around the services provided by physicians, hospitalizations, diagnostic tests and procedures – and realigning the system with patient needs and, in particular, patient outcomes. This proposal implies replacing a system where each local provider provides a full range of services with a system in which specific services are provided in appropriate locations in order to maximize value.

Porter and Lee's philosophy and strategy directly inspired the Expert Panel in its reflections.

¹⁵ Michael E., PORTER and Thomas H. LEE, *The Strategy That Will Fix Health Care*, Harvard Business Review, [Online], [<http://hbr.org/2013/10/the-strategy-that-will-fix-health-care-art-1>].

2. WHAT CHANGES CAN PATIENT-BASED FUNDING BRING TO QUÉBEC'S HEALTH CARE SYSTEM?

As can be seen, the changes patient-based funding can bring correspond to the main challenges facing Québec's health care system.

It should be added that by its very nature, patient-based funding is a powerful incentive to change.

The evolution of forms of budgeting in governments

Patient-based funding is part of a philosophy of government program management that is in keeping with new forms of budgeting that have gradually been introduced in public administrations.¹

From input-based management to performance-based management

In most developed countries, the forms of budgeting used by public administrations have gradually shifted from input-based management to output-based management and then to performance-based management.

Administrations initially based their budgeting on inputs. For example, they distributed budgets to fund material needs and salaries.

Administrations gradually modified their budgeting, shifting to management based on the production of services. Budgets were then defined based on the programs provided by public organizations, with more focus on the services produced.

With performance budgeting, we have now gone one step further. Administrations take results into account when allocating budgets.

There are several variations of this method.

- In the “presentation” approach, information is presented in budget documents, but is not used in the decision-making process.
- The information approach is an indirect method, where the information presented is important for the decision-making process, but does not explicitly determine the resources allocated.
- In the direct approach, the allocation of resources depends directly on the results obtained. In the health sector, patient-based funding is a direct approach.

The conditions necessary for performance budgeting to produce the expected benefits

A number of conditions must be met if performance budgeting is to effectively improve the use of funding. The main conditions are as follows:

- a managerial culture in institutions that incorporates the proposed rules well and is supportive of the change;
- sufficient quality information on the services provided, the results obtained and the costs incurred;
- strategic and operational planning that is well accepted and communicated to all administrative and decision-making levels;
- a budget distribution that is consistent with strategic planning, for in many cases this distribution tends to reflect institutional characteristics;
- adequate reporting.

¹ On this subject, see in particular: Allen, SCHICK, “Performance Budgeting and Accrual Budgeting: Decision Rules or Analytic Tools?”, OECD, *Journal of Budgeting*, Vol. 7, No.2, 2007, 30 p., and Pierre CLICHE, “La gestion et la budgétisation axées sur les résultats: Où en est le Québec?”, *Cahier de l’Observatoire de l’administration publique*, ENAP, 2012, 30 p.

2.1 The challenges facing the health care system: The very ones patient-based funding is designed to address

As we have shown, Québec's health care system is facing major challenges that we have no choice but to address.

- The system must be made more accessible to patients. Progress has been made, but is insufficient. In particular, we must develop primary care, improve the continuum of care and meet growing needs associated with aging population and chronic disease.
- Improved accessibility must be achieved in a context of budgetary challenge. Health budgets cannot continue to grow at the same rate as in the past. We must therefore contain rising system costs while improving the services provided. This can be achieved by focusing on effectiveness and efficiency, that is, on the value of services.
- All this must be achieved while ensuring quality of care and equitable health care delivery.

The objectives of patient-based funding will address these challenges. The goal of patient-based funding is to:

- improve access to health care;
- increase efficiency while remaining within budget envelopes;
- support and improve the quality of health care;
- ensure equitable access to care and equitable funding.

☐ Defining the system of the future

Patient-based funding allows us to start defining the health care system Quebecers will need in the future.

- Long-term conditions must be tackled by making the transition from a system that is primarily oriented toward acute care to one that is more focused on services in the community.
- Care pathways must be improved by tracking patients' progress through the system.

❑ Building the health care system of tomorrow

We must participate in building the health care system of tomorrow, a system that will have to meet citizens' needs and expectations. Patients would like to be better informed. Patients would like to make choices and have more say in the care they receive. The system must place greater emphasis on preventive initiatives and health promotion.

We need to rebalance the system:

- by providing more home and community care;
- by restricting the use of hospitals and institutions to cases requiring this level of service.

❑ Changes ahead

This means that the nature of hospital activities is going to change significantly.

Some people anticipate even more far-reaching changes over a long period. The traditional hospital model is being called into question due to the combined effect of several factors. The hospital as we know it is being affected by the development of a more personalized medicine, the emergence of new technologies, changes in people's expectations and needs as well as financial pressures.

Hospital activities as we know them traditionally will evolve. New models of health care organization are being considered, both for hospitals and doctors' offices, inspired by ideas proposed by experts in the science of innovation.¹⁶

Such changes are already apparent in traditional health care systems such as Québec's. Even more profound changes can be seen in jurisdictions where a rapid response to financial and population pressures was necessary.

❑ Anticipating the changes

The Expert Panel is convinced that significant changes are underway or will occur in the foreseeable future. Québec must anticipate these changes, and patient-based funding is a particularly appropriate way to do so.

¹⁶ Clayton M. CHRISTENSEN, Jerome H. GROSSMAN and Jason HWANG, *The Innovator's Prescription: A Disruptive Solution for Health Care*, New York, McGraw-Hill, 2009, 441 p.

A vision of the changes ahead in the hospital sector

Some political thinkers such as Corrigan and Mitchell believe that the hospital of the future will be very different.

A very different hospital

England's National Health Service (NHS) has already initiated several decades of reform with far-reaching implications, including the separation of the roles of purchasers and providers of services, the strengthening of clinical governance and activity-based funding, in order to increase high-performing hospital trusts' margin for manoeuvre and protect patient choice in the delivery of care.

- Changing health care needs and the challenges of chronic disease mean that more services must be delivered in the community and home; modern medicine and new technologies must also be widely disseminated across all services. Hospitals will have to change their models.

Source: Paul Corrigan and Caroline Mitchell, The hospital is dead, long live the hospital – Reform, September 2011, [\[http://www.reform.co.uk/resources/0000/0302/The_hospital_is_dead.pdf\]](http://www.reform.co.uk/resources/0000/0302/The_hospital_is_dead.pdf).

2.2 Patient-based funding is a powerful incentive to change

Patient-based funding is a powerful incentive to change, for it means that the resources allocated to institutions are based directly on results, which are in turn linked to the desired changes and the objectives to transform the network.

As mentioned previously, the results that determine how resources are allocated are volumes of services (activity-based funding), quality and access indicators (performance-based funding) or health care protocols and procedures (best practice funding).

Institutions are highly motivated to achieve these results, since their funding depends directly on them. Patient-based funding concerns both clinical and financial sectors. The patient is a vital element of the resource allocation system. The patient is no longer a source of costs, but a source of revenue.

❑ A lever that is part of a broader strategy

Patient-based funding is a particularly appropriate tool for tackling the challenges facing the health care system, for it can be used as a lever in a broader strategy.

Thus it can bring about major changes. Institutions are encouraged to provide more services, which addresses the problem of accessibility.

If properly designed and implemented, patient-based funding leads to:

- improved cost control by encouraging efficiency;
- integrated services, reducing the silo effect;
- changes in management culture and practice.

❑ Patient-based funding is not an end in itself

Patient-based funding must not, however, be considered an end in itself. Funding approaches must provide the right incentives, in keeping with the vision adopted, the policies defined and the action plans implemented.

It is part of a more comprehensive change in health care that has already been underway for several years. The new funding method would help the network adapt to the necessary changes.

❑ Québec: the Access to Surgery Program

Québec has already started to introduce patient-based funding to resolve the problem of access to surgery. The Access to Surgery Program is an example of allocation of resources using activity-based funding.

The Access to Surgery Program was introduced in 2004-2005 to resolve problems of accessibility and in response to the Chaouli ruling. It led to a significant reduction in waiting lists.

- Between 2008-2009 and 2011-2012, average wait times were reduced for all types of surgeries, except general surgery.
- Wait times were reduced by 31% for orthopedic surgery and by 86% for cardiovascular and thoracic surgery.

Elsewhere in the world, patient-based funding is widely used to increase volumes, make better use of available resources, improve quality and introduce greater equity.

The Access to Surgery Program introduced in 2004-2005

The Access to Surgery Program was implemented in Québec in 2004-2005 with the objective of increasing the volumes of certain types of surgeries in order to reduce wait times. Funding covers the volume of additional surgeries compared with 2002-2003. It initially targeted hip, knee and cataract surgeries.

Other types of surgeries were gradually integrated into the program.

Shorter wait times

In the past ten years, this program has significantly reduced wait times for several types of surgery.

- Surgeries covered by the Access to Surgery Program increased by 22% between 2002-2003 and 2012-2013, which represents an annual growth rate of 2.0%.
- This increase in surgical output led to increased funding for the program, which rose from 29 million dollars in 2004-2005 to 189 million dollars in 2012-2013.
- These amounts represented 3% of the physical health budget in 2012-2013, which was 6,385 billion dollars.

The Access to Surgery Program achieved its clinical objectives, that is, shorter wait times and shorter lengths of stay.

Limitations

Nonetheless, in its current form, the program has certain limitations:

- some people still wait too long;
- access to surgery still varies between regions;
- the program does not include quality control or monitoring.

The program also appears to be poorly understood by clinicians and managers (for more on this subject, see page 94).

❑ **Changes to the rules for allocating resources**

In Québec's case, patient-based funding would change the funding rules in the two-step process currently used to allocate resources.

Patient-based funding has repercussions for all the resources allocated to a region. Patient-based funding would mean significant changes for the Ministère de la Santé et des Services sociaux, regions and institutions.

It introduces a new logic in defining the resources allocated to institutions. This logic changes resource allocation methods traditionally used by regional agencies. We will understand the practical implications of these changes when we look at the priority areas proposed by the Expert Panel and discussed below.

3. HOW SHOULD WE GO ABOUT IMPLEMENTING PATIENT-BASED FUNDING?

It is in Québec's best interest to make full use of patient-based funding to undertake the reforms that will ensure the sustainability of the health care system.

We must not, however, underestimate the effort required to implement the new resource allocation method in a system as complex as health care.

- The introduction of patient-based funding relies on the creation of certain conditions to meet the requirements of the method.
- Experiences with patient-based funding reveal a number of risks that must be managed.
- Observing what has been done elsewhere also leads us to insist on the importance of the strategy adopted to implement the new resource allocation method.

Lessons to be learned from the application of patient-based funding in other jurisdictions

Many jurisdictions around the world have experimented with various forms of health care funding based on volumes of services to patients. Most of these jurisdictions started with activity-based funding initiatives, often for acute physical health services provided within the same institution.

More recently, a number of initiatives have been developed to reduce the difficulties encountered by activity-based funding. For example, funding is modified to extend the episode of care or to include bonuses to enhance quality. Most jurisdictions use a combination of several of these payment formulas in their payment systems at the same time as the global budget.

Six jurisdictions

The Expert Panel focused on six jurisdictions that have similar contexts to Québec's in order to learn from their experience with patient-based funding. The jurisdictions are Alberta, England, Australia, British Columbia, France and Ontario.

The Expert Panel also consulted the report produced by INESSS¹ at the request of the Minister of Health and Social Services. In the report, INESSS examines various experiences with patient-based funding in other health care systems in order to determine the conditions necessary for its implementation and to identify the obstacles that need to be overcome and the mistakes to be avoided to ensure its successful implementation in Québec.

Lessons to be learned

The following lessons can be learned from these different experiences:

- patient-based funding must be applied in support of clear objectives, aligned with a comprehensive health care strategy that is implemented at the same time as the other changes required to improve the system as a whole;
- patient-based funding must be based on accurate clinical and financial information. Efforts and resources must be devoted to ensuring the various network stakeholders have access to the quality data they need;
- patient-based funding must not focus solely on financial issues. A concern for quality must be central to the initiative, which requires the participation of health care professionals and patients;
- patient-based funding involves risks that must be actively managed. These include data manipulation, budget control, patient selection and cumbersome administrative procedures;
- the successful implementation of patient-based funding requires sound management of the change given the potential effect of the new resource allocation method on supply. This includes stage-wise implementation, a flexible approach to tackle any difficulties that might arise and effective communication at all levels and throughout the entire initiative.

In conclusion, as INESSS points out, irrespective of the difficulties of implementation, jurisdictions that have introduced patient-based funding do not question this choice in any way; rather they confirm its value. The advantages of this type of funding, in particular with respect to transparency, more than make up for its drawbacks, although improvements must be made to the various components of the tariff system apart from regular updates.

1 INSTITUT NATIONAL D'EXCELLENCE EN SANTÉ ET EN SERVICES SOCIAUX (INESSS), *Le financement axé sur les patients*, [Note informative rédigée par Jean-Marie R. Lance], Québec, 2013, 87 p.

3.1 The conditions to be met

Patient-based funding is a lever that can be used to achieve an overall vision. Therefore, the fundamental condition for its implementation is knowing where we want to go.

❑ Four components

Based on experiences in other health care systems and various researches on the subject, all patient-based funding systems can be said to have the following four basic components:¹⁷

- the choice or development of a classification system for patient-based activities;
- the collection of clinical and financial data;
- the setting of prices or tariffs for each category;
- the actual payment or reimbursement.

❑ A number of conditions

Given these components and all the relevant elements identified by the Expert Panel, the introduction of patient-based funding means that a number of conditions must be met.

The conditions are as follows:

- Depending on the chronological order in which the method is implemented, first we must have a set of data on patients and patient care. More specifically, we require:
 - clinical and financial information on patients and activities;
 - access to this data;
 - appropriate information technology and financial systems.
- A certain number of tariff and budget rules must be defined.
- Lastly, we must focus on how institutions are managed by building bridges between the clinical and the administrative sectors.

¹⁷ INSTITUT NATIONAL D'EXCELLENCE EN SANTÉ ET EN SERVICES SOCIAUX (INESSS), *Le financement axé sur les patients, Revue de littérature sur les expériences étrangères*, [Note informative rédigée par Jean-Marie R. Lance], Québec, 2013, p. 59 and pages 63-69.

❑ Complete and reliable clinical and financial data

Patient-based funding depends on eventually having complete and reliable clinical and financial data on health care costs and outcomes. This data is essential to case costing and to evaluate the outcomes on which funding will be based.

■ Case costing

Case costs are the costs of services and care provided to a patient during an episode of care. Case costs are calculated by grouping together or linking financial data and clinical data.

For example, for surgery, case costing usually covers all the costs of the care pathway, from admission to discharge from hospital. For a patient with one or more chronic diseases, case costing can include all the costs of services and care this patient receives in a given year.

■ A classification system

This data is processed using a classification system based on cases or patient's episodes of care.

As indicated previously,¹⁸ classification systems are used to group cases or patient's episodes of care into a limited number of diagnostic-related groups with similar clinical characteristics and resource use.

Classification systems for patient's episodes of care
In patient-based funding, classification systems for patient's episodes of care play a strategic role. By accurately describing institutions' clinical activities, these classification systems are used to: – document institutions' activities; – document the types of patients served; – support management and improve transparency; – encourage greater efficiency.¹⁹ For example, classification systems are useful for:²⁰ – evaluating performance – start case costing on diagnoses and resource utilization, analyzing lengths of stay, evaluating non-quality; – evaluating quality of care and services – assessing mortality rates, adverse events, readmission rates, appropriateness of services; – funding activities or episodes of care by permitting the development of a tariff structure when combined with case costing.

¹⁸ See above, page 48.

¹⁹ Anne, LEMAY, *Allocation des ressources aux établissements de santé et services sociaux: Pistes et balises pour implanter le financement à l'activité*, Montreal, AQESSS, 2012, 33 p. and Joanne, CASTONGUAY, *Analyse comparative des mécanismes de financement des hôpitaux, Rapport de projet*, CIRANO, 2013, 176 p.

²⁰ Anne, LEMAY, *Perspective et réflexion sur les outils nécessaires à l'implantation d'un financement axé sur le patient au Québec, Rapport final*, July 2013.

■ **Modernize clinical and financial information**

We must invest in modernizing clinical and financial information.

■ **Limited resources**

In Québec's case, it must be said that despite increased health budgets, limited resources have been allocated to improving clinical and financial data and to relaying information to clinicians and managers. Information on patients is scattered across a number of information systems and it is very difficult to obtain an overview of the patient's pathway.

■ **Data is often inaccessible**

The data available must also be accessible, which raises important legal issues.

Also in Québec's case, the Commission d'accès à l'information has defined a certain number of rules to protect the confidentiality of private information. The Expert Panel noted that the Ministère de la Santé et des Services sociaux has added further constraints to these rules, thus providing new guidelines for accessing information.

■ **Inadequate systems**

Financial and information technology systems must be able to meet the information needs of patient-based funding.

In Québec, we already have standardized financial data. The form and content of accounting systems meet essential reporting requirements, but the timeframes required to produce financial reports are incompatible with management needs in the field and requests from central bodies. Nor do these systems meet the needs of patient-based funding.

The Expert Panel has noted:

- the disparity between information structures, and especially charts of accounts, which limits and slows down data transfer;
- the incompatibility between institutions' accounting by clinical programs and accounting by activities in the annual financial report;
- the impossibility of using current financial systems to record costs based on a continuum of care;
- the inadequacy of tools for accessing Ministère de la Santé et des Services sociaux data.

■ **An effort that would benefit the entire system**

The conditions related to clinical and financial information are challenging. However, we must stress that in fulfilling them, we would go beyond the sole objective of implementing patient-based funding.

The modernization of information resources would benefit the entire health care system. Better clinical and financial information would improve the way institutions are managed and allow funding allocated to the health sector to be used more effectively. Better information resources would improve patient services, for example, by making it easier to track the patient's progress along his entire care pathway.

This modernization involves additional non-recurring costs. Institutions should not have to choose between patient services and information system development. Therefore, it seems appropriate that the government provide funding to modernize clinical and financial information in order to protect the health care envelope.

❑ **Tariff and budget rules**

The introduction of patient-based funding must be accompanied by tariff and budget rules. These rules are required for reasons of clarity and transparency: in a patient-based funding system, everyone must know the rules of the game.

Moreover, tariff and budget rules must be established to control the amount of resources used. The implementation of patient-based funding has often led to increased health budgets due to growth in the volume of care.

Patient-based funding must therefore be accompanied by clear tariff and budget rules.

- The tariffs set must not lead to behaviours that run counter to objectives, for example, under-provision of certain services, cream skinning, the delivery of poorer quality treatments or a higher volume of inappropriate care.
- Budget rules must minimize the risks of exceeding the closed envelopes allocated to the sector.

❑ **Bridges between the clinical and administrative sectors**

The third condition concerns how institutions are managed: bridges must be built between the clinical and administrative sectors.

Patient-based funding calls for partnership and a genuine collaboration between the clinical and administrative sectors in institutions. The Expert Panel notes that there is much work to be done in Québec's health care system in this regard.

Clinicians must play an integral role in managing the quality, costs and outcomes of services. Clinicians and managers alike must have access to transparent clinical and financial information systems as well as to relevant data concerning the costs and outcomes of services.

3.2 Risk management

By fulfilling all the necessary conditions, a certain number of risks can be avoided along with the adverse effects often observed when traditional allocation methods are replaced with patient-based funding.

❑ The main risks

The main risks or adverse effects we must be aware of are as follows:

- reductions in lengths of stay in institutions at the expense of quality of care, with patients discharged prematurely and the ensuing risk of readmissions or complications;
- the overly rapid transfer of responsibility for patients to other institutions;
- cherry picking or cream skimming, where institutions avoid treating higher risk patients and prefer to treat patients likely to be discharged sooner;
- the overdelivery of certain types of care solely to obtain a reimbursement;
- segmentation of stays;
- upcoding, which is the practice of classifying a patient with a more complex diagnosis than his actual condition to obtain a higher reimbursement.

The Expert Panel believes these risks can be managed provided the implementation approach is properly defined and the conditions necessary for the implementation of patient-based funding are fully respected. The very logic behind the method's implementation means having a growing number of tools and making full use of them to effectively manage any potential risks.

3.3 The implementation strategy is key

Indeed, the implementation of patient-based funding must be part of an overall strategy that the Expert Panel considers key to the success of the reform.

The health care system is divided into sectors of activities that are not impervious to one another. A change in one sector will have an impact on the other sectors. A sound implementation strategy will anticipate possible interactions and mitigate any associated risks.

☐ A reform spanning several years, short-term effects

Patient-based funding is a reform that will be carried out over several years, but with short-term effects. Implementation must be accompanied by both short- and longer-term objectives, part of the overall vision of the reform.

- A sound implementation strategy must endeavour to resolve immediate problems, such as lengthy waiting lists.
- It must also establish guidelines for the challenges ahead, such as chronic disease management.

In both cases, the aim is to promote the best possible treatment for the patient and avoid overuse of hospital resources.

☐ A steady pace without destabilizing the system

Implementation must proceed at a steady pace without, however, destabilizing the system. The rate of implementation must be sufficiently rapid to really engage the process of change.

At the same time, patients, the public and the health care network must be allowed time to adapt and understand the new rules of the game. A sound strategy is a gradual strategy that allows the clinical and the administrative sectors to adapt to the changes.

☐ Be pragmatic

The conditions to be met are numerous and challenging. We cannot wait until they are all in place to move forward. Such an approach would hinder any change. We must proceed at a pace that matches the speed with which support and monitoring tools are implemented.

The strategy adopted must therefore be sufficiently pragmatic to provide the network with the necessary supports, carry out appropriate monitoring and minimize adverse effects.

**The conditions to be met to implement the change
according to Michael E. Porter and Thomas H. Lee**

Professors and researchers Michael E. Porter and Thomas H. Lee, whose work was mentioned earlier, describe the steps to follow to restructure how health care delivery is organized, measured and reimbursed in order to address the challenges the system is facing.

According to Porter and Lee, the transformation must come from within. Every stakeholder has a role to play.

The first step is to define clear objectives. A strategy that is too narrow, that focuses on improving access, containing costs and boosting profits, is only a distraction from a real overarching initiative.

- Access to care is not an objective if quality of care is poor.
- Reducing costs cannot be considered an objective if it is done at the expense of quality.
- Increasing volumes is not in patients' interests if the care provided does not maximize outcomes.

Source: Michael E. PORTER and Thomas H. LEE, "The Strategy That Will Fix Health Care", *Harvard Business Review*, October 2013.

The experts' main conclusions

The main conclusions

Below are the main conclusions¹ that contributed to the Expert Panel's reflections:

- funding mechanisms are one of many tools that can be used to improve population health;
- the introduction of new funding mechanisms is a step towards a more extensive reform;
- one of the key characteristics of patient-based funding is the emphasis on efficiency, which requires a cost-benefit analysis of the services provided;
- efficiency can be improved by promoting the production of cost-effective services with proven meaningful outcomes and by reducing the production of services of limited or undetermined value. Where services have a high value for a limited number of patients, we must be able to identify the patients who need these services most;
- we must also be able to determine the extent to which a funding model promotes the integration of services and has an impact on a large segment of the continuum of care;
- the consequences of a reform of funding mechanisms, be they positive or negative, are directly related to the objectives and incentives.

Points of caution

Special attention must be paid to the following aspects.

- A localized intervention (that targets only one procedure on the continuum of care) is likely to be disappointing in terms of impact, patient outcome and health care system efficiency. Payments that cover several segments of the continuum of care should be encouraged, for they create more incentives to provide services at a better overall cost.
- It is important to balance process improvements with outcome improvements. It is easier to improve processes. However, priorities may no longer be aligned with the desired health outcomes.
- Patient-based funding requires transparency and data from all care providers. The first step is to intensify the computerization of health care data in order to provide more information on processes, costs and outcomes.
- Tariffs must reflect, at least to some extent, the cost of providing care. The relative intensity of resource utilization and the human resources involved must also be taken into account in tariffs.
- A change in funding models must undergo rigorous evidence-based evaluation. Significant gains can be made when evaluations are a routine part of the change process.
- Funding models that include an incentive to increase volumes will increase costs. The best-case scenarios are those where funding mechanisms contribute to greater efficiency.

¹ Erin STRUMPF, Samer FARAJ and Vedat VERTER, *Making Decisions about Activity-Based Funding in Health Care: Payment Mechanisms and Policy Goals*, McGill University, May 20, 2013.

PART THREE: THE OBJECTIVE AND THE RECOMMENDED APPROACH

The Expert Panel is convinced of the value of extending the use of patient-based funding in the health care system.

- This conviction is part of a vision and principles that must be formulated.
- It brings us to the first recommendation made to the government concerning the objective.
- To implement it, the Expert Panel proposes a pragmatic approach spanning several years, with three priority areas.
- The first of these areas is better access to surgery, by implementing an expanded activity-based funding program.
- The second area focuses on improving quality of care, by adopting an approach that rewards best practice.
- The third priority area concerns the management of people with chronic diseases, using a funding method that promotes the integration of care.

1. THE VISION AND THE PRINCIPLES: REFORM THE HEALTH CARE SYSTEM BY MAKING THE PATIENT THE FOCUS OF CONCERN

The changes proposed with the implementation of patient-based funding are part of a vision of the health care system and its future development that must be clear.

□ The vision

The vision proposed by the Expert Panel is as follows.

Québec's health care system has evolved significantly in recent years. This must continue: patient-based funding is a lever and an agent of change, a tool in an ongoing process of change designed to ensure the system continues to improve and respond to new circumstances.

The changes ahead are based on a number of key ideas:

- The system's sustainability depends on the quality of care and the delivery of efficient, effective services.
- The patient is the focus of concern and participates in the system.
- Patient-based funding is a lever that is part of an overall strategy where quality of care is of key importance.

The objective of the proposed vision is to ensure that Québec's health care system is able to tackle the main challenges it is facing, namely:

- accessible care;
- cost control;
- quality of care;
- compliance with equity criteria adopted by Québec society.

When making the necessary changes, the patient must be the focus of concern.

❑ **Firmly established consensus**

These transformations are taking place in a system whose main characteristics are founded on firm consensus in Québec society.

■ **A universal health care system**

Québec's health care system is universal, which means that everyone covered has access to a comparable level of care for similar needs.

Universal coverage is defined as ensuring that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.²¹

This definition of universal coverage embodies three related objectives:

- equity in access to health services – those who need the services should get them, not only those who can pay for them;
- that the quality of health services is good enough to improve the health of those receiving services;
- financial risk protection – ensuring that the cost of using care does not put people at risk of financial hardship.

■ **A public health care system**

The health care system is public and its administration is the government's responsibility.

❑ **A health care system centred on the patient and his care**

On the whole, the implementation of patient-based funding is part of a vision of a health care system where changes are determined by patient needs and technological capabilities.

A health care system that is oriented towards the volume and quality of services is a system that adapts to needs more easily, that is able to pursue innovation and embrace change.

Such a health care system is driven by clearly defined objectives and incentives and focuses on performance rather than on controlling inputs. This type of system would make the patient and his care the focus of concern.

²¹ WORLD HEALTH ORGANIZATION, *Health financing for universal coverage, What is universal coverage?*, [Online], [http://www.who.int/health_financing/universal_coverage_definition/en/].

2. THE OBJECTIVE: IMPLEMENT AND EXTEND THE USE OF PATIENT-BASED FUNDING IN QUÉBEC'S HEALTH CARE SYSTEM

Compared with global and historical budgets, patient-based funding models can bring about positive changes to improve access, quality, integration of care and the efficient use of resources.

❑ An appropriate tool for the changes required

Patient-based funding is an appropriate tool for undertaking the changes required.

The method of resource allocation is a powerful lever for changing how things are done. Patient-based funding can steer the change in the right direction.

By allocating resources based on the services provided, patient-based funding supports the expansion of services within a given budget – provided they are appropriate – efficient service delivery, quality of care and equity.

❑ A mixed approach

The implementation and widespread application of patient-based funding will mean that a large share of budgets will be allocated to institutions based on the services they provide to patients.

The current population-based approach would still be used to distribute envelopes to agencies. From these envelopes, agencies would fund institutions using a mixed approach, combining a global and historical budget with patient-based funding initiatives.

For each patient-based funding initiative, institutions' global reference budget would be replaced with a budget based on the services provided and the tariffs set.

❑ A major change in how the system is managed

The implementation of patient-based funding will bring about a major change in how the system is managed.

It will introduce a new management culture and practice in Québec's health care system. Controlling inputs will be replaced with service- and results-based management. Patient-based funding will also provide greater insight into costs.

The plan for the sector involves:

- shifting from controlling means to controlling results;
- adapting management and information tools to do so.

With patient-based funding, decisions will be based on:

- better information on the use of resources allocated to health care;
- a better estimate of the value of the care provided to patients.

The new method of allocating resources will give health care professionals new opportunities to undertake initiatives in order to provide patients with the right services. It will bring about a new management culture built on a funding method that is based on patient services and outcomes rather than on global budgets.

❑ A change that is in keeping with the autonomy insurance project

The implementation and expansion of patient-based funding in Québec's health care system is fully in keeping with the government's autonomy insurance project. Patient-based funding and the government's autonomy insurance project are connected in a number of ways.

The basic philosophy is the same. The goal of both patient-based funding and autonomy insurance is to increase the options available to the person receiving the service. The objective is to obtain a better price for the service and a better outcome for the patient. With autonomy insurance, as in the different forms of patient-based funding, the aim is for the money to follow the patient.²²

Autonomy insurance can therefore be considered a form of patient-based funding.

²² On this subject, see the presentation made by the Minister of Health and Social Services in the National Assembly on November 21, 2013 during parliamentary proceedings on the autonomy insurance project.

❏ The Expert Panel's recommendation

Recommendation 1

The Expert Panel recommends that the government make a major change to resource allocation methods in Québec's health care system by the widespread application of patient-based funding.

The Expert Panel believes patient-based funding must be used as a lever in a process of reform to:

- increase access to care;
- improve cost control;
- enhance quality of care;
- respect principles of equity.

3. THE RECOMMENDED APPROACH: A PRAGMATIC APPROACH, THREE PRIORITY AREAS

As noted previously, the implementation of patient-based funding and its widespread application must be part of an overall, pragmatic strategy that spans several years.

Based on previous experience and foreseeable needs, the Expert Panel recommends that this strategy focus on three priority areas, namely:

- access to surgery;
- quality of care;
- chronic disease management.

3.1 A pragmatic approach spanning several years

The implementation of patient-based funding requires a pragmatic approach spanning a period of three to five years.

☐ **Start even if all the conditions are not in place**

We must start to implement the method even if all the conditions are not in place at the outset. Experiences in other health care systems as well as the opinions of experts and people consulted by the Expert Panel concur on this point.

In today's context of rapid and continuous change, strategies in the business world are considered "long term" if they span a period of three to five years. Even within this agenda, implementation is a major challenge for the organizations involved in a strategic change process.

Agreeing on short-term targets is considered essential to overcome the risks of a failed implementation, ensure lasting change and maintain leaders' motivation.²³

We must also consider:

- the structure of the system as a whole and how its components interact, for introducing change can have consequences elsewhere and have a domino effect on the entire network;
- the characteristics of clinical and financial information systems;
- the availability of data on outcomes and case costs;
- the organizational capacity to introduce the required changes.

A transition period is necessary in order to implement the change gradually.

☐ **Proceed in stages**

The Expert Panel proposes to proceed in stages, building on experiences already underway. A pragmatic approach spanning several years will allow initiatives already underway to be consolidated and next steps to be taken to put the necessary conditions in place for the future.

☐ **An investment strategy**

The Expert Panel is also aware of the investments the government will have to make to initiate the recommended change, primarily with respect to improving information systems. The pragmatic approach recommended by the Expert Panel should therefore include an investment strategy.

Patient-based funding should be implemented within the framework of the budgets allocated to the Ministère de la Santé et des Services sociaux.

²³ Chris BRADLEY, Angus DAWSON and Antoine MONTARD, "Mastering the Building Blocks of Strategy", McKinsey Quarterly, October 2013, [Online],
[\[http://www.mckinsey.com/insights/strategy/mastering_the_building_blocks_of_strategy\]](http://www.mckinsey.com/insights/strategy/mastering_the_building_blocks_of_strategy).

❑ The Expert Panel's recommendation

Recommendation 2

The Expert Panel recommends that the government adopt a pragmatic, stage-wise approach to the implementation of patient-based funding.

This stage-wise implementation would take the form of a multi-year strategy, aligned with strategic health care objectives and supported by change management.

The strategy would take into account:

- the current resource allocation method;
- the characteristics of existing clinical and financial information systems;
- the availability of data on outcomes and case costs;
- the organizational capacity to introduce the required changes.

The strategy to implement patient-based funding would respect available budgets and the government's ability to pay.

3.2 Three priority areas

As part of this pragmatic approach, the Expert Panel has identified three concrete areas where patient-based funding should be implemented as a priority.

In all three cases, it involves going beyond pilot projects and starting to use patient-based funding to consolidate initiatives already underway or to meet growing needs in the future.

☐ **Improve performance through the Access to Surgery Program**

Québec already applies patient-based funding in the Access to Surgery Program. It is therefore logical to use what is already being done as a starting point, to use existing structures and build on experience.

The Expert Panel recommends that the government expand the scope of the existing program and improve its terms and conditions.

The Expert Panel proposes taking the existing program further by using patient-based funding for all surgeries in order to improve performance.

☐ **Enhance quality of care by using best practice funding**

Efforts are already underway in the system to improve quality of care. The Québec Colorectal Cancer Screening Program was implemented to fight a disease that is the second cause of cancer mortality in Québec. This program focuses on quality of care through protocol-based care. The program applies to eight pilot institutions. It does not include patient-based funding to enhance quality.

The Expert Panel proposes extending the program to all endoscopy units and eventually applying a form of patient-based funding to all eight units, namely, best practice funding.

The Expert Panel also proposes implementing a best practice funding program. This would involve extending this type of funding to other areas of health care to improve quality of care. The Expert Panel proposes using patient-based funding to support best practices through protocol-based care.

☐ **Chronic disease: promote the integration of services**

Chronic disease management is a major challenge for Québec because there are more people and they are living longer.

Managing people with chronic diseases requires better integrated services. Patient-based funding is a way to support and promote the integration of services.

The Expert Panel proposes relying on patient-based funding to manage patients with chronic diseases.

❑ The Expert Panel's recommendation

Recommendation 3

The Expert Panel recommends that the government implement patient-based funding immediately by introducing the method in three sectors:

- funding based on volume and quality for all surgeries by expanding the existing program;
- funding based on best practices by introducing a program to implement best practices, starting with colonoscopy;
- funding to manage patients with chronic diseases, starting with practical experiments accompanied by the necessary support.

4. BETTER ACCESS TO SURGERY: AN EXPANDED ACTIVITY-BASED FUNDING PROGRAM

The Expert Panel proposes applying patient-based funding in the surgical sector first.

- The starting point is the Access to Surgery Program, which has allowed Québec to become familiar with patient-based funding methods.
- Building on its strengths, we must take the program one step further by implementing an expanded activity-based program in the surgical sector in order to improve performance.

4.1 The starting point: The Access to Surgery Program

The Access to Surgery Program, introduced in Québec in 2004-2005, is an activity-based funding program. The program has achieved the objectives set out at the time of its implementation. However, it has been observed that the program has now reached certain limits.

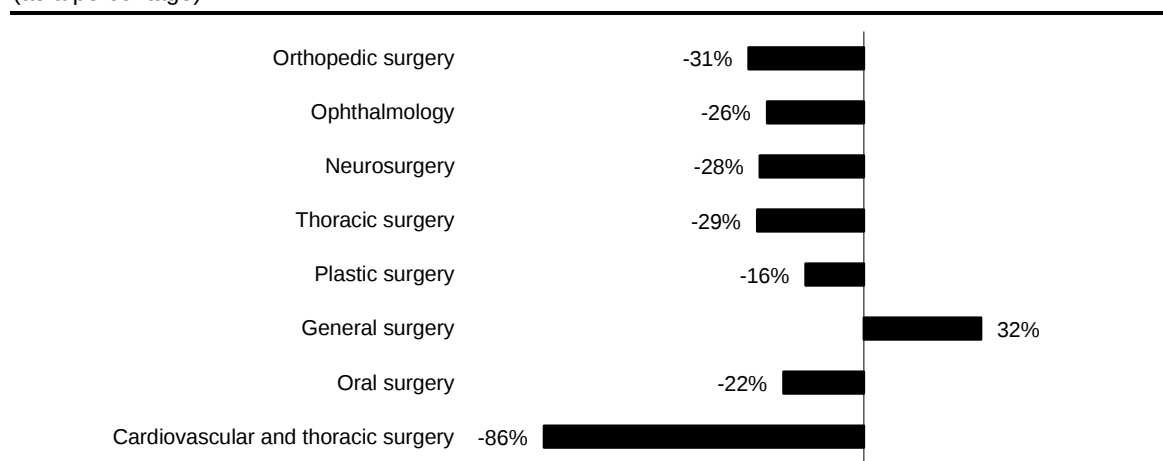
❑ Objectives achieved

The Access to Surgery Program made a step in the right direction to improve access to surgery, in particular by reducing average wait times.

The clinical objectives set out when the program was implemented have been achieved. Between 2008-2009 and 2011-2012, average wait times decreased by 31% in orthopedic surgery and by 86% in cardiovascular and thoracic surgery.

GRAPH 7

Changes in average wait times by specialty between 2008-2009 and 2011-2012⁽¹⁾
(as a percentage)



Note: While wait times for general surgery increased, they were less than three months.

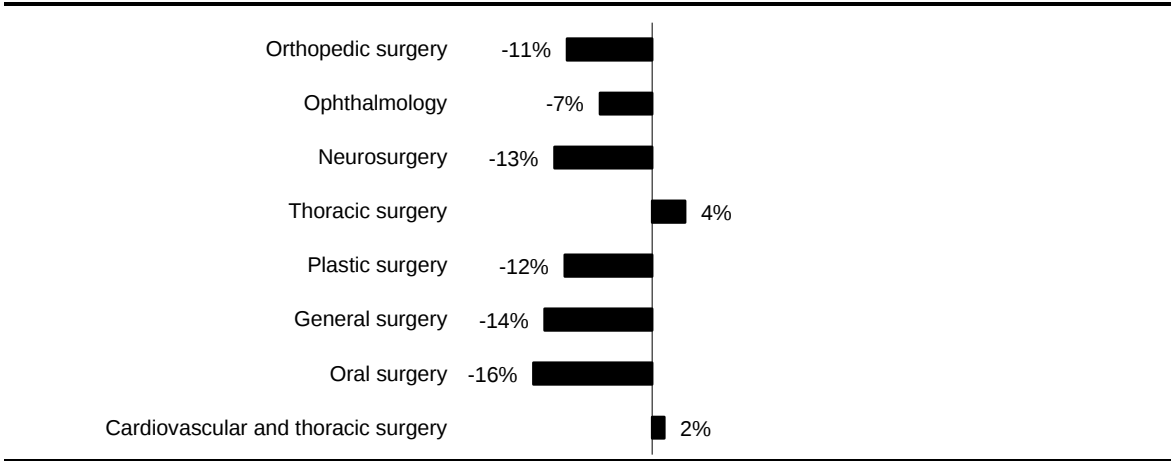
(1) This period was selected due to the availability of data.

Source: Ministère de la Santé et des Services sociaux.

Between 2002-2003 and 2010-2011, average length of stay decreased by 11% in orthopedic surgery and by 16% in oral surgery. These results are due to efficiency gains in surgeries.

GRAPH 8

Changes in average length of stay by specialty between 2002-2003 and 2010-2011⁽¹⁾
(as a percentage)



(1) This period was selected due to the availability of data.
Source: Ministère de la Santé et des Services sociaux.

❑ Limits

However, in its current form, the program has reached certain limits in terms of its ability to improve the population's access to surgery:

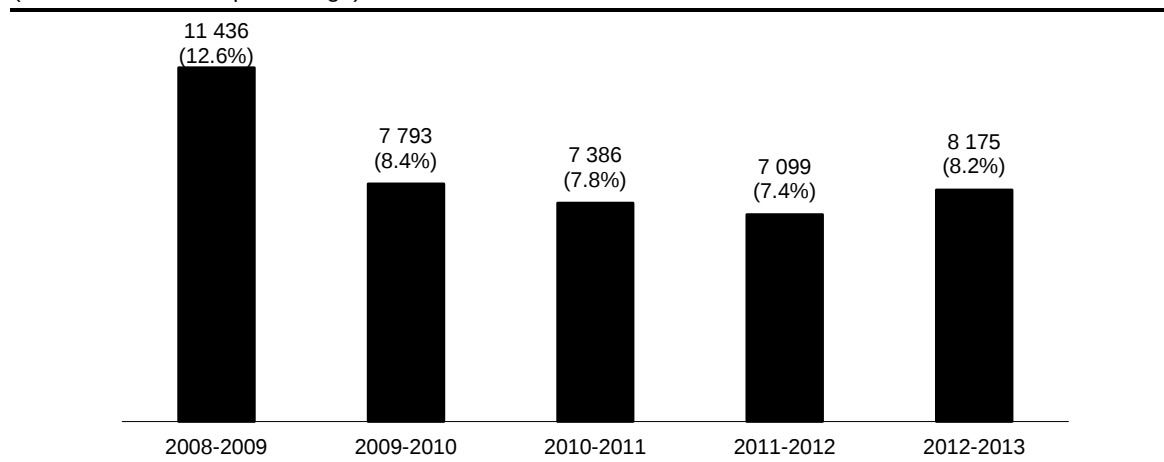
- some people still wait too long;
- there are disparities between regions;
- the program does not include indicators that could be used to promote quality of care;
- the program is poorly understood by clinicians and managers in the network.

■ Some people still wait too long

Demand for the surgical services in question continues to grow, increasing pressure on the system. The number of patients waiting more than one year has increased in recent years.

GRAPH 9

Changes in the number of patients waiting more than one year between 2008-2009 and 2012-2013⁽¹⁾
(in number and as a percentage)



(1) This period was selected due to the availability of data.
Source: Ministère de la Santé et des Services sociaux.

■ Disparities between regions

Furthermore, there are disparities in access to surgery across Québec. Despite significant results in increasing volumes of surgical output, the number of people waiting more than six months for surgery varies widely between regions.

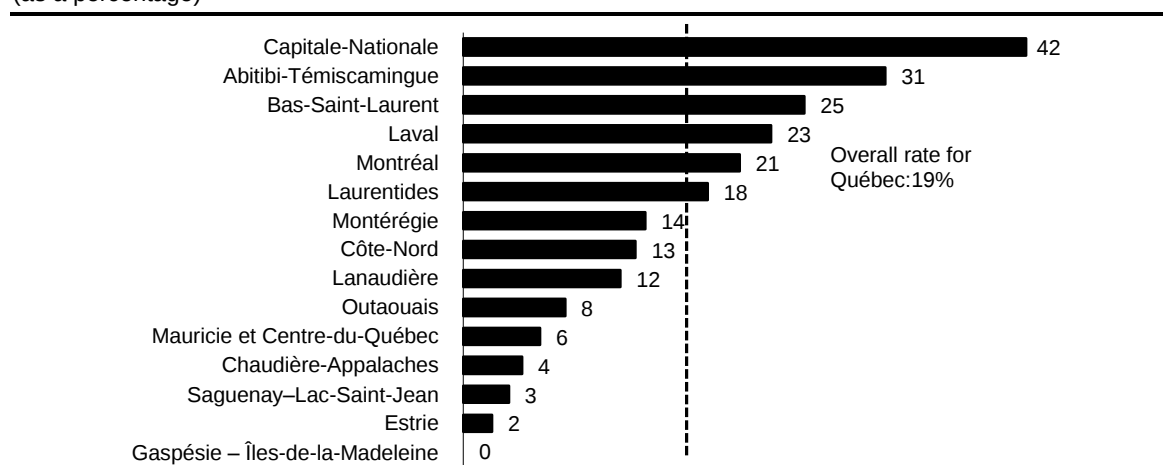
For example, an analysis of the situation on January 11, 2014 showed that 21% of people waiting for day surgery in the Montreal region had been waiting more than six months. This proportion was 3% in the Saguenay–Lac-Saint-Jean region, 14% in the Montérégie region and 42% in the Capitale-Nationale region. The proportion of patients waiting more than six months for hip or knee replacement surgery was 19% in Québec.

A number of factors can explain these interregional disparities in access, including the availability of operating rooms and medical specialists. There are also significant disparities in how the funding allocated to regions is used, with some agencies not fully adopting the program's parameters and instead using their own funding method depending on their strategy for increasing surgical output.

The Expert Panel believes that defining approaches to funding that are more patient centred will help reduce these disparities.

GRAPH 10

Proportion of patients waiting more than six months for hip or knee replacement surgery⁽¹⁾
(as a percentage)



(1) Situation on January 11, 2014.

Source: Data from the Information System on Mechanisms of Access to Specialty and Subspecialty Services (SIMASS).
<http://wpp01.msss.gouv.qc.ca/app/g74web/>

■ No quality indicators

The program does not include quality indicators that would be taken into account when determining the payment made to institutions for surgeries.

Evaluating quality is, however, as important as tracking volumes. By taking quality into account, the appropriateness of surgical output can be assessed, while ensuring that surgeries are performed with a constant concern for patient safety.

In the family of patient-based funding methods, taking quality into account marks the shift from activity-based funding to performance-based funding.

■ The program is poorly understood by clinicians and managers

In 2012, at the Expert Panel's request, a process to evaluate the Access to Surgery Program was undertaken. The objective was to encourage representatives of the health and social services network to reflect, in particular through focus groups, on the clinical and financial aspects of the program.²⁴

During the consultations, the groups raised the point that the Access to Surgery Program is poorly understood by clinicians and managers. In particular, they said that shortcomings with respect to the availability of methodological information for the program make dissemination to the various stakeholders in the network difficult.

Furthermore, existing information systems do not contain the mechanisms required for the reconciliation, verification and comprehension of clinical and financial data related to surgery. Consequently, institutions do not have adequate means to analyze the quality and efficiency of the interventions performed.

²⁴ For more on this topic, see page 18 of Paper 1 on the expansion of the Access to Surgery Program.

□ The Expert Panel's recommendation

Therefore, as a first priority area, the Expert Panel proposes expanding and integrating the Access to Surgery Program by applying patient-based funding to all surgeries in institutions that treat at least 1,000 weighted cases per year and introducing performance-related payments.

- It is imperative that the program be linked to quality objectives. For this reason, it must cover all surgical output, not only additional output compared with the 2002-2003 level, as is the case at present.
- All surgical output must also be covered if we want to improve the efficiency of the program and, in particular, direct the service offer toward the most appropriate facilities.
- To make actions more effective and coherent, the new program should be part of a national surgery strategy. Most successful experiences with implementing patient-based funding show the importance of aligning financial incentives with clearly identified objectives.

An initiative that is part of a national surgery strategy
The purpose of the national surgery strategy is to: – determine the health care system's objectives in surgery; – define access and quality standards and review them periodically; – identify measures to be taken to support the appropriateness of services; – propose quality assessment and performance measurement tools to be implemented to monitor, assess and adjust the services provided to the population; – integrate funding methods so that they support priority objectives; – establish appropriate links with workforce plans and propose workforce training priorities that take advances in knowledge and organizational methods into account; – ensure the integrated management of activities undertaken to achieve objectives regarding clinical and administrative information systems, fixed assets and equipment; – develop reporting and information tools to inform the public about surgical services. The Expert Panel sees the national surgery strategy as an additional opportunity to bring together and coordinate the efforts of clinical directors and administrators in achieving the objectives of access, quality, equity and efficiency in surgery.

❑ The Expert Panel's recommendation

Recommendation 4

The Expert Panel recommends that the government expand the Access to Surgery Program and make this initiative the first priority area for patient-based funding.

The new Access to Surgery Program would cover almost all surgical output.

The new program could be part of a national surgery strategy.

The purpose of the Expert Panel's recommendation is to align services in the surgical sector more closely with the government's main objectives in the health care system, namely:

- access to care;
- appropriateness and quality of care;
- equity;
- efficient service delivery.

4.2 Access to surgery: An expanded activity-based funding program

The Expert Panel proposes expanding and integrating the existing Access to Surgery Program by applying patient-based funding to all surgeries in institutions that treat 1,000 or more cases per year in order to improve performance.

The Expert Panel carried out a detailed, practical review of the steps to be taken to implement this proposal. The result of this review is presented in Paper 1, a companion document to the report. The main proposals that resulted from this review are outlined below.

□ The procedures covered

The Expert Panel proposes that the new Access to Surgery Program cover all surgeries, including tertiary cardiology, hemodynamics and interventional electrophysiology. If, in exceptional cases, a sector could not be covered owing to very high costs or a volume of surgeries that is too low, for example for grafts and transplants, funding would continue on an historical basis.

Since the cost of providing care varies widely depending on the type of care, categorizing all patient cases based on the services received is a crucial step in patient-based funding. The Expert Panel recommends a new method for categorizing surgical cases.

Surgeries would be categorized and weighted by combining two types of information:

- the classification of surgeries, based on the procedure codes in the physician remuneration database (RAMQ);
- the weight of surgical cases,²⁵ based on APR-DRG classifications²⁶ in the MED-ECHO database.²⁷

□ Eligible institutions

The Expert Panel recommends that eligible institutions must have a surgical production volume of at least 1,000 weighted cases per year.

Applying the proposed funding method to institutions with lower production volumes might undermine the supply of services in these institutions. A minimum production threshold of 1,000 weighted cases per year is also used in other jurisdictions.

This threshold encompasses a sufficiently high number of activities, namely, 52 institutions and over 97% of surgical production.²⁸

²⁵ Case weight refers to the level of resource utilization required.

²⁶ International classification system in which each patient is attributed a diagnosis-related group (DRG) and a clinical severity level.

²⁷ Maintenance et exploitation des données pour l'étude de la clientèle hospitalière [Maintenance and Development of Data for the Study of Hospital Patients].

²⁸ A lower threshold would have meant that institutions with low volumes and special characteristics that are less suited to the type of funding proposed would have had to have been included.

❑ The episode of care covered

The Expert Panel proposes phasing in patient-based funding for the patient's entire pathway so that the new method of funding would cover the full care pathway by 2017-2018. This gradual implementation will allow clinical and financial information systems to be modernized at the same time, for patient-based funding relies on the use of these systems

Patient pathway funding will be phased in in three stages:

- funding for the surgical episode of care – from admission to discharge from hospital (simulation in 2014-2015 and introduction of funding in 2015-2016);
- funding for the inpatient care pathway – from preadmission to discharge from hospital (2016-2017), which includes the preoperative episode of care and the surgical episode of care;
- funding for the full care pathway – interinstitutional (2017-2018), which includes the preoperative episode of care, the surgical episode of care and the postoperative episode of care.

Progression from one stage to the next mainly depends on the availability and quality of data and on the exchange of information on patients between institutions.

❑ The funding of surgeries

In accordance with the very principle of patient-based funding, funding for surgical activities in an institution would be based on the number of surgeries performed and the provincially determined tariff for each type of surgery.

- The number of surgeries performed by each institution would be defined after discussions between institutions and agencies. It would be an integral part of the management agreement.
- The tariff for each surgery would be determined provincially and applied by agencies without any modification.

The introduction of a new patient-based funding method involves case costing, determining the budget envelope for the program and the tariff.

■ Start case costing

The Expert Panel has chosen the “top-down” approach to case costing. In this approach, the average cost per recipient of services is obtained by dividing the cost of an activity centre by the number of patients treated there.

This approach has one drawback: it does not allow the institution to explicitly identify the costs for each patient it treats.

The Expert Panel proposes that a shift be made eventually to a “bottom-up” approach that involves recording, for each patient, the cost of the care received along a care pathway, from entry to departure from the health care system. This evaluation will rely directly on the availability of means to modernize clinical and financial information systems.

■ Defining the budget envelope

In order to define the budget envelope for the new program, the portion of the recurrent envelope allocated to surgeries covered by the Access to Surgery Program (ASP+) must first be estimated.

To finance the new program, the Expert Panel proposes that the funds currently allocated to surgery be recouped and included in the budget envelope. The budget envelope for the new program would be a closed envelope.

Cost-sharing rules for operating costs that are common to surgical activities and other activities should be defined in consultation with representatives from agencies and institutions.

■ Setting the tariff

A tariff must be set for each group of surgeries.

The new Access to Surgery Program would comprise 150 groups of surgeries. For the initial years of the program, the Expert Panel proposes basing tariffs on the average cost of each group of surgeries. In the longer term, tariffs that are slightly below the average cost could be used in order to provide incentives for institutions to improve efficiency. Average unit cost could also be recalculated using information from the case costing system once a large enough sample size of institutions is available.

The Expert Panel recommends establishing a provincial tariff for each group of surgeries. The same base tariff would apply to each group of surgeries for all institutions participating in the program.

A fair and equitable patient-based funding system must, however, take the particular situation of some institutions into account (teaching, research, remoteness and certain subspecialty services). The Expert Panel recommends that the tariff exclude certain special costs, such as teaching costs, costs associated with distance from subspecialty centres and costs associated with institutions' specialization, that will be funded separately.

Tariffs should also take quality into account in order to recognize institutions' efforts to establish or maintain best practices.

■ A gradual implementation

The new funding method for surgeries must be implemented gradually.

The Expert Panel proposes that the first year the new program be a simulation year. Tariffs would be announced to institutions after consultation. Funding for surgeries would continue to be allocated using the current rules.

During this simulation year, the Ministère de la Santé et des Services sociaux could develop information systems and use the required clinical and financial data to monitor the impact of the tariffs on the system in general. During this year, the Ministère de la Santé et des Services sociaux, agencies and institutions could also familiarize themselves with the parameters of the program and implement the new clinical and financial information systems.

The allocation of funding for surgeries based on the number of surgeries and tariffs would come into effect in the second year of the program's implementation.

□ Taking quality and access to care into account

Taking quality and access to care into account marks a shift from activity-based funding to performance-based funding. It will involve the use of indicators that influence tariffs and consequently the payments made to institutions.

The Expert Panel has identified the indicators it recommends for measuring quality of care and access to services, such as wait times, readmission rates after 30 days and infection rates.

A mechanism would be introduced in the payment institutions receive for each surgery: the payment would be adjusted according to whether or not certain targets have been achieved in relation to the indicators. Other indicators would be used to evaluate clinical processes and monitor appropriateness.

The Expert Panel recommends that institutions use a tool that will allow them to easily compare their respective quality of care results.

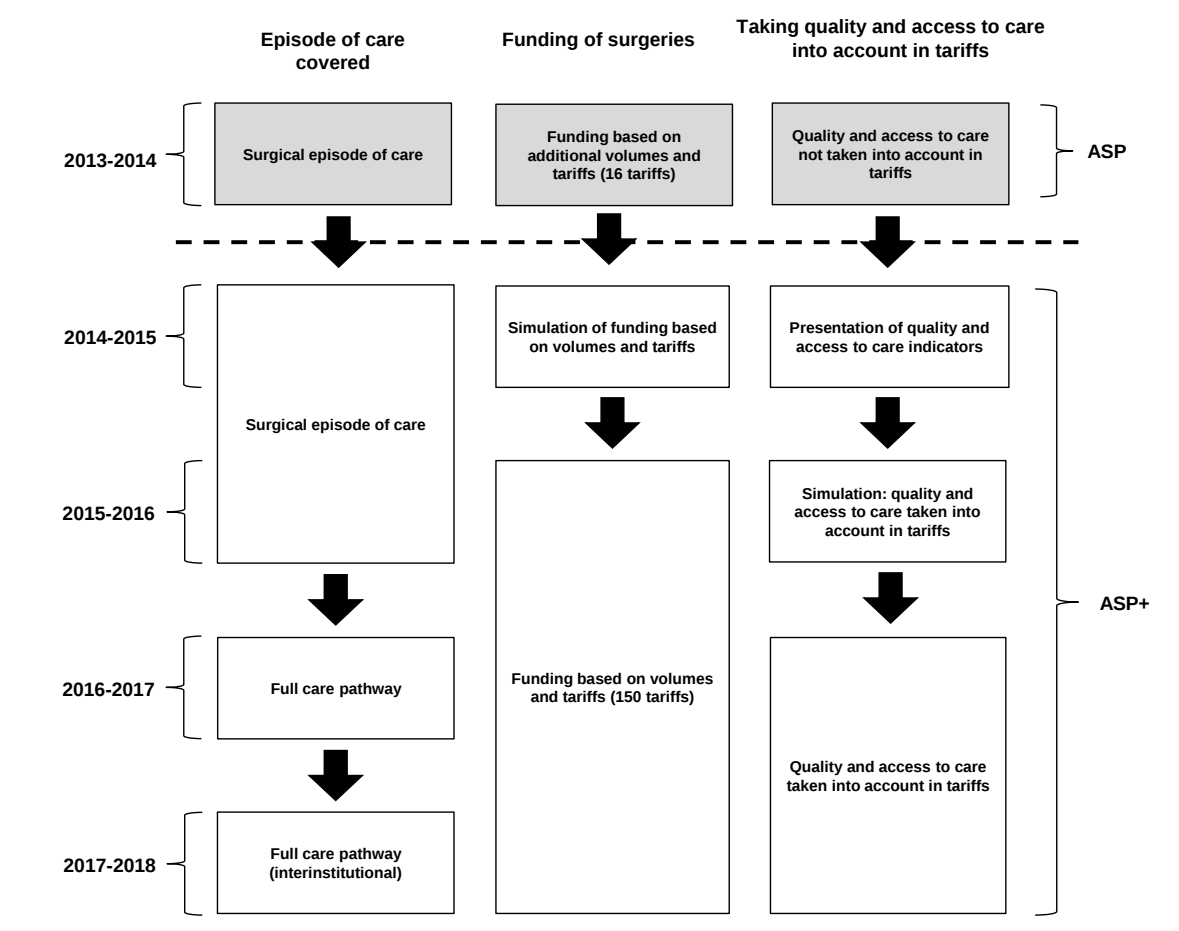
■ Three stages

The Expert Panel proposes taking quality and access to care into account in three stages.

- In the first year of the program's implementation, the indicators used to measure access and quality would be presented and institutions' results for each of these indicators published.
- In the second year of the program's implementation, the impact of the indicators would be simulated. Institutions would be informed of the financial implications the results obtained for the quality and access indicators would have had if they had been taken into account.
- Quality of care and access to care would be taken into account starting in the third year of the program's implementation.

ILLUSTRATION 3

Summary of the gradual implementation of the new Access to Surgery Program (ASP+)



Note: As mentioned previously, clinical and financial information systems will be developed simultaneously and the systems and databases used for the ASP+ will evolve over time. However, since this will not take place according to a fixed schedule, it is not presented in the illustration.

❑ The development of clinical and financial information systems

The Expert Panel recommends adopting a pragmatic approach to information requirements by starting with data that is available immediately and simultaneously developing clinical and financial information systems.

The problems with access to data are twofold:

- the data are missing from existing databases;
- the data exist, but access to files is limited because they contain personal information.

The issue of protection of personal information must be addressed. The Ministère de la Santé et des Services sociaux must comply with the requirements of various laws and regulations governing access to data. These requirements restrict the use of clinical and financial data that would enhance our understanding and management of the health care system.

The challenge will be to strike a balance between the protection of personal information and the need to improve access to data in order to serve the patient better.

❑ The communication and collaboration strategy

The successful implementation of patient-based funding for all surgeries requires a communication and collaboration strategy. All the stakeholders concerned must share a common vision. Everyone must have a clear understanding of the parameters. The network must adopt the program. Stakeholders must have the necessary tools to play their role fully.

The Expert Panel recommends:

- consulting the network so that it can collaborate in developing some of the program's parameters;
- implementing a communication and training strategy to distribute relevant information about the program and the implementation process throughout the network.

❑ Monitoring and evaluation

The implementation of the new program must be accompanied by a strategy to monitor and evaluate results.

The Expert Panel recommends that this strategy be developed by the Ministère de la Santé et des Services sociaux after consulting the various network stakeholders.

The monitoring strategy should include:

- an evaluation of the clinical and financial consequences of the new program;
- procedures to allow institutions to make comparisons among themselves;
- self-evaluation procedures for institutions.

❑ **Managing the risks**

As mentioned previously, the introduction of a patient-based funding method involves certain risks that must be managed.

To do so, the Expert Panel recommends a number of initiatives:

- promote appropriateness and quality of care;
- give the Ministère de la Santé et des Services sociaux and institutions the means to adapt;
- maintain budget control;
- manage operational risks, namely, the risk of upcoding and the risk of cherry picking.²⁹

²⁹ See page 71.

❑ The Expert Panel's recommendation

Recommendation 5

The Expert Panel recommends that the new Access to Surgery Program apply to all surgeries performed in institutions with an annual surgical production volume of at least 1,000 weighted cases.

The implementation of patient-based funding would gradually apply to the patient's entire pathway so that the new funding method would cover the full care pathway in 2017-2018.

Funding for an institution's surgical activities would be based on the number of surgeries performed and the provincially determined tariff for each type of surgery. To this end, the Expert Panel recommends specific terms and conditions for:

- starting case costing;
- defining the new program's budget envelope;
- setting the tariff for each group of surgeries.

The new funding method must be implemented gradually.

In order to take quality and access to care into account, the Expert Panel proposes a number of indicators. The application of these indicators should also be introduced gradually.

The Expert Panel recommends adopting a pragmatic approach to the development of clinical and financial information systems.

The Expert Panel describes the communication and collaboration strategy that must accompany the implementation of the new program.

The Expert Panel recommends a strategy for monitoring and evaluating results.

The Expert Panel recommends a number of initiatives to manage the risks associated with the implementation of patient-based funding for all surgical activities.

5. QUALITY OF CARE: AN APPROACH TO REWARD BEST PRACTICE

The Expert Panel proposes a second application of patient-based funding, focusing on quality of care.

- The Québec Colorectal Cancer Screening Program already promotes best practices.
- Drawing on the Québec Colorectal Cancer Screening Program, the Expert Panel proposes extending the initiative already underway to the entire province of Québec and making it a funding approach that truly promotes best practices.
- At the same time, the government would extend best practice funding to other priority clinical sectors.

The Expert Panel carried out a detailed review of the steps to be taken to implement this proposal. The result of this review is presented in Paper 2, a companion document to the report.

A recapitulation of the characteristics of the pilot project as well as the main proposals that resulted from this review are presented below.

5.1 The Québec Colorectal Cancer Screening Program

In Québec, an initiative that promotes best practices has already been undertaken with the Québec Colorectal Cancer Screening Program.

□ The program implemented in 2010

The program was implemented in 2010 in response to a number of reports that called into question the quality of screening procedures used for this type of cancer at the time. In 2008, the Institut national de santé publique du Québec (INSPQ) had published a report on the numerous deficiencies in procedures observed in institutions. In 2010, the Collège des médecins had identified less-than-optimal practices and published standards of practice for colonoscopy.³⁰

■ Standards

The program implemented in 2010 identified eight pilot sites where institutions committed to complying with criteria regarding the availability of data that would be used to monitor performance and practices.

The Direction québécoise de cancérologie coordinated the work of an expert panel charged with developing "clinical practice standards for colonoscopy."

The program also led to the definition of organizational standards regarding the optimal clinical pathway for people who require a colonoscopy as well as quality assurance mechanisms.

³⁰ COLLÈGE DES MÉDECINS DU QUÉBEC, *Normes d'exercice en matière de coloscopie*, Vol. 50, No. 2, 2010, p. 15.

■ Financial support

Investments were made to computerize endoscopy units. Computerization was essential to enable the data entered by clinicians to be used to produce and calculate performance indicators. The investments allocated to computerize endoscopy units amounted to a little over \$730,000,³¹ or an average of \$91,250 per institution.

Institutions also received financial support to catch up on their waiting lists. Participating institutions were eligible for activity-based funding for volumes of activities exceeding a certain threshold and at a tariff equal to 50% of the unit cost of colonoscopy in order to speed up the process of treating cases with excessive wait times.

To date, the sums associated with this additional funding for the eight participating pilot sites amount to a little over \$608,000³² for 2012-2013, which represents nearly 6,755 colonoscopy cases out of the total 45,000 performed.

This financial support was justified by the savings generated by the initiative as a whole. For example, a report³³ published by the INSPQ in 2008 describes the findings of a study conducted in a number of European countries.³⁴ Only 46% of colonoscopies in referred patients were appropriate or necessary, while 27% of referrals had an uncertain indication and 27% of cases had an inappropriate indication. These findings are important, since they identify significant proportions of inappropriate colonoscopies, which could compromise patient safety and generate unwarranted expenditures.

³¹ Data from the Ministère de la Santé et des Services sociaux.

³² Ibid.

³³ INSTITUT NATIONAL DE SANTÉ PUBLIQUE DU QUÉBEC, *Pertinence et faisabilité d'un programme de dépistage du cancer colorectal au Québec*, 2008, p. 43, http://www.inspq.qc.ca/pdf/publications/882_PertinFaisPrograCcColo.pdf.

³⁴ J.K. HARRIS, F. FROELICH, J.J. GONVERS, V. WIETLISBACH, V. BURNAND and J.P. VADER, "The Appropriateness of Colonoscopy: A Multi-center, International, Observational Study", *International Journal for Quality in Health Care*, Vol. 19, 2007, pp. 150-157.

❑ Not a patient-based funding program to enhance quality

The Québec Colorectal Cancer Screening Program was therefore accompanied by targeted financial support, but was not a patient-based funding program to enhance quality.

The program did not include a mechanism for allocating resources on the basis of results in order to promote best practices. It did, however, include targeted tools to achieve certain quality standards.³⁵

❑ Convincing results

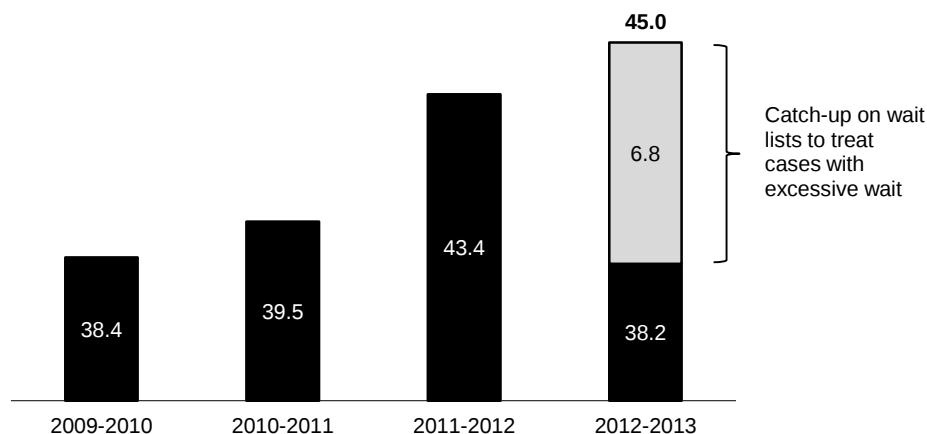
■ Increased volumes

At the eight pilot sites, colonoscopy volumes increased between 2009-2010 and 2011-2012, from 38,400 to 43,400. Gains in appropriateness could therefore cover some of the costs incurred.

However, a decrease in the number of colonoscopies is anticipated, since many of the colonoscopies performed in 2012-2013 were part of a temporary catch-up process to quickly treat cases with excessive wait times that were still on waiting lists.

GRAPH 11

Changes in volumes of colonoscopies between 2009-2010 and 2012-2013 (in thousands)



Sources: Data from the Régie de l'assurance maladie du Québec and the Information System on Mechanisms of Access to Specialty and Subspecialty Services (SIMASS).

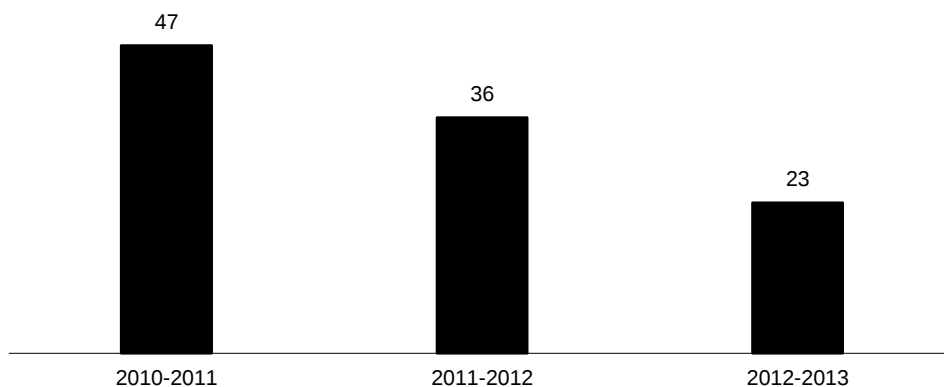
³⁵ See Paper 2, *Quality of care: an approach to reward best practice*, page 32.

■ Shorter wait times

In the same institutions, the wait time for a colonoscopy was halved between 2010-2011 and 2012-2013, decreasing from 47 days to 23 days, according to partial data.

GRAPH 12

Changes in wait times for a colonoscopy between 2010-2011 and 2012-2013 (in days)



Source: Partial data from the Régie de l'assurance maladie du Québec and the Information System on Mechanisms of Access to Specialty and Subspecialty Services (SIMASS).

❑ The Expert Panel's recommendation

Based on the experience of the Québec Colorectal Cancer Screening Program, the Expert Panel proposes using patient-based funding to reward best practice and thus stimulate efforts to improve quality of care. The existing program must therefore be extended.

The Expert Panel proposes extending the program to all endoscopy units that meet Québec's quality standards and allocating funding to the existing eight pilot units based on performance indicators that can be changed into best practice funding in the future.

The Expert Panel recommends extending best practice funding to other priority clinical sectors selected on the basis of a number of criteria.

Recommendation 6

The Expert Panel recommends that the government apply patient-based funding in a second priority area, focusing on quality of care.

The government would expand the Québec Colorectal Cancer Screening Program and allocate funding based on best practices.

The government would extend best practice funding to other priority clinical sectors as part of a best practice funding program. The priority clinical sectors would be selected based on the scope of the desired outcomes.

5.2 The province-wide deployment of the Québec Colorectal Cancer Screening Program

The Expert Panel recommends deploying the Québec Colorectal Cancer Screening Program throughout Québec and gradually changing the program to a best practice funding program.

The Expert Panel carried out a detailed review of the steps to be taken to implement this proposal. The result of this review is presented in Paper 2, a companion document to the report. The main proposals that resulted from this review are presented below.

□ Upgrading

The existing program is applied at eight pilot sites. The Expert Panel recommends that all endoscopy units in Québec benefit from the same program and thus be upgraded.

Based on information received from the Ministère de la Santé et des Services sociaux, the Expert Panel believes that this upgrading would generate substantial financial savings in the medium term, notwithstanding the initial investments for information systems and employee training.

Financial and health benefits would be obtained through a combination of a screening test,³⁶ limiting colonoscopies to appropriate cases, and the delivery of more efficient treatment by using best practices.

Savings generated by efficiency gains would improve access to colonoscopy, shorten the lengthy waiting lists that are still found in some regions of Québec and allow resources to be reallocated to other priority areas of health care.

□ Activity- and performance-based funding

The Expert Panel recommends that funding for colonoscopies performed in the eight pilot institutions that currently benefit from the Québec Colorectal Cancer Screening Program be based on performance.

- Funding would be calculated based on volumes of activities and an average cost tariff.
- The tariff would be adjusted to take into account the results obtained with respect to performance indicators.

The Expert Panel recommends improving knowledge of colonoscopy costs so that case costing can be used for all institutions.

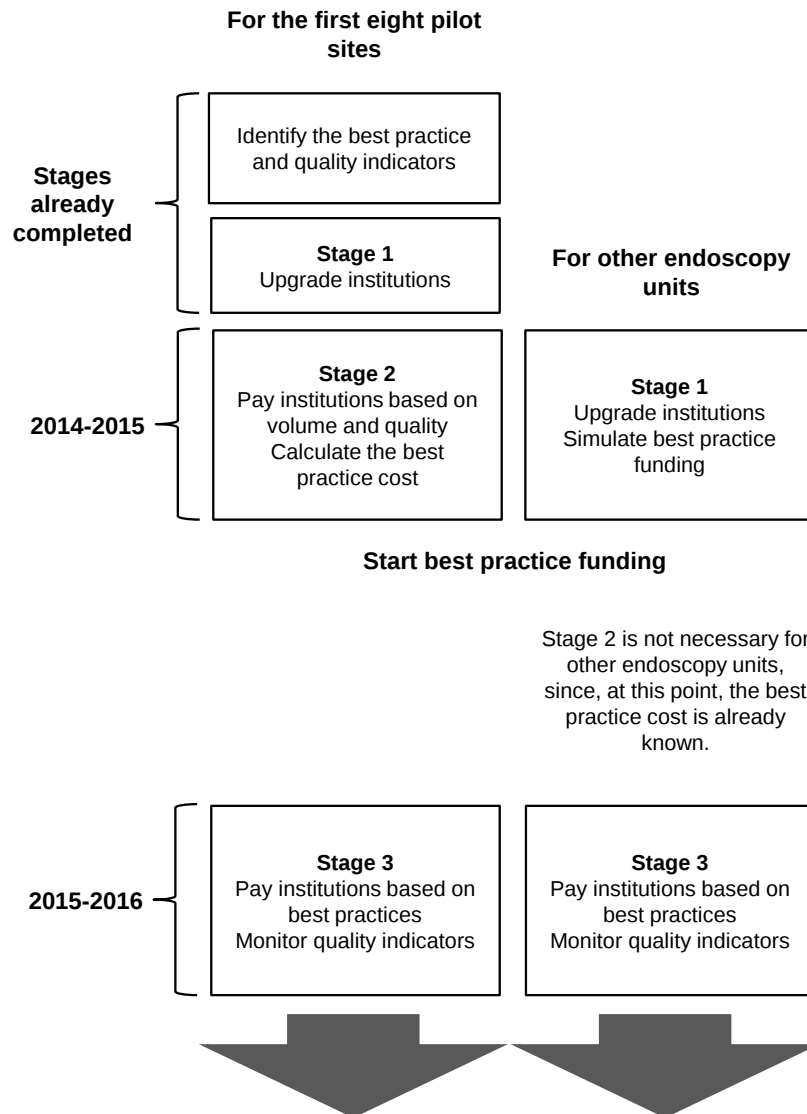
³⁶ The immunochemical fecal occult blood test (iFOBT), also called a fecal immunochemical test (FIT), is an advanced screening test that is economical and easy to use. The iFOBT means that patients who do not require a colonoscopy as a first-line investigation do not have to have one, thus doing away with unnecessary testing. Only patients with a positive result on the iFOBT will require a colonoscopy.

❑ Best practice tariffs

The Expert Panel recommends modifying the program so that funding for colonoscopies is based on best practice tariffs.

ILLUSTRATION 4

Summary of the proposal for colonoscopy



5.3 A best practice funding program

At the same time the Québec Colorectal Cancer Screening Program is deployed, the Expert Panel recommends that the government establish a best practice funding program in other priority clinical sectors.

❑ The objective

The best practice funding program would be based directly on the Québec Colorectal Cancer Screening Program and on best practice funding models around the world that were studied by the Expert Panel.

The objective would be to identify clinical practice priorities for Québec as a whole and to promote their widespread application by replacing global budgets with best practice tariffs.

The sustainability of the health care system depends largely on improving all aspects of quality of care, namely, appropriateness, efficiency and the patient's experience. The purpose of the Expert Panel's recommendation is to use financial levers to encourage the rapid adoption of best practices and the use of interventions that would be inexpensive to implement and could take effect in a few years.

To implement evidence-based practices more quickly and systematically, a concerted effort is necessary. This effort must allow the right stakeholders to work together to provide committed clinical and administrative leadership.

The goals and objectives of the best practice funding program would be as follows:

- systematize the selection of interventions that offer the greatest potential for enhancing value by using agreed-upon criteria to identify priority clinical sectors;
- include priority clinical sectors in the multi-year plan for the implementation of a best practice funding program, supported by project management at the Ministère de la Santé et des Services sociaux;
- identify lessons learned across activity sectors and from the experiences undertaken in order to develop the skills needed to identify and disseminate best practices throughout Québec's health care system and among the stakeholders concerned;
- enable the health care system to develop strengths in all its organizations and at all levels and ensure their harmonization;
- achieve more significant outcomes than those obtained by sporadic and isolated experiences in order to initiate a change in culture.

These goals and objectives require leadership on the part of the Ministère de la Santé et des Services sociaux to promote the adoption of best practices supported by funding.

❑ **Criteria for selecting clinical services**

The program would apply to a limited number of interventions, identified each year, with implementation extending over a continuous period and comprising three stages.

The Expert Panel has defined a number of criteria for selecting priority clinical sectors for the application of the best practice funding program.

These criteria include:

- the importance of the clinical sector in terms of the number of interventions and patients concerned;
- the presence of significant variations in practices;
- the impact on health outcomes;
- the potential for improving the patient's experience;
- rigorous evidence from scientific research;
- clinical directors' level of motivation and commitment;
- the existence of a cost-benefit analysis to assess the expected benefits based on limited costs.

❑ **Clinical leadership**

The successful dissemination of best practices depends on clinical leadership committed to the objective. As for the Québec Colorectal Cancer Screening Program, we must be able to rely on effective clinical and administrative leadership and a multidisciplinary team that has a sound understanding of health care delivery.

The Expert Panel recommends that each priority clinical sector have its "clinical and administrative leaders", supported by an efficient, cohesive multidisciplinary team.

❑ A cost-benefit analysis

The interventions selected should have the potential to improve care and a positive cost-benefit ratio. A convincing cost-benefit analysis illustrating the anticipated benefits would have to be carried out.

The goal is to provide a document that is more quantitative than qualitative, based on rigorous data, to demonstrate the potential gains and present performance targets against which the project's success could ultimately be evaluated.

A review of the research literature for the clinical activity in question, including patient experience, would have to be carried out, enabling us to obtain data on the health outcomes of the patients treated.

We must be able to make a case for change that includes an analysis of the anticipated costs and benefits based on costs, volumes and the likely impact of the implementation of best practices. From now on, in a context where resources are scarce, sectors that wish to benefit from investments will also have to take the "efficiency" factor into account.

□ The process proposed

The Expert Panel proposes implementing the program in three stages.

■ Stage 1

In stage 1, a cohort of early adopters would initiate the project and start to upgrade procedures based on best practice guides and the standards and targets established.

Early adopters could benefit from temporary implementation funding in order to support the adoption of standardized clinical and financial collection data systems. Early adopters could also be eligible for incentive funding, for example, to reduce waiting lists. This financial assistance would be temporary.

During this stage, the project's progress could be tracked using a set of indicators.

■ Stage 2

In stage 2, global funding would be replaced with performance-based funding in order to determine the best practice cost.

The early adopters would have had time to get accustomed to practice standards and targets. The early adopters would replace the global funding envelope with performance-based funding.

As best practices are implemented, the data would provide an increasingly accurate indication of the difference between the average starting cost and the "best practice cost."

■ Stage 3

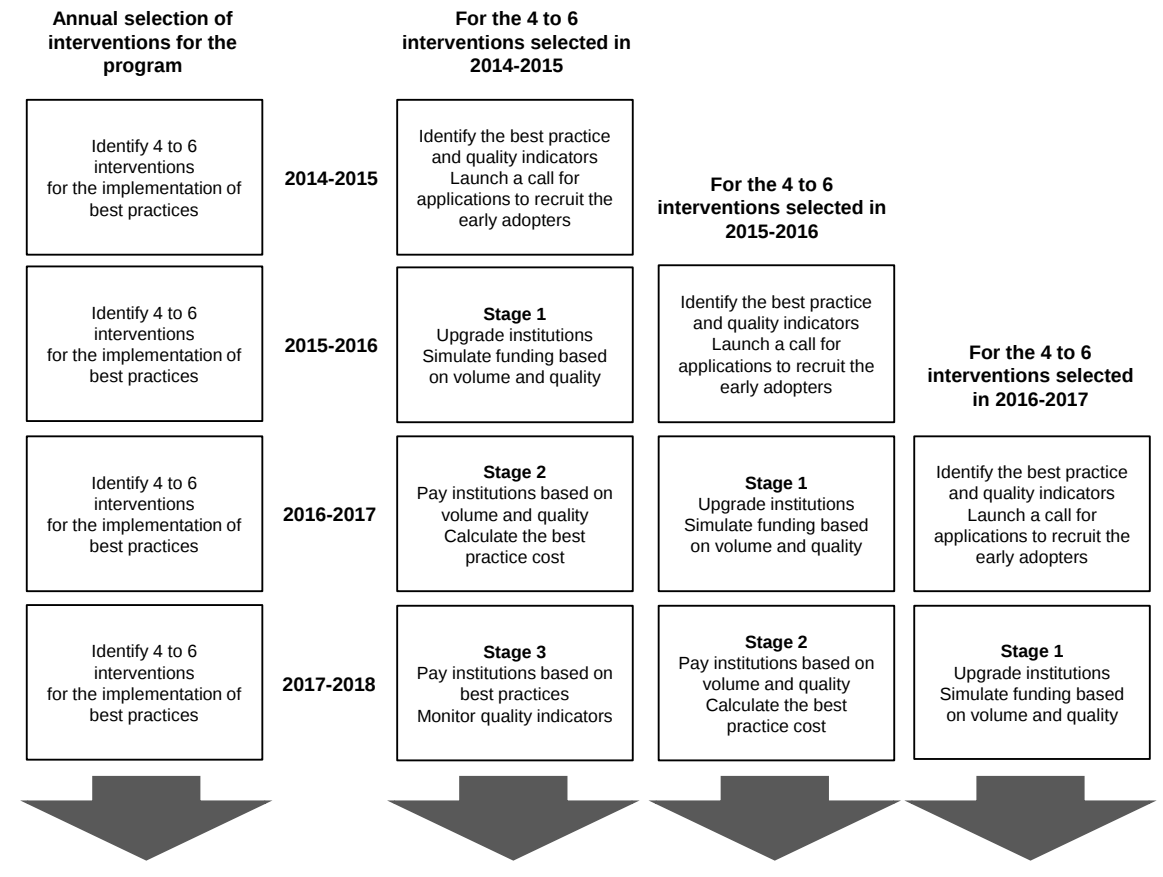
The third and final stage would be devoted to effectively implementing best practice tariffs. This stage would begin once enough data has been collected to define a best practice tariff.

The objective would be to adopt best practices, ensure they are applied and check that the protocol is being followed.

Quality, volumes and costs would still have to be monitored. However, we must avoid introducing an audit process that is too cumbersome. Instead, we should focus on monitoring specific institutions whose performance relative to indicators deviates from the desired outcomes.

ILLUSTRATION 5

Summary of the recommended approach: a best practice funding program



❑ The Expert Panel's recommendation

Recommendation 7

The Expert Panel recommends that the implementation of patient-based funding have the clear objective of improving quality of care.

The Expert Panel recommends that the best practice funding program rely on clinical leadership, structures, processes and skills that will ensure that the best practices concerned are spread and supported by funding.

The Expert Panel recommends developing a plan for best practice funding in consultation with clinicians and experts.

The Expert Panel recommends that a significant number of clinical sectors be included in the program each year based on the scope of the desired outcomes and in accordance with the criteria proposed.

Two examples of best practice funding

Best practice tariffs in England

On April 1, 2010, England's National Health Service (NHS) replaced the average cost with an optimal cost in its funding system. The optimal cost is calculated based on medical best practices for certain health problems and types of care (including cataracts, hip fractures, stroke, renal dialysis and cholecystectomy). This tariff is based on the cost of the most efficient practice. According to the NHS, this best practice tariff can be higher or lower than the average cost and depend on certain requirements.

There is no single calculation method. Tariffs are calculated based on the specific characteristics of each intervention, recognized best practices and the availability of data on quality.

The criteria for selecting interventions are based on:

- a high incidence, that is, a high volume, large variations in practices and a significant impact on health outcomes;
- the availability of evidence on what constitutes best practice;
- broad expert consensus on the characteristics of best practice.

As a rule, the tariff should apply not only to the surgical procedure, but also to stages of management “upstream” and “downstream”, from diagnosis to postoperative follow-up. For example, in cataract treatment, the best practice is to carry out all preoperative assessments at the same time, treat in day surgery and carry out all follow-up assessments on the same day, two weeks after the procedure.

Two examples of best practice funding (cont.)

Quality-based procedures in Ontario

In Ontario, quality-based procedures reimburse care providers for the types and quantities of patients institutions treat using evidence-informed tariffs that are adjusted for case weight and quality of care.

Experts develop best practice clinical pathways for each "quality-based procedure" and must set a tariff based on the actual costs of each intervention. To support the identification and prioritization of quality-based procedures, an evidence-based quality initiatives framework with the following four principles was developed: practice variation, availability of clinical data, feasibility of change and infrastructure for change.

For 2012-2013, the tariff for quality-based procedures was the 40th centile of costs incurred on average over a three-year period by participating institutions. Over time, this tariff will be replaced with a "best practice tariff" which will more explicitly reflect quality of care considerations.

Tariffs must fund the entire care pathway. If we take the example of a total knee replacement, the patient will need surgery and rehabilitation. Quality-based procedures specify the payment each health care provider will receive for his contribution to the patient's care pathway.

At present, the ten procedures are hip replacement, knee replacement, cataract surgery, chronic kidney disease services, gastrointestinal endoscopy, chemotherapy – systemic treatment, stroke management, congestive heart failure management, the treatment of chronic obstructive pulmonary disease and vascular procedures (non cardiac). Over the next three years, other procedures will be added.

Sources: For a more detailed evaluation of outcomes, see: R. MACDONALD, S. ZAID, S. TODD, F. KONTEH, K. HUSSAIN, J. ROE, T. ALLEN, E. FICHERA and M. SUTTON, *A Qualitative and Quantitative Evaluation of the Introduction of Best Practice Tariffs*, London, U.K., Department of Health, 2012, 81 p.

South East Local Health Integration Network, *Patient-Based Funding, Quality-Based Procedures*, 2012, [[http://www.southeastlin.on.ca/uploadedFiles/Public_Community/Health_System_Funding_Reform/HSFR%20QBP%20presentation%20for%20HASP%20-%2012Oct%2010%20\(3\).pdf](http://www.southeastlin.on.ca/uploadedFiles/Public_Community/Health_System_Funding_Reform/HSFR%20QBP%20presentation%20for%20HASP%20-%2012Oct%2010%20(3).pdf)].

Ministry of Health and Long-Term Care, *2013-2014 Quality Improvement Plan: Guidance Document for Ontario's Health Care Organizations*.

6. THE MANAGEMENT OF PEOPLE WITH CHRONIC DISEASES: A FUNDING METHOD THAT PROMOTES THE INTEGRATION OF CARE

The Expert Panel proposes a third application of patient-based funding, namely, in the management of patients with multiple chronic diseases.

- Chronic disease is a real challenge for the health care system. The treatment of chronic disease will be the source of considerable clinical and financial pressure on the health care system. This pressure must be anticipated and far-reaching changes made to how patients with chronic diseases are treated.
- The Expert Panel recommends that the government use patient-based funding to support and promote the integration of services for people with chronic diseases in order to expand community and home care services.

The Expert Panel commissioned a paper³⁷ on the management and funding of care for people with chronic diseases. This paper was published at the same time as the report.

³⁷ Madeleine BRETON, *Avis sur le financement de la prise en charge des maladies chroniques*, [Document technique], December 2013.

6.1 The challenge of chronic disease

As in all developed countries, Québec is seeing a rapid increase in chronic diseases.

❑ WHO sounds the alarm

As far back as the early 1990s, the World Health Organization sounded the alarm regarding the rapid increase in chronic diseases and their consequences, both for those affected and for the health care systems of the countries concerned.

The rise in the number of people with chronic diseases is partly due to increased life expectancy and population aging. It also depends largely on lifestyle.

The Institut de la statistique du Québec reported that in 2005, significant proportions of people had two or three or more chronic diseases. It was observed that the percentage of people with multiple chronic diseases – or comorbidities – increases with age.

While only 2.4% of people aged 25-44 years reported having two or more chronic diseases, this proportion is 14.8% in those aged 45-64 years, 38.6% in those aged 65-79 years and 48.6% in those aged 80 years and over. Comorbidity has a direct effect on the organization of services, since people with several concomitant problems are usually less independent and require a higher level of care.

TABLE 5

Proportion of people with multiple chronic diseases by age group, in 2005, in Québec
(as a percentage)

	2 or more chronic diseases	3 or more chronic diseases
25-44 years	2.4	0.7 ⁽¹⁾
45-64 years	14.8	4.6
65-79 years	38.6	14.0
80 years and over	48.6	18.5

(1) Rough estimate provided for information purposes only.

Source: Institut de la statistique du Québec, *Zoom santé*, March 2008.

Chronic diseases
Chronic diseases refer to non-infectious diseases that develop slowly, lead to disability and can be long lasting.
Chronic diseases are often incurable. However, many are preventable.

❑ The impact on the health care system

The increasing prevalence of chronic diseases has a direct impact on the health care system.

People with chronic diseases can become frequent health care system users if they are unable to find an appropriate response to their situation. In Québec, it is estimated that circulatory system diseases are responsible for 90,000 hospitalizations annually.

In 2010-2011, in Québec, 36% of people with at least one long-term health condition consulted a physician three or more times.³⁸ Around 17% of people with at least one long-term health condition who have a family physician needed but were unable to obtain a consultation over a 12 month period.

■ A triple challenge

In a context where people are living longer with multiple chronic diseases, and where these people can rely on medical advances and new technologies, the challenge for Québec's health care system is threefold.

- Quality services must be provided to a growing number of people. Too often, professional interventions are piecemeal, with each clinician ignorant of what the previous clinician did.
- A new approach to service delivery must be adopted, moving away from what is found in traditional hospitals. The patient must be involved and be able to manage his own care. Primary care is of critical importance, the core element in the continuum of care in the community and at home. The patient needs timely access to integrated care rather than to separate professional procedures performed by individual practitioners. The goal is to provide him with an optimal, stable quality of life.
- Services must be of the highest quality possible and provided at the best cost possible to ensure the system's sustainability.

³⁸ INSTITUT DE LA STATISTIQUE DU QUÉBEC, *Enquête sur les limitations d'activités, les maladies chroniques et le vieillissement 2010-2011*, Vol. 4, 2013.

Living with chronic health conditions

Most health services have been designed around an acute care model. Long-term conditions raise different issues and need new ways of thinking and working.

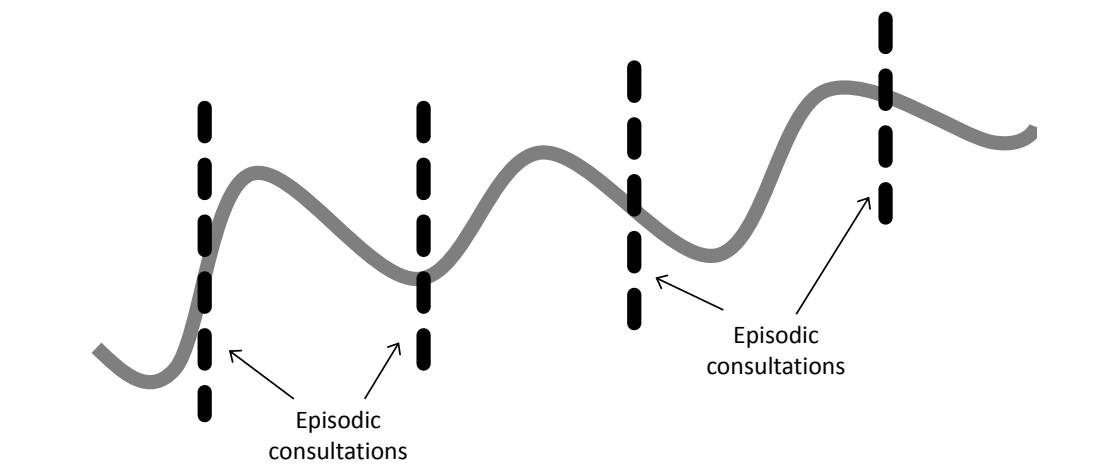
The diagram below shows what the daily life of a person with long-term conditions is like.

- The wavy line represents the ups and downs of daily life, when the person is managing their condition and their life.
- The vertical lines represent the contact points with health and social care.

This highlights two important factors:

- the contact with health care professionals is limited and represents only a small part of someone's overall life (three hours of health care versus 8,757 hours of self-care in a year);
- the contact with health care is often arranged at regular intervals, unrelated to real life events or the needs of the patient.

Daily life a person with long-term conditions



Source: NATIONAL HEALTH SERVICE, *Year of Care*, England, [Online], [<http://www.yearofcare.co.uk/challenge>].

❑ Initiatives in Québec

In Québec, various measures have been taken to address the rapid increase in chronic diseases.

- Health and social services centres (CSSSs), where health and social services are provided in a single facility, offer a range of programs and services delivered by professionals working in multidisciplinary teams who are very knowledgeable about the local population, its needs and the resources available.
- Family medicine groups and integrated network clinics offer interprofessional family medicine services to their patients.
- In spring 2012, the Ministère de la Santé et des Services sociaux published a framework for chronic disease prevention and management. This framework complies with the best practices described in the literature. It is based on an internationally recognized model, the Chronic Care Model.³⁹
- Chronic disease prevention and management programs have been implemented in several regions of Québec. Initiatives are underway in CSSSs and medical clinics, in particular in family medicine groups.

❑ Measures that will be inadequate

These measures will, however, not be sufficient to meet the challenge of chronic disease. Due to the lack of information systems, we do not have information about the people concerned, the needs to be met or the outcomes of the care currently provided.

Nor do we have data on the cost of treating chronic diseases. Nor are the costs of chronic disease management monitored or controlled.

There is no real system for managing patients with chronic diseases that allows the delivery of integrated services. The incentives associated with current funding methods do not support the integration of services. On the contrary, they encourage clinicians to work in isolation and in silos.

Funding based on global budgeting and fee-for-service payments for physicians thwart efforts in the health care network to improve chronic disease management.

³⁹ EH, WAGNER, "Chronic disease management: What will it take to improve care for chronic illness?", *Effective Clinical Practice*, Vol. 1, No. 1, pp. 2-4, September 1998.

Health Links in Ontario

Created in Ontario, Health Links put patients at the centre of the health care system with general practitioners helping them to navigate the network throughout their treatment. The Ontario government decided that action had to be taken to improve the quality of care provided to people with multiple long-term health conditions.

Building on the Northumberland PATH project, developed by the Change Foundation, the government aims to extend health networks across Ontario to serve the most vulnerable people with multiple chronic health conditions.

Through Local Health Integration Networks and Community Care Access Centres, Ontario's Ministry of Health and Long-Term Care encouraged health care networks to register and selected a cohort of early adopters that meet certain criteria:

- evidence of collaboration between the different sectors;
- at least 65% of the general practitioners in the area are willing to be part of the Health Link;
- a strong commitment to using electronic health records;
- the ability to identify patient cohorts with the most complex needs on their territory;
- the ability to track these cohorts.

The most important requirement is the ability to provide patients with an individualized care plan and ensure patients have regular access to a primary care provider.

While there are no financial incentives in the first stage of development of Health Links, the initiative is closely aligned with the other aspects of health funding reform in Ontario.

Sources: MINISTRY OF HEALTH AND LONG-TERM CARE, *Ontario's Action Plan for Health Care, The Year Two Progress Report*, January 2014, [http://www.health.gov.on.ca/en/ms/ecfa/healthy_change/docs/progress_healthychange_2yr.pdf] and a telephone interview with representatives of the Ministry of Health and Long-term Care.

The lessons to be learned from the treatment of chronic disease in other countries

By studying experiences in the treatment of chronic disease in other countries, we can identify a few key principles, all based on the chronic care model defined by Edward Wagner.

These principles are as follows:

- we must work in integrated service networks, mobilizing community resources to meet people's needs and encouraging people to become involved in their treatment;
- we must emphasize patient assessment so that patients can receive the most appropriate service for their condition;
- the more complex a patient's condition, the more emphasis must be placed on coordinated care, case management and the availability of treatment 24 hours a day, 7 days a week;
- we must emphasize the work of multidisciplinary teams of care providers and the achievement of outcomes with a given patient group;
- these teams must adjust their services to patient needs, emphasize the role of the community and support patients' self-management of their illness;
- these teams are more efficient if they are accountable for the costs of their services.

❏ The Expert Panel's recommendation

The Expert Panel proposes using patient-based funding to promote the integration of care in the treatment of chronic diseases.

Patient-based funding is weighted based on patients' risk profile and resources are allocated based on anticipated quality of care and cost outcomes. This type of funding would allow Québec to finance care for people with chronic diseases while encouraging the development of effective, efficient services.

On a practical level, the Expert Panel proposes that the government prepare, experiment with and evaluate the formation of consortia of physicians and other health care professionals.

These professionals would commit to providing quality care at the lowest possible cost to people with multiple chronic diseases whose condition is unstable.

Recommendation 8

The Expert Panel recommends that the government apply patient-based funding in a third priority area, namely, the management of patients with chronic diseases, in order to promote the integration of services.

The Expert Panel recommends that the government start with concrete experiments accompanied by the necessary support.

The government would implement a program to promote the formation of consortia of physicians and other health care professionals to manage people with multiple chronic diseases whose condition is unstable.

Funding of these consortia would be weighted based on the patients' risk profile and resources would be allocated based on outcomes.

6.2 Applying patient-based funding to chronic disease management

The Expert Panel carried out a practical review of the steps to be taken to apply patient-based funding to chronic disease management in order to promote the integration of services.

The proposals that resulted from this review are presented below.

❑ Put the starting conditions in place

In Québec, the only patient characteristics we have are those taken from epidemiological data calculated for very large population groups.

■ Data about people

To provide appropriate monitoring that ensures the quality of services and allows costs to be monitored, much more detailed data is required, such as:

- the number of people with chronic diseases and multiple chronic diseases in a given territory;
- the number of these people with complex needs and an unstable condition.

This information can be made available in existing databases, but will have to be validated regionally and locally. In all cases, we must agree on what is meant by "patients with multiple chronic diseases whose condition is unstable" and define the criteria used to classify them.

■ The services that will be provided

Once the patients have been identified, we must identify the services that will be provided and at what cost. This should be done in collaboration with clinicians, physicians, social workers and nurses.

Best practice guidelines could be used as a guide while promoting the autonomy of people who need care.

■ The target outcomes

The approach taken must allow the target outcomes for patients and the system to be defined along with the indicators that will be used to measure these outcomes.

The work carried out by INESSS, as well as follow-ups carried out in other societies, will help when it comes to selecting indicators. It will be important to develop information systems that can report the target outcomes in a timely manner.

A description of the current situation (patient groups, services that will be provided and costs) and the ability to track the achievement of target outcomes are essential steps to improve quality and control costs.

❑ **Form health care consortia**

The aim of forming health care consortia is to make the teams that manage patient groups jointly responsible for achieving the target health outcomes, while controlling costs.

To cover all the aspects of the services required by patients with multiple chronic diseases, a consortium of different partners with strong primary care representation is recommended. This consortium could include, for example, a CSSS, a family medicine group, a specialized medical clinic and community organizations.

Since they share responsibility for outcomes, the members of the consortium will have to develop clinical and administrative governance mechanisms, that is, rules to ensure quality of care and coordinate the administration of the consortium.

❑ **Develop and introduce financial incentives that promote integration**

In jurisdictions where financial incentives are based on performance, a contract is drawn up between care providers (here the consortium, by the person responsible for administrative coordination) and a payer organization which, in Québec's system, could be the regional health and social services agency or the CSSS. The contract sets out the target outcomes, the measures that will be taken and the financial arrangements that will support the achievement of these outcomes.

Different options are possible to ensure the funding has a positive impact.

- Financial bonuses can be awarded for achieving target outcomes. When performance monitoring indicators have been validated and are sufficiently reliable, a financial bonus could be awarded to consortia that perform well.
- Per capita funding can be used. A portion of the health care system's funding could be allocated on a per capita basis based on the weight of the patient type served.

These or other arrangements will allow funding to be used to support the target outcomes. Given the increasing prevalence of chronic diseases, aiming for and monitoring quality outcomes are essential.

❑ **Adopt a specific work plan**

To ensure the project is a success, the Expert Panel proposes a work plan comprising three phases.

■ **Phase 1**

A first, "preliminary" phase to:

- profile the patient types to be served, define services, develop classification tools and estimate costs;
- develop test projects, in particular with respect to procedures for the formation of consortia and patient registration, governance and reporting mechanisms as well patient-based funding models that encourage the integration of care and achievement of outcomes.

■ **Phase 2**

A second phase to conduct practical tests with the formation of consortia and allocation of funding based on performance measured against the parameters identified in the preliminary phase.

■ **Phase 3**

A third phase to measure and evaluate outcomes, make any necessary corrections and agree on the conditions for the gradual implementation of the model.

■ **An initiative that is already underway elsewhere**

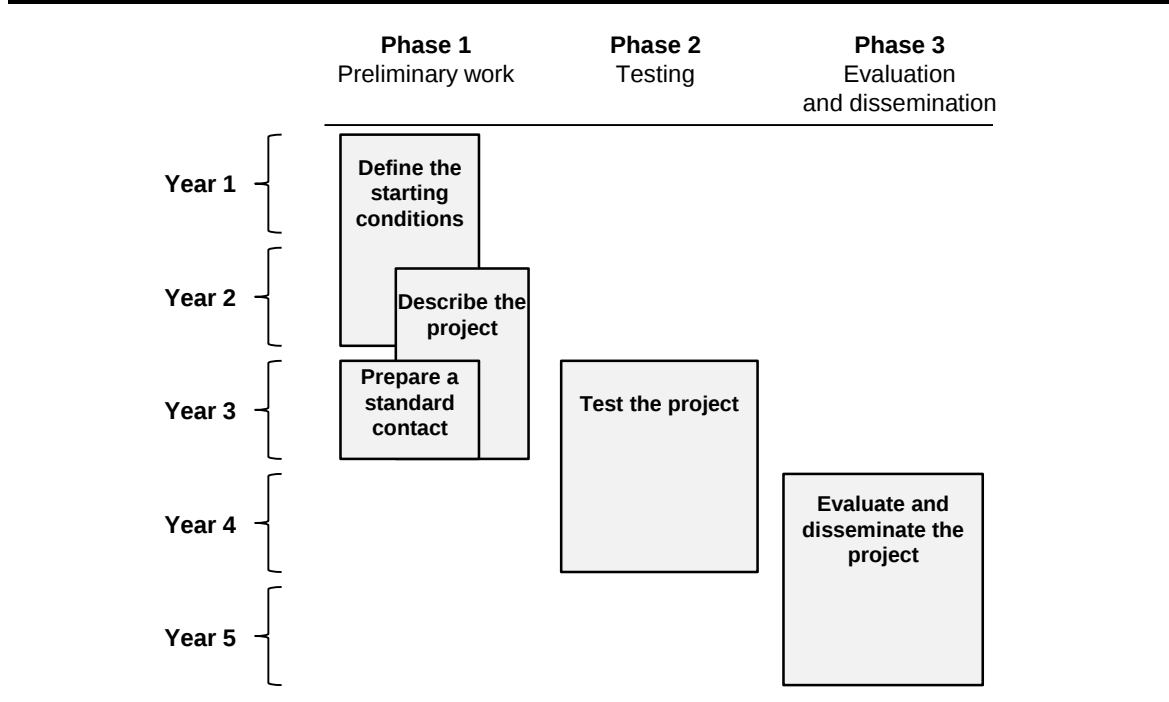
The initiative proposed may seem ambitious, but is already on the agenda of many jurisdictions, both in Canada and around the world.

Since quality and efficiency have become issues of sustainability for health care systems, the implementation and monitoring of an efficient system to manage people with chronic diseases are being improved everywhere.

However, we must take the time to build the project and test it rigorously. A five-year calendar seems necessary.

ILLUSTRATION 6

Five-year work plan for establishing consortia for the treatment and support of people with multiple chronic diseases



■ Clearly define the starting conditions

During the preliminary work, the starting conditions must be defined. This involves:

- interesting physicians to participate in preparing and testing the project and determining the patient groups that will be served;
- developing patient classification tools, defining the services that will be included in the program as well as their costs and profiling the current costs of chronic disease management and those for people with multiple chronic diseases;
- defining a single funding method that will support the achievement of outcomes.

■ Clearly describe the project

It is also important to clearly describe the project. This involves:

- identifying target outcomes (in the form of health and cost reduction indicators) and patient registration procedures;
- identifying clinical and administrative governance mechanisms and developing a tariff structure for management that is linked to performance and other funding methods currently in use;
- preparing financial and contractual monitoring and identifying reporting mechanisms.

At this point, a standard contract that complies with clinical, legal and financial requirements can be drawn up and approved by physicians and others professionals.

During the testing phase, the formation of consortia will allow performance-based funding to be introduced and its basis and terms and conditions defined.

During the final evaluation and spreading phase, outcomes will be evaluated and any necessary adjustments made; the results of the testing phase will then be publicized and the conditions for the project's gradual implementation agreed upon.

England's Year of Care program

In England, the health department implemented the Year of Care program to introduce individualized care planning as part of routine management for people with multiple long-term conditions. The program covers the costs of a year's worth of care for people with long-term conditions, with care and services adjusted to people's needs and choices.

The Year of Care program has two components:

- care planning: communication, negotiation and decision making between the patient and health professionals regarding care management;
- commissioning: appropriate commissioning of local services to support choices made by patients with their health professionals in planning care, while encouraging self-management and health maintenance.

The objectives of the Year of Care program are to maximize the well-being and quality of life of people with long-term conditions and the efficient use of resources. The way the program works is described below.

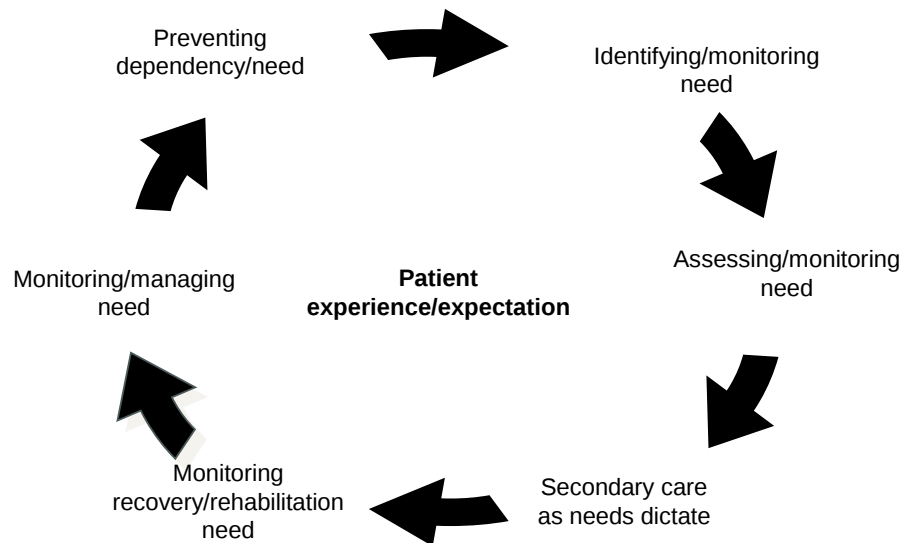
1) Risk-adjusted capitation budget

Capitation payments cover all the costs of care for a person over a certain time period, one year in the case of the Year of Care program, and vary according to an individual's characteristics (risk adjustment). The risk-adjusted capitation budget aims to support improved outcomes through a dedicated budget based on an individual's needs rather than on a diagnosis.

This type of budget promotes prevention, primary care and integrated care, and avoids the inappropriate use of specialist care. The principle of the Year of Care program is that people with long-term conditions can be supported better in their community and are admitted to hospital only as part of a coordinated care plan.

The diagram below illustrates the Year of Care approach.

Cycle of care for a patient in the Year of Care program



Source: National Health Service, *QIPP Long Term Conditions*, April 2012, p.12.

England's Year of Care program (cont.)

2) Assessing and classifying people

Assessing people with long-term conditions is a fundamental part of the care planning process.

Two supporting processes can be used during the assessment and classification of needs:

- Risk profiling data (symptoms) for patients with long-term conditions can be used to identify the number of people in the community that meet the program criteria and to classify them according to level of need in order to plan for and commission the necessary services.
- The NHS Continuing Health Care Decision Support Tool is used to group patients using a classification system based on four levels of need and complexity:
 - low: long-term conditions stable and low complexity;
 - medium: long-term conditions fluctuating and some complexity;
 - high: long-term conditions unstable and high complexity;
 - palliative care: these would be funded by the Year of Care program until the national palliative care classification and funding system is developed to meet the specific needs of people at this stage of care.

3) Funding, costing and pricing methodology

The capitation funding for the program includes the following services for long-term conditions:

- community services;
- secondary care such as acute admissions;
- health care and social services provided by independent institutions.

With respect to cost accounting, a costing information system is being developed to determine the tariff for each level of need.

In 2012-2013, detailed costing analysis was undertaken taking into account direct and indirect costs of providing care for people with long-term conditions. This will be further refined in 2013-2014 with the aim of publishing national currencies for 2014-2015 and national prices for 2015-2016.

4) Discussion between commissioners and providers

The NHS provides documentation and examples of contracts to help commissioners and providers in developing contracting models that meet their needs and that will support progress towards the Year of Care program being implemented.

Contracts between commissioners and providers include risk-sharing agreements regarding the final outcomes of patient care delivery.

5) Recovery and rehabilitation model

The recovery and rehabilitation model looks to move the responsibility for recovery and rehabilitation to primary and community care by separating the current acute tariff payment and starting a new tariff for recovery and rehabilitation. This separation will be based on costing analyses undertaken in 2012-2013 to determine how and when the tariff for long-term conditions could be separated.

England's Year of Care program (cont.)

6) Related national policies

Several other policy developments in the funding and integration of health care related to the Year of Care program are underway. They include the development of specific tariffs for people with mental health problems, the introduction of personal health budgets and the adaptation of the program for palliative care.

The Year of Care program has the advantage of focusing on people's needs and making their participation in choices that concern them central to every initiative. This care model covers the entire continuum of care for a given year and defines specific support measures for each person. Since the progression of people with multiple unstable long-term conditions is not linear, this approach seems much more suited to their conditions than management of episodes of care.

It is important to note that certain conditions in England facilitate the implementation of this program.

In England, the roles of commissioners and providers of health care services are separate. Unlike Québec where these processes are centralized, clinics and institutions in England commission services for their patients themselves. Furthermore, medical remuneration by capitation is very widespread there.

PART FOUR: THE CONDITIONS TO BE MET AND HOW TO MANAGE THE CHANGE

The approach recommended by the Expert Panel to ensure the widespread application of patient-based funding is pragmatic and should span several years.

At the same time as the three priority areas for action, the Expert Panel recommends that the government undertake initiatives to create the necessary conditions and manage the change.

More specifically, the Expert Panel reflected on the content of the multi-year strategy that it encourages the government to adopt regarding:

- clinical and financial information:

Clinical and financial information on patients and activities is essential to implement patient-based funding, in particular to determine case costs and evaluate outcomes;

- tariff and budget rules:

Patient-based funding involves defining tariff and budget rules that will support the implementation of the new resource allocation method;

- the bridges to be built between the clinical and administrative sectors in managing institutions:

We must reduce the gap between the concept of medical accountability and organizational logic by developing a vision that is widely shared – which has very practical implications;

- how the change should be managed:

The process of change initiated by implementing patient-based funding is far-reaching. It must be managed so that the health care system is able to plan and support the changes;

- the timeline for implementing the different initiatives:

The implementation of patient-based funding in three priority areas can already be included in an overall timeline indicating the steps to follow and the transition periods needed.

1. CLINICAL AND FINANCIAL INFORMATION

Patient-based funding depends on eventually having complete and reliable clinical and financial data on health care costs and outcomes. It is a prerequisite for the implementation of the new system of resource allocation. At the same time, the availability of better quality clinical and financial information will have an impact on the management of all activities in the health sector.

As Michel Clair pointed out in his report on the funding and organization of services in Québec's health and social services network, "management is essential, not a secondary activity."⁴⁰

The effort recommended with respect to clinical and financial information will serve to both implement patient-based funding and generate efficiency gains for the entire system, which will have an impact on quality of care and access to services.

The Expert Panel conducted a thorough review of the steps and initiatives to be undertaken to improve clinical and financial data. The result of this review is presented in Paper 3, a companion document to the report. The main proposals that resulted from this review are presented below.

The work proposed by the Expert Panel will allow the desired strategic shift to be made and generate essential efficiency gains.

[...] understanding costs and outcomes allows resources to be allocated to the care providers that deliver the best value, that is, the best outcomes achieved per dollar expended.⁴¹

Robert S. Kaplan and Michael E. Porter

□ An effort in three areas

The effort recommended must focus on:

- information resources, namely, the people, databases and information systems needed to manage clinical and financial information;
- the actual clinical and financial data;
- using information to support the implementation and development of patient-based funding, in particular with case costing.

⁴⁰ Commission d'étude sur les services de santé et les services sociaux (Clair report), 2000, p. 203.

⁴¹ Robert S. KAPLAN and Michael E. PORTER, *The Big Idea: How to Solve the Cost Crisis in Health Care*, Harvard Business Review, 2011.

1.1 Information resources

Information resources include the people, the data and the information technology systems used to process the information needed by clinicians and managers in the health and social services system to carry out and manage activities.

Information resources in the health and social services sector cover the activities of the Ministère de la Santé et des Services sociaux and its network. The network comprises more than 180 public institutions.

☐ Extremely important

Information resources are extremely important when it comes to improving quality of care, access to care and efficiency in the health sector. For this reason, substantial investments have been made in information resources in recent years.

In 2012-2013, institutions and agencies in the network recorded overall spending on information technologies of nearly 485 million dollars, accounting for 2.5% of total operating expenditures of institutions and agencies in the network. Added to this amount are funds allocated centrally by the Ministère de la Santé et des Services sociaux, the Régie de l'assurance maladie du Québec (RAMQ) and other organizations reporting to the Ministère de la Santé et des Services sociaux. In 2012-2013, central spending was close to 180 million dollars, bringing overall government spending on information technologies for the health and social services sector to 665 million dollars for the same year.

Efforts focused primarily on the delivery of services, including spending on the deployment of the Québec Health Record which is currently in use.

However, most investments were based on specific needs, which has resulted in multiple sources of information and databases that it is difficult to use for purposes other than those for which they were designed.

❑ Deficiencies

Over the years, a number of reports have been produced to examine the issues of information resources and the organization of Québec's health and social services network. One of the most frequently raised concerns is that of deficiencies in management information.

The table below presents the main recommendations contained in the reports produced for the Government du Québec in the past fifteen years with respect to the evaluation of information resources. The table also shows the main findings of the report of the Auditor General of Québec for 2010-2011.

TABLE 6

Recommendations from expert reports on information resources and management mechanisms and the findings of the Auditor General of Québec

	Clair report (2000)	Bédard report (2002)	Ménard report (2005)	Castonguay report (2008)	AGQ report (2011)
Need for clear orientations	X				X
Standardize collection procedures and databases		X		X	
Link data	X				X
Access to databases difficult					X
Implement a culture of evaluation and reporting			X	X	
Invest in information resources	X	X	X		
Develop performance-based systems	X		X	X	
Complete clinical and financial databases	X	X			
Determine case costs	X	X		X	
Establish a verification process		X			
Develop and disseminate benchmarking indicators			X	X	X

The scope of the changes to be made calls for strategic leadership on the part of the Ministère de la Santé et des Services sociaux. A strategic unit could be mandated to develop tools to measure costs and services more accurately in order to implement patient-based funding.

❑ Cohesive and integrated systems

The Expert Panel believes the architecture of this data set must be reviewed so that cohesive and integrated systems can support clinical and management processes as a whole.

This review can also be used to strengthen clinical governance by providing management tools such as case costing analyses and performance evaluations. With complete and reliable clinical and financial data, we can not only improve how institutions are managed, but also use funds allocated to health more effectively and improve patient services.

There will be benefits for caregivers and patients.

- To be valid, the information must come from clinical teams.
- To be profitable, the information must go back to these same clinical teams.
- At the same time, the availability of better quality clinical and financial information will have an impact on the management of all activities in the health sector.

■ Meet data transfer needs

These cohesive and integrated systems will meet data transfer needs.

Information is constantly circulating and evolving. In the health care network, the same item of data can be found successively in the databases of institutions, the Ministère de la Santé et des Services sociaux and other government bodies.

At present, data transfer is long and painstaking. Information evolves and delays in accessing it can compromise its quality and usefulness.

Data transfer is easier and fewer errors are introduced when data is standardized at its source. Data is also easier to compare and is of better quality.

❏ The Expert Panel's recommendation

Recommendation 9

The Expert Panel recommends that the government:

- review the architecture of clinical and financial data to ensure systems are cohesive and integrated;
- increase the operating budget for information resources in the health and social services sector;
- finance the change from a dedicated envelope;
- assess the possibility of creating a strategic information resources project team at the Ministère de la Santé et des Services sociaux with the necessary authority to coordinate the implementation of the recommendations;
- assess the possibility of establishing an expertise centre for data processing and analysis at the Ministère de la Santé et des Services sociaux.

1.2 Clinical and financial data

Independently of information resources, the effort must focus on the actual clinical and financial data that will be used to determine case costs and measure performance.

❑ Clinical data

Clinical data is data of an administrative nature on the care provided to patients, such as:

- data on acute care hospitalizations, from admission to discharge;
- data on emergency room patients;
- data on ambulatory care, for example day surgeries.

As seen previously, classification systems are used to group cases or episodes of care into groups with similar clinical characteristics and resource use.⁴²

■ Insufficient data, insufficiently verified

This data does not cover all sectors of activity. For example, limited data is available on physical or mental rehabilitation, social interventions, regional coordination of admissions and ambulatory care.

Today, patients are cared for by multidisciplinary teams, involving multiple organizations that perform interventions along a continuum of care. The exchange of information between a patient's caregivers is essential. However, at present, this information is not linked. Consequently, a patient cannot be tracked in the health care system without considerable effort.

Despite the use of normative frameworks for some databases, there is no systematic verification of the quality of the data. The network's and the Ministère de la Santé et des Services sociaux's ability to measure institutions' activities, including quality of care, relies on timely access to data.

■ Data is often inaccessible for legal reasons

The delay before clinical data becomes available could be significantly reduced by reviewing the legislative framework and data input processes. As mentioned previously, clinical data is often inaccessible for legal reasons.⁴³

⁴² See above, page 48.

⁴³ See above, page 67.

■ The importance of an anonymous unique identifier

Clinical data about a patient comes from multiple sources. There must be a way to link this clinical data.

One of the main obstacles to linking data is the absence of a common key that could be used to compile, compare and match patient data, irrespective of its source. Institutions and the Ministère de la Santé et des Services sociaux could use this key to access the different databases concerning a patient in order to identify target patient groups, obtain complete information on the care provided and attribute a cost to episodes of care.

The definition of a key of this type must meet specific information management needs. It must take into account a whole series of elements, such as the choice of software packages, their integration in institutions, the development of information technology gateways between systems as well as the nature and frequency of database queries.

The unique identifier is the key we need to allow clinical data to be linked. The unique identifier is, in fact, the only way to reconstitute the continuum of care. The unique identifier must be anonymous in order to protect the confidentiality of personal information.

At the moment, a local record number is used to represent the patient in an institution or facility.⁴⁴ This is a neutral number produced by the institution's own local system. It is different from one institution to the next which means that it cannot be used to track the progress of patients who have used different health care services.

It is crucial to introduce an anonymous unique identifier so that clinical data about a patient can be linked. This will make it possible to not only track the continuum of services provided to this patient, but also to evaluate the accessibility of services and profile the consumption of services.

⁴⁴ Except in the MED-ÉCHO database, where a health insurance number is used.

❑ Financial data

Financial data includes data on the cost of services. It is used to manage institutions' resources. In the implementation of patient-based funding, financial data is essential to case costing and to assess quality, access and efficiency.

Financial data is used to produce financial reports or costs per activity centre. The accounting systems of the health care network and the Ministère de la Santé et des Services sociaux are the only source of financial data for this sector of activity which accounts for over 40% of the government's budget.

These systems are fundamental to patient-based funding. The data in accounting reports is needed to:

- establish credible case costing;
- allow comparisons with a financial dimension;
- promote collaboration between managers and clinicians.

■ The need to standardize the financial information structure

In the report submitted for the 2010-2011 fiscal year, the Auditor General stressed the need to make institutions' financial reports comparable between institutions.⁴⁵ The Auditor General noted that financial reports were not accurate enough to allow such a comparison. There are significant disparities between reports because the degree of accuracy required by managers is not the same as that used by the external auditor. Institutions have no choice but to communicate with one another directly to ensure their respective financial data corresponds.

Canadian jurisdictions other than Québec have adopted the *Standards for Management Information Systems in Canadian Health Service Organizations* (MIS Standards).⁴⁶ These standards are more detailed than is required by Québec reporting rules. They set standards and allow comparisons between jurisdictions and institutions. The Canadian database is supplied by a standardized chart of accounts using general accounting principles and procedures, workload measurement systems and statistics on the amounts and kinds of services provided. Each jurisdiction has its own chart of accounts that meets its specific needs.

An effort must be made in this area by developing a financial application that allows financial data in the system to be compared using recognized indicators.

⁴⁵ *Report of the Auditor General of Québec to the National Assembly for 2010-2011*, Vol. II, Chapter 7, Performance Monitoring of the Institutions of the Health and Social Services Network" p. 7-3.

⁴⁶ The *Standards for Management Information Systems in Canadian Health Service Organizations* is a set of standards used across health care systems in Canadian jurisdictions to collect and report financial and statistical data on health service organizations' daily operations.

❑ Audits

Patient-based funding requires an enormous amount of clinical and financial data to be processed.

At present, much clinical and financial data does not undergo systematic verification. How useful this data is depends on how accurately and quickly diagnoses, medical procedures and various patient data are coded. Systematic auditing must be introduced to monitor potential undesirable practices and to ensure that payments are warranted.

■ The quality of the information available

The main issue raised by the lack of audits concerns the quality of the information available. Indeed, in some cases, information may be incomplete because documentation and classification practices vary between institutions.

These practices will lead to problems with comparability between institutions which will in turn compromise the linking of databases to track episodes of care. In 2002, the Bédard report recommended using new verification tools and performing audits on the validity and reliability of data coding and processing.⁴⁷

Failure to carry out systematic verifications can lead to the following problems:⁴⁸

- coding practices may not be the same across institutions;
- data may not match the data in the medical record;
- the coding system may lag behind medical practices.

The incentives associated with patient-based funding can also give rise to undesirable practices in institutions that could compromise coding quality and influence the payment. Potential undesirable practices in institutions include upcoding, that is, subjective choices in coding likely to lead to a higher payment.

■ Systematic auditing

The use of clinical and financial data to fund institutions requires the introduction of systematic auditing in order to:

- monitor potential undesirable practices;
- ensure that clinical and financial data is quality data and that payments are warranted.

For auditing purposes, a team of auditors should be formed in order to examine a sample of files and reclassify them independently. The sample can be created randomly or based on disparities observed relative to target outcomes.

⁴⁷ MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX, *Rapport du comité sur la réévaluation du mode de budgétisation des centres hospitaliers de soins généraux*, 2002.

⁴⁸ Ibid.

❑ The Expert Panel's recommendations

Recommendation 10

The Expert Panel recommends:

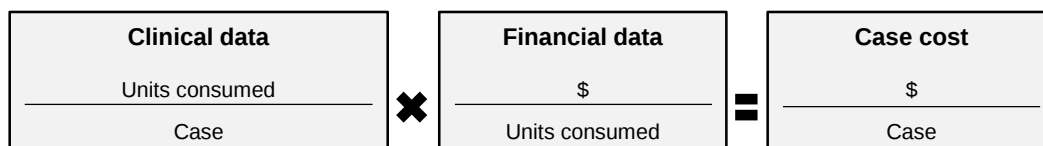
- developing databases to cover sectors of activity that are not covered at all or are covered only to a limited extent at the moment, in particular for ambulatory care and rehabilitation services, using appropriate classification systems;
- making the necessary changes to the legislative framework to allow data to be collected more rapidly and to facilitate the linking of clinical data;
- consolidating and accelerating work on the introduction of an anonymous unique identifier so that clinical data can be linked;
- encouraging collaboration between the Ministère de la Santé et des Services sociaux and institutions to establish financial databases and standardized charts of accounts to facilitate comparisons between institutions and with institutions in other provinces;
- developing a clinical and financial application for institutions and the Ministère de la Santé et des Services sociaux, with data entered in a timely manner by institutions in the network and which allows data to be compared using recognized indicators;
- performing audits of clinical data produced by institutions, with verifications performed randomly or on a targeted basis if unexplained disparities are observed.

1.3 Using information to support the implementation and development of patient-based funding: determining case costs

Case costing is obtained by matching financial data, which are aggregate data and do not directly concern the patient, with clinical data, which are unit data and concern the service provided to the patient, but not the costs associated with the services received.

ILLUSTRATION 7

Case costing



❑ Limited matching of clinical data and financial data

Even today, there is limited matching of clinical data and financial data. Most hospitals are unable to link information on the type of care provided to a patient during their hospital stay (clinical data) to the cost of care (financial data) in order to determine the case cost or the cost of the patient's stay in hospital.

Case costing would strengthen support for clinical governance by allowing interinstitutional comparisons, more efficient delivery of care and collaboration between managers and physicians.

Obstacles to matching clinical information and financial information are a disincentive to developing effective information resources that could be used as an input for decision making or in the application of patient-based funding.

Matching is necessary so that everyone can understand clinical data and financial data, be they analysts, clinicians or managers.

❑ The need for resources to process the information

Once the clinical data and financial data has been matched, additional resources are needed to process the information produced.

This information can take different forms. For example, it might be information used for case costing or to measure performance. It might also be used for budget forecasts or decision making.

Matching financial data and clinical data will mean substantial gains at all levels of management in the health care network. It is one of the challenges to be met to improve the way the network is managed, be it with respect to patient-based funding, reporting, performance measurement, planning, service organization or the allocation of resources.

❑ **Matching data to improve efficiency and quality**

Matching clinical and financial data should, above all, enable institutions to link their clinical outcomes to the resources they use to treat their patients.

By grouping data, case costs can be estimated and compared with tariffs set by the Ministère de la Santé et des Services sociaux or with the case costs of institutions in the same category. Once these comparisons have been made, managers and clinicians will be able to discuss how to improve efficiency and quality of care.

Case costing data should promote the development of performance indicators and the identification of corresponding targets as well as encourage institutions to compare their outcomes. This data should allow institutions in the network and the Ministère de la Santé et des Services sociaux to share information with other jurisdictions.

As health care providers, institutions must understand and keep their costs under control in order to maintain and increase the efficiency of their activities.

■ **A better understanding of resource utilization for a specific episode of care**

Institutions' recent initiatives confirm that a case costing system can help inform reflections on clinical governance in order to gain a better understanding of the institution's use of resources for a specific episode of care.

This cooperative effort can lead to efficiency gains and a better knowledge of margins for manoeuvre in patient care units. The initiative in the Saguenay–Lac-Saint-Jean region shows the value of this type of system for profiling frequent health care users and associated costs. The main objective of implementing a case costing system is to improve knowledge of health care production costs.

❑ The methodology

A census of recent case costing initiatives in Québec indicates that three methodologies are currently used in Québec:

- the case costing methodology used by the Ministère de la Santé et des Services sociaux (top-down approach);
- the case costing estimator developed by the Association québécoise d'établissements de santé et de services sociaux (AQESSS) (top-down approach);
- a software package from the private sector (bottom-up approach).

Both the Ministère de la Santé et des Services sociaux and institutions use the "top-down" method to estimate their case costs. This method involves calculating the average cost per service recipient by dividing the cost of an activity centre by the number of patients treated there. This approach gives limited results in terms of detailed costs per activity, per episode of care and per patient. Furthermore, relying solely on an average cost per patient can result in an overestimation or underestimation of costs per patient.

In the "bottom-up" approach, the patient is the common denominator in the cost category. A case costing system based on this approach is able to provide complete costs and a breakdown of costs by episode of care for a single patient. It can also provide valuable data on the actual or more specific use of resources by patients.

Case costing provides financial information per episode of care that could not be obtained by simply using activity centres' financial and management data.

Despite the fact that many institutions are concerned about their performance and have even invested in private firms to determine case costs and measure their performance using personalized indicators, very few institutions have tested the bottom-up approach in the implementation of their case costing system.

❏ The Expert Panel's recommendations

Recommendation 11

The Expert Panel recommends:

- ensuring that the review of the architecture of clinical and financial data allows clinical databases and financial databases to be linked;
- introducing a standardized case costing methodology for institutions;
- identifying existing initiatives that can be used as models for the information systems needed to facilitate the production of reproducible case costs by the institutions concerned;
- gradually developing a database at the Ministère de la Santé et des Services sociaux that institutions can use to make comparisons among themselves.

The initiative in the Saguenay–Lac-Saint-Jean region
Managing clinical information and costs to improve the health care system

Following the submission of the Castonguay report, the government announced the implementation of a pilot project in three regions for the purchase of services on their territory, namely, the Capitale-Nationale, Estrie and Saguenay–Lac-Saint-Jean regions. The Saguenay–Lac-Saint-Jean Health and Social Services Agency then launched an extensive project to measure costs per patient on its territory.

This project relied on the Agency's and institutions' shared desire to improve performance and control costs in the system by changing both clinical and management practices.

The Agency funded the implementation of a case costing information system, integrated into clinical data for all CSSSs in the region.

This case costing data was used to create an integrated regional profile of patient care pathways and clinical resources used on the entire Saguenay–Lac-Saint-Jean territory.

The data was used to:

- determine the effect of repeated emergency room visits, multiple hospitalizations and interventions in local community service centres (CLSCs) on resource use by frequency;
- profile the consumption of patient groups from six large families of chronic diseases with respect to emergency room, outpatient clinic, hospitalization and CLSC activities;
- compare patient groups, case costs and outcomes based on morbidity between CSSSs and measure potential clinical and financial performance gains;
- define and implement more effective, efficient and patient-appropriate clinical pathways.

2. TARIFF AND BUDGET RULES

The introduction of patient-based funding formulas, including activity-based funding, requires tariff and budget rules that define the financial terms and conditions of the initiatives to be implemented.

Activity-based funding has often led to increased health budgets due to growth in the volume of care.

The implementation of patient-based funding must therefore be accompanied by measures to ensure that health spending does not exceed the global budgets allocated to the sector.

The Expert Panel's recommendations concern:

- tariff rules;
- budget rules.

2.1 Tariff rules

□ Tariffs based on costs

In most systems where hospitals are funded based on tariffs, the costs observed in hospitals serve as the basis for setting tariffs. The data used are often aggregate data from some or all of the hospitals in the health care system. Several types of costs can be used to set tariffs.

■ Average cost tariffs

Tariffs based on hospitals' average cost are the most widely used method. It is a relatively neutral practice insofar as all activities are valued based on their relative costs.

■ Marginal cost tariffs

Another approach is to use tariffs based on marginal cost. This approach is based on the fact that beyond a certain threshold, costs per activity decrease due to increasing production. Beyond this threshold, the cost of treating each additional patient, which is called the marginal cost, is less than the hospital's average cost.

In this approach, hospitals are reimbursed using a tariff that reflects the average cost of treatment up to a given volume considered to be the threshold beyond which the production cost decreases. Beyond this volume, the tariff is reduced to more accurately reflect the marginal cost of production, as recommended by economic rationality.

While it is more difficult to implement marginal cost tariffs, this approach provides hospitals with more incentive to reduce their treatment costs than an average cost tariff.

■ Best practice tariffs

Best practice tariffs are set in such a way that they incentivize both high quality and efficient health care.

Rather than being based on the sum of the costs incurred by institutions in the health care system in providing care, these tariffs reflect the cost of the treatment that is considered best medical practice.

TABLE 7

Advantages and disadvantages of using types of costs as a basis for setting tariffs

	Advantages	Disadvantages
Average cost	Most widely used method Measure generally better understood	Sensitive to extreme values
Average cost less a certain percentage	Requires greater efficiency gains than average cost Can be a way of controlling spending	Can require too much effort from hospitals
Median cost	Less sensitive than average cost to extreme values	Measure generally less well known than average cost Method not widely used
Marginal cost	Method recommended by economic theory	Estimation complex Depends on assumptions regarding hospitals' capacities
Best practice cost	Encourages high quality and efficient care	Difficult to reach consensus on medical best practices

❑ **Criteria for good tariff practices**

Beyond the form the tariff might take, criteria for good tariff practices must be respected:

- cost data must be reliable;
- base tariffs should be determined based on best practice costs whenever possible;
- for costs related to teaching, training and research, lump-sum payments may be more appropriate;
- tariffs must be tested to ensure they are sufficiently aligned with the government's objectives (e.g., bonus for priority interventions) which will increase confidence in these tariffs among health care network stakeholders;
- a document that clearly presents the tariffs and the methodology used to calculate them must be published every year;
- an annual consultation and continuing evaluation process must be introduced for tariffs so that any necessary updates can be made.

❑ The Expert Panel's recommendations

Recommendation 12

The Expert Panel recommends:

- establishing a transparent process to update tariffs to encourage compliance and confidence among network stakeholders;
- publishing a document every year that clearly presents the tariffs and the methodology used to calculate them;
- introducing an annual consultation and continuing evaluation process to ensure tariffs are aligned with the health care system's objectives and to allow any necessary updates to be made.

2.2 Budget rules

In all countries where activity-based funding has been adopted, such as England, Australia, and France, the single budget envelope has been divided into two components:

- the first budget component is related to institutions' fixed costs, that is, the costs that do not vary with activity (infrastructures, heating, administrative costs, etc.);
- the second component is related to the variable costs of activities (some salary expenditures, medical supplies, including drugs, food service, etc.).

The hospital therefore receives two types of revenue:

- global funding to cover the fixed costs of activities;
- variable funding that increases based on a predetermined tariff.

☐ Three principles

Three basic principles must be respected when defining budget rules.

- Once it has been defined, the budget envelope must be respected.
- The tariffs set must also be respected during their year of application.
- Payment must be made where service is provided.

These three principles are derived from the very philosophy of patient-based funding.

❑ **Clear and transparent budget rules**

In countries that use patient-based funding, certain budget rules are established to control the allocation of resources under this funding method.

Three mechanisms are widely used:

- volume management involves reimbursing the volume of care at a given price, up to predefined annual target;
- tariff management involves adjusting tariffs after they have been defined in order to meet spending objectives;
- budgetary reserves are reserves established by reducing tariffs in order to provide a cushion against budget overruns.

The Expert Panel does not recommend adopting any of these mechanisms, believing that to do so would, to say the least, be premature. It is important to respect the principles arising from the very definition of patient-based funding. These principles call for clear and transparent budget rules.

■ **How to manage the financial risk**

How the financial risk should be managed is certainly a central issue when implementing patient-based funding. To reduce this risk, patient-based funding has often been phased in and applied only to activities considered suitable for this funding method.

The Ministère de la Santé et des Services sociaux must continue its work to define its detailed financial reports and develop its program and service budgeting. Indeed, the shift from a global budgeting approach to activity-based budgeting requires more detailed knowledge of its budgets.

It is also important to ensure rigorous and frequent monitoring of the volumes of activities performed in the health care network in order to report any deviations from forecasts.

Lastly, budget practices are constantly evolving. Knowledge of budgetary control in a context of patient-based funding is at its beginnings in Québec. The Ministère de la Santé et des Services sociaux should keep a watch on initiatives in other countries in the area of patient-based funding and budget management best practices.

❑ The Expert Panel's recommendation

Recommendation 13

The Expert Panel recommends:

- making rigorous forecasts of volumes of activities covered by patient-based funding and ensuring the tariffs set will respect the closed envelope;
- rigorously monitoring volumes of activities, tariffs and budgets in order to refine tariff and budget rules and making any necessary corrections quickly in order to manage budgets effectively;
- monitoring changes made to the budget rules used in other jurisdictions to manage the financial risk while respecting the principles of patient-based funding.

3. HOW TO MANAGE INSTITUTIONS: BRIDGES BETWEEN THE CLINICAL AND ADMINISTRATIVE SECTORS

Genuine co-management between the clinical and administrative sectors is a necessary condition when implementing patient-based funding.

- The need to build bridges between the clinical and administrative sectors is a reminder of the gap between the traditional concept of medical accountability and organizational logic.
- This gap must be reduced by developing a shared vision of accountability among all partners in the health sector.
- Such a vision has a number of practical implications, which are a reflection of the bridges built between the clinical and administrative sectors.

3.1 The concept of medical accountability and organizational logic

❑ Medical accountability

The traditional concept of medical accountability refers to the physician's responsibility towards a patient who consults him in the context of a patient-physician relationship.⁴⁹

In this vision, only the patient's health is important to the physician. Standards of competence and ethics are developed and evaluated by peers, making it an "autonomous" profession subject to limited external monitoring.

In this understanding of clinical governance, concerns with population responsibility, efficient resource utilization and the adoption of clinical practices with the best quality-cost ratio are relatively absent.⁵⁰

❑ Organizational logic

Advances in scientific knowledge, increasing concerns for the health of various populations, the needs and requirements of modern society and the imperative of containing costs make the introduction of a more organizational accountability necessary.

Organizational logic is based on the principle that population health care and services can be improved by placing greater emphasis on management and organization practices and by highlighting the positive role of the organizational context in the development of professional practices.

⁴⁹ CONSEIL MÉDICAL DU QUÉBEC, *Avis: imputabilité médicale et gouvernance clinique, bâtir sur la qualité et la performance des pratiques*, 2003, 93 p., [Online], [\[http://www.csbe.gouv.qc.ca/fileadmin/www/Archives/ConseilMedical/Avis/2003_04_av_fr.pdf\]](http://www.csbe.gouv.qc.ca/fileadmin/www/Archives/ConseilMedical/Avis/2003_04_av_fr.pdf)

⁵⁰ ASSOCIATION QUÉBÉCOISE D'ÉTABLISSEMENTS DE SANTÉ ET DE SERVICES SOCIAUX, *Modèles et enjeux du partenariat médico-administratif: État des connaissances*, 2012, 81 p.
N., EDWARDS, "Doctors and managers: Poor relationships may be damaging patients – what can be done?", *Quality & Safety in Healthcare*, 2003, Vol. 12, pp. i21-i24.
Jean-Louis DENIS, ENAP, Émilie GIBEAU, HEC Montréal, Ann LANGLEY, HEC Montréal, Marie-Pascale POMEY, Université de Montréal and Nicolas VAN SCHENDEL, HEC – Université de Montréal, *Modèles et enjeux du partenariat médico-administratif*, [Online], [\[http://expertise.hec.ca/pole_sante/wp-content/uploads/2011/09/S%C3%A9minaire-du-P%C3%B4le-sant%C3%A9-HEC-Montr%C3%A9al-Ann-Langley-21-f%C3%A9vrier-2012-partenariat-m%C3%A9dico-administrative.pdf\]](http://expertise.hec.ca/pole_sante/wp-content/uploads/2011/09/S%C3%A9minaire-du-P%C3%B4le-sant%C3%A9-HEC-Montr%C3%A9al-Ann-Langley-21-f%C3%A9vrier-2012-partenariat-m%C3%A9dico-administrative.pdf)

3.2 Develop a widely shared vision

Patient-based funding cannot be implemented under the right conditions without establishing a close connection between clinical leaders and administrative managers. Building bridges between the clinical and administrative sectors calls for a vision of accountability that reconciles the traditional medical approach with managers' concerns.

☐ A few ideas for a widely shared vision

This widely shared vision could be built around the following ideas:

- involving physicians in management is a prerequisite to improving the quality and efficiency of care;
- physician managers can play a key role in mobilizing the medical profession as a whole;
- health care organizations considered to be high performing have adopted a cohesive set of strategies, including the development of medical leadership and physician involvement in managing institutions;
- increasing physician participation in management means that visions must be reconciled or made cohesive so that physicians and managers can work together and productively to the benefit of patients. There is a need for cultures to converge.

☐ A widely shared vision is necessary

Such a shared vision is necessary when implementing patient-based funding, for quality cannot be improved nor costs contained in isolation.

Physicians are responsible for determining which diagnostic tests to perform, which treatment to provide and which drugs to prescribe for each patient.

These decisions should, however, take into account all the factors that influence health care delivery. Clinicians must acknowledge the reality of financial constraints, which highlights the ethical responsibility of ensuring resources are used wisely.

Patient-based funding therefore requires the development of an organizational structure that will facilitate discussions on the improvement of services and resource utilization.

More generally and more fundamentally, patient-based funding requires a closer relationship between physicians and managers.

3.3 The practical implications

In practical terms, the changes made to clinical and administrative governance in institutions should concern the following:

- clinicians must be an integral part of managing the quality and costs of services. A clinical governance model, defined and disseminated by the Ministère de la Santé et des Services sociaux, could be used;
- both clinicians and managers should have access to transparent clinical and financial information systems as well as to relevant information on quality and costs;
- clinical governance philosophy and skills should be taught to managers, physicians and other health care professionals as part of their training and continuing professional development.

□ The Expert Panel's recommendation

Recommendation 14

The Expert Panel recommends supporting integrated management between the clinical and administrative sectors at all levels – the Ministère de la Santé et des Services sociaux, agencies, institutions and patient care units.

More specifically, the Expert Panel recommends:

- developing and proposing an integrated management model for the clinical and administrative sectors at all levels – the Ministère de la Santé et des Services sociaux, agencies, institutions and patient care units – and aligning incentives to support this model;
- ensuring clinicians and managers have access to clinical and financial information.

4. HOW TO MANAGE THE CHANGE

How the changes are communicated and implemented is extremely important and key to achieving the objectives.

The people the Expert Panel met with insisted on the importance of ensuring staff support the changes in funding methods and of accompanying staff in the change process.

It is important to explain to stakeholders how the changes are related to the strategic objectives and their importance for patients, as well as the potential repercussions of patient-based funding.

A vision of the health care system of the future must be presented, its objectives defined and a funding system that supports this vision designed.

Managing the change requires:

- clear objectives;
- a shared understanding of the objectives;
- a dedicated team;
- information systems;
- a communication plan.

Build on existing strengths, use financial levers
The strategy recommended by the Expert Panel relies on the network's existing strengths, for example the Access to Surgery Program and the quality initiatives conducted by clinicians and teams who are experienced in working within a health care management model. It is best to begin with stakeholders who are ready to start, who can be early adopters and are able to provide the necessary leadership and have a ripple effect on others. Financial levers can be used to define a progressive patient-centred health care strategy to ensure the system's sustainability. Changing funding methods is not an initiative intended to drastically reduce budgets or privatize services. The objective is to increase the value of care by improving quality and efficiency. Information systems and updating clinical practices are both key elements of the strategy and tools that health care professionals can use to manage the change.

4.1 Clear objectives

The case for change in financial approaches must be legitimate and communicated to the stakeholders concerned so that the system can be prepared for and support the change. The implementation of patient-based funding is not a simple financial or administrative change.

It means adopting performance-based budgeting, which requires:

- a results-oriented managerial culture;
- sufficient, reliable information on the services provided, the outcomes achieved and the costs incurred;
- strategic planning that is understood and accepted by everyone and communicated to all administrative and decision-making levels.

The objectives behind the change must be clearly explained, which means introducing a new patient-centred management culture and practice in order to address the challenges of accessibility of care, cost control, quality of care and compliance with equity criteria.

4.2 A shared understanding of the objectives

Patients, decision-makers and health care professionals must have a shared understanding of the objectives. We must be clear about what needs to be changed, what needs to be attributed value.

- For example, we must explain to patients that they must reduce their use of hospitals if their care is provided at home in an integrated approach.
- We must explain to staff that the change in funding method is necessary and that the changes could help improve care for patients.
- We must clearly explain the consequences of focusing on developing primary care and community care.

4.3 A dedicated team

To successfully manage the change, a dedicated team must be created to communicate the orientations and coordinate the implementation of the new resource allocation method. The creation of a dedicated team is one of the first actions taken in jurisdictions that have implemented patient-based funding.

The team must be multidisciplinary. Its members must have a combination of skills in clinical, financial, technology and communications fields so that they can support and coordinate all aspects of the initiative.

The team must be given the latitude and the authority needed to fulfil its mandate. Patient-based funding requires the sustained commitment of political authorities. The project's progress should be reported directly to the Minister of Health and Social Services.

The team should be made up of people who embody the desired change in culture.

4.4 Information systems

One of the advantages of patient-based funding is that it relies on evidence from verified data. It is therefore essential to implement information systems that provide data on patient health outcomes, performance relative to indicators or compliance with best practices.

Information systems are very useful for making management decisions. When data are published, they send a clear message about the importance of quality of care in the health care network's overall strategy.

Information systems centred on outcomes and practices can even help redefine monitoring mechanisms and become a tool for evaluating accountability in the system.

4.5 A communication plan

The implementation of patient-based funding must be accompanied by a sound communication plan.

The communication plan must not only present and publicize the changes, but also the reasons behind the introduction of patient-based funding, reasons centred on quality and benefits for the patients.

The communication plan must clearly convey the role and potential impact of each person – clinicians, managers at each of the three levels of governance and patients – as well as the ultimate vision behind the initiative as a whole.

❑ The Expert Panel's recommendation

Recommendation 15

The Expert Panel recommends:

- creating an integrated project team with the necessary authority to coordinate the implementation of the proposed changes;
- providing stakeholders with means to develop their skills and ability to implement the changes;
- developing and implementing a communication strategy regarding the implementation of measures;
- defining a global envelope or provision, clearly identified and dedicated to funding the gradual implementation of changes;
- establishing a rigorous continuing evaluation and feedback process to maximize the results of the proposed changes.

5. A TIMELINE

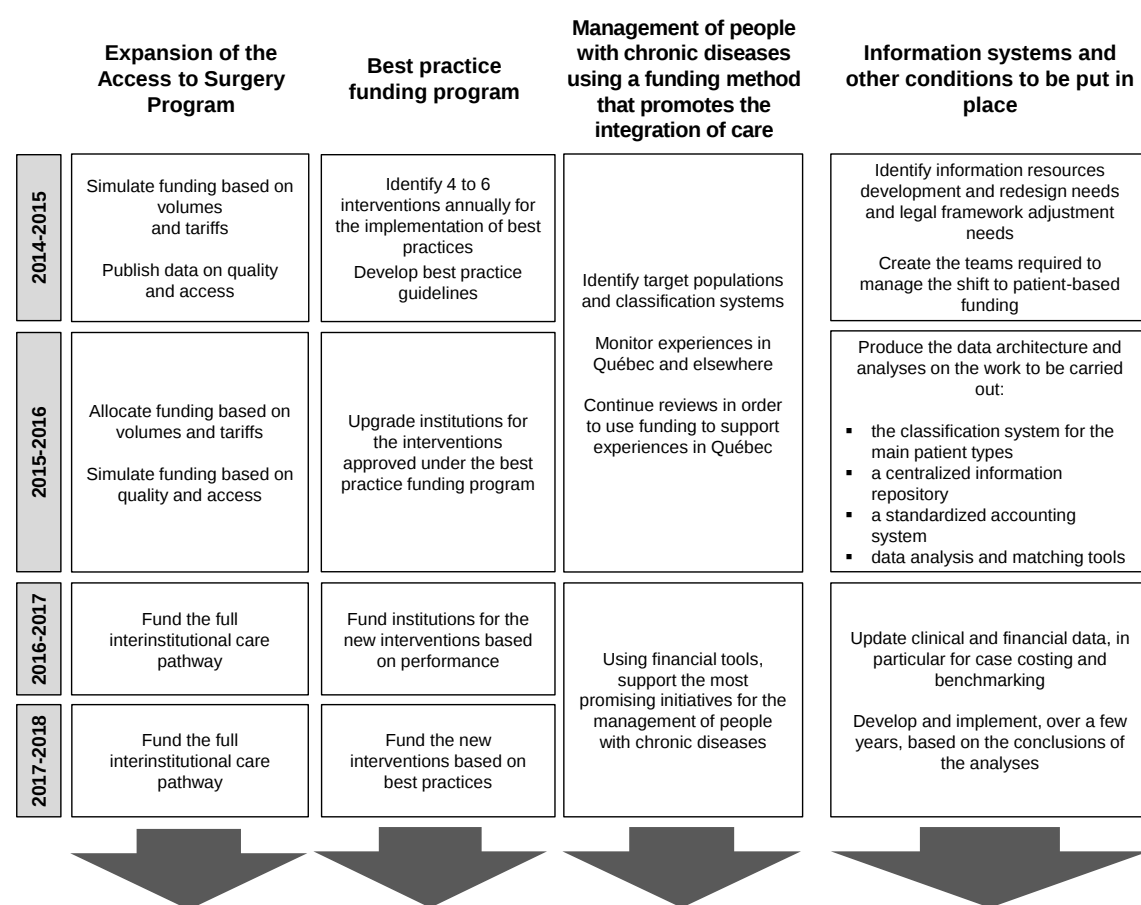
To implement and extend the use of patient-based funding in Québec's health care system, the Expert Panel recommends a pragmatic approach spanning several years.

The timeline proposed by the Expert Panel spans a four-year period with the implementation of patient-based funding starting in 2014-2015.

The objective of this timeline is to simultaneously undertake the initiatives in the three priority areas – namely, the expansion of the Access to Surgery Program, the implementation of a best practice funding program and the management of people with chronic diseases using a funding method that promotes the integration of care – and make the first investments in information systems and the other conditions to be met to ensure the successful implementation of the new method of resource allocation.

ILLUSTRATION 8

Timeline for the implementation of patient-based funding 2014-2018



PART FIVE: RECOMMENDATIONS

Listed below are the fifteen recommendations made by the Expert Panel under the mandate it was given by the government.⁵¹

☐ The objective

Recommendation 1

The Expert Panel recommends that the government make a major change to resource allocation methods in Québec's health care system by the widespread application of patient-based funding.

The Expert Panel believes patient-based funding must be used as a lever in a process of reform to:

- increase access to care;
- improve cost control;
- enhance quality of care;
- respect principles of equity.

☐ The recommended approach

Recommendation 2

The Expert Panel recommends that the government adopt a pragmatic, stage-wise approach to the implementation of patient-based funding.

This stage-wise implementation would take the form of a multi-year strategy, aligned with strategic health care objectives and supported by change management.

The strategy would take into account:

- the current resource allocation method;
- the characteristics of existing clinical and financial information systems;
- the availability of data on outcomes and case costs;
- the organizational capacity to introduce the required changes.

The strategy to implement patient-based funding would respect available budgets and the government's ability to pay.

⁵¹ The recommendations presented in the three papers may be more detailed than those in the report.

❑ **Three priority areas**

Recommendation 3

The Expert Panel recommends that the government implement patient-based funding immediately by introducing the method in three sectors:

- funding based on volume and quality for all surgeries by expanding the existing program;
- funding based on best practices by introducing a program to implement best practices, starting with colonoscopy;
- funding to manage patients with chronic diseases, starting with practical experiments accompanied by the necessary support.

❑ **An expanded activity-based Access to Surgery Program**

Recommendation 4

The Expert Panel recommends that the government expand the Access to Surgery Program and make this initiative the first priority area for patient-based funding.

The new Access to Surgery Program would cover almost all surgical output.

The new program could be part of a national surgery strategy.

The purpose of the Expert Panel's recommendation is to align services in the surgical sector more closely with the government's main objectives in the health care system, namely:

- access to care;
- appropriateness and quality of care;
- equity;
- efficient service delivery.

Recommendation 5

The Expert Panel recommends that the new Access to Surgery Program apply to all surgeries performed in institutions with an annual surgical production volume of at least 1,000 weighted cases.

The implementation of patient-based funding would gradually apply to the patient's entire pathway so that the new funding method would cover the full care pathway in 2017-2018.

Funding for an institution's surgical activities would be based on the number of surgeries performed and the provincially determined tariff for each type of surgery. To this end, the Expert Panel recommends specific terms and conditions for:

- starting case costing;
- defining the new program's budget envelope;
- setting the tariff for each group of surgeries.

The new funding method must be implemented gradually.

In order to take quality and access to care into account, the Expert Panel proposes a number of indicators. The application of these indicators should also be introduced gradually.

The Expert Panel recommends adopting a pragmatic approach to the development of clinical and financial information systems.

The Expert Panel describes the communication and collaboration strategy that must accompany the implementation of the new program.

The Expert Panel recommends a strategy for monitoring and evaluating results.

The Expert Panel recommends a number of initiatives to manage the risks associated with the implementation of patient-based funding for all surgical activities.

❑ An approach to reward best practice

Recommendation 6

The Expert Panel recommends that the government apply patient-based funding in a second priority area, focusing on quality of care.

The government would expand the Québec Colorectal Cancer Screening Program and allocate funding based on best practices.

The government would extend best practice funding to other priority clinical sectors as part of a best practice funding program. The priority clinical sectors would be selected based on the scope of the desired outcomes.

Recommendation 7

The Expert Panel recommends that the implementation of patient-based funding have the clear objective of improving quality of care.

The Expert Panel recommends that the best practice funding program rely on clinical leadership, structures, processes and skills that will ensure that the best practices concerned are spread and supported by funding.

The Expert Panel recommends developing a plan for best practice funding in consultation with clinicians and experts.

The Expert Panel recommends that a significant number of clinical sectors be included in the program each year based on the scope of the desired outcomes and in accordance with the criteria proposed.

❑ **The management of chronic disease in order to promote the integration of care**

Recommendation 8

The Expert Panel recommends that the government apply patient-based funding in a third priority area, namely, the management of patients with chronic diseases, in order to promote the integration of services.

The Expert Panel recommends that the government start with concrete experiments accompanied by the necessary support.

The government would implement a program to promote the formation of consortia of physicians and other health care professionals to manage people with multiple chronic diseases whose condition is unstable.

Funding of these consortia would be weighted based on the patients' risk profile and resources would be allocated based on outcomes.

❑ **Clinical and financial information**

Recommendation 9

The Expert Panel recommends that the government:

- review the architecture of clinical and financial data to ensure systems are cohesive and integrated;
- increase the operating budget for information resources in the health and social services sector;
- finance the change from a dedicated envelope;
- assess the possibility of creating a strategic information resources project team at the Ministère de la Santé et des Services sociaux with the necessary authority to coordinate the implementation of the recommendations;
- assess the possibility of establishing an expertise centre for data processing and analysis at the Ministère de la Santé et des Services sociaux.

Recommendation 10

The Expert Panel recommends:

- developing databases to cover sectors of activity that are not covered at all or are covered only to a limited extent at the moment, in particular for ambulatory care and rehabilitation services, using appropriate classification systems;
- making the necessary changes to the legislative framework to allow data to be collected more rapidly and to facilitate the linking of clinical data;
- consolidating and accelerating work on the introduction of an anonymous unique identifier so that clinical data can be linked;
- encouraging collaboration between the Ministère de la Santé et des Services sociaux and institutions to establish financial databases and standardized charts of accounts to facilitate comparisons between institutions and with institutions in other provinces;
- developing a clinical and financial application for institutions and the Ministère de la Santé et des Services sociaux, with data entered in a timely manner by institutions in the network and which allows data to be compared using recognized indicators;
- performing audits of clinical data produced by institutions, with verifications performed randomly or on a targeted basis if unexplained disparities are observed.

Recommendation 11

The Expert Panel recommends:

- ensuring that the review of the architecture of clinical and financial data allows clinical databases and financial databases to be linked;
- introducing a standardized case costing methodology for institutions;
- identifying existing initiatives that can be used as models for the information systems needed to facilitate the production of reproducible case costs by the institutions concerned;
- gradually developing a database at the Ministère de la Santé et des Services sociaux that institutions can use to make comparisons among themselves.

Recommendation 12

The Expert Panel recommends:

- establishing a transparent process to update tariffs to encourage compliance and confidence among network stakeholders;
- publishing a document every year that clearly presents the tariffs and the methodology used to calculate them;
- introducing an annual consultation and continuing evaluation process to ensure tariffs are aligned with the health care system's objectives and to allow any necessary updates to be made.

❑ Tariff and budget rules

Recommendation 13

The Expert Panel recommends:

- making rigorous forecasts of volumes of activities covered by patient-based funding and ensuring the tariffs set will respect the closed envelope;
- rigorously monitoring volumes of activities, tariffs and budgets in order to refine tariff and budget rules and making any necessary corrections quickly in order to manage budgets effectively;
- monitoring changes made to the budget rules used in other jurisdictions to manage the financial risk while respecting the principles of patient-based funding.

❑ How to manage institutions: bridges between the clinical and administrative sectors

Recommendation 14

The Expert Panel recommends supporting integrated management between the clinical and administrative sectors at all levels – the Ministère de la Santé et des Services sociaux, agencies, institutions and patient care units.

More specifically, the Expert Panel recommends:

- developing and proposing an integrated management model for the clinical and administrative sectors at all levels – the Ministère de la Santé et des Services sociaux, agencies, institutions and patient care units – and aligning incentives to support this model;
- ensuring clinicians and managers have access to clinical and financial information.

❑ How to manage the change

Recommendation 15

The Expert Panel recommends:

- creating an integrated project team with the necessary authority to coordinate the implementation of the proposed changes;
- providing stakeholders with means to develop their skills and ability to implement the changes;
- developing and implementing a communication strategy regarding the implementation of measures;
- defining a global envelope or provision, clearly identified and dedicated to funding the gradual implementation of changes;
- establishing a rigorous continuing evaluation and feedback process to maximize the results of the proposed changes.

APPENDICES

APPENDIX I – THE EXPERT PANEL

❑ The members of the Expert Panel

■ Wendy Thomson, Chair

A graduate of McGill University and holder of a master's degree in social work, Ms. Thomson moved to England to earn a Ph.D. in social administration at the University of Bristol. She held numerous senior public service positions in England, including those of executive director of a local government in London and director of inspection of local government in England and Wales. As executive director and founder of the Office of Public Service Reform, she served as advisor to Prime Minister Tony Blair. For her contribution to public service, she was made a Commander of the British Empire by Queen Elizabeth II in 2005.

Ms. Thomson is now director of the School of Social Work at McGill University where she teaches social policy. As part of her research, she continues to advise the governments of Canada and other countries on the governance and performance of services such as health, education and child services. She is a member of the board of directors of the CSSS de la Montagne in Montreal.

■ Roger Paquet

A graduate of Université Laval and holder of a master's degree in social work, Mr. Paquet started his professional career in the field of social rehabilitation in various centres for youth and adults from 1970 to 1993. He then worked for the Government of Québec, at the Ministère de la Santé et des Services sociaux, where he held a number of senior positions, including that of deputy minister from 2006 to 2009.

He has since established himself as a consultant, with mandates relating to the planning, organization, operation and assessment of health and social services institutions. He is involved in the planning, development and performance of health care systems.

■ Pierre Shedleur

Mr. Shedleur is a graduate of the École des hautes études commerciales, a chartered accountant since 1972 and a Fellow of the Order of Chartered Accountants since 1996. After working in the private sector, Mr. Shedleur began a career in the public sector in 1980. In particular, he worked at the Ministère de l'Éducation and the Secrétariat du Conseil du trésor and was president and chief executive officer of the Commission de la santé et de la sécurité au travail (CSST) from 1993 to 1997. He was also president and chief executive officer of the Société générale de financement du Québec from 2004 to 2010.

From 2004 to 2010, he co-chaired the Forums régionaux sur l'avenir du Québec as well as an advisory panel on public finances.

□ The support team

■ Ministère de la Santé et des Services sociaux

Michel Fontaine, Deputy Minister, Coordination, financement, immobilisations et budget

François Dion, Executive Director, Budget et politiques de financement

Normand Lantagne, Acting Director, Direction des politiques de financement et de l'allocation des ressources

Nizar Ghali, Economist, Direction de l'allocation des ressources en santé physique

■ Ministère des Finances et de l'Économie

Simon Bergeron, Secretary of the Expert Panel for Patient-Based Funding and Assistant Deputy Minister, Politique budgétaire

Marc Sirois, Executive Director, Politique budgétaire

Alain Boisvert, Director, Direction de la prévision des dépenses et de la modélisation

Marie-Pier Fortin, Economist, Direction de la prévision des dépenses et de la modélisation

Anny Gagnon, Administrative Technician, Office of the Assistant Deputy Minister, Politique budgétaire

Jacynthe Létourneau, Administrative Assistant, Direction générale de la politique budgétaire

■ Ministère du Conseil exécutif

Jean-Pierre Pellegrin, Assistant Secretary, responsible for the Direction des politiques publiques et des prospectives, Secrétariat aux priorités et aux projets stratégiques

Claude Bertrand, Administrative Technician, Administrative Assistant, Secrétariat aux priorités et aux projets stratégiques

❑ Other collaborators

■ Ministère de la Santé et des Services sociaux

Martin April, Direction de la main-d'œuvre médicale

Richard Audet, Assistant Deputy Minister, Direction générale des technologies de l'information

Naomi Ayotte, Direction des affaires juridiques

Marie Bellavance, Direction des études et des analyses

Sylvie Bernier, Direction de la qualité

Vivianne Cantin, Direction des études et des analyses

Lise Caron, Service des mécanismes d'accès

Taha Chaabouni, Direction québécoise de cancérologie

Marlène Champagne, Direction québécoise de cancérologie

Harold Côté, Director, Direction de l'évaluation

Jacques Cotton, President and Chief Executive Officer, Régie de l'assurance maladie du Québec

Linda Cyr, Direction de la gestion financière – réseau

Martine Désilets, Service de l'allocation des ressources

Gisèle Drapeau, Service de l'allocation des ressources

François Dubé, Direction de l'organisation des services de première ligne intégrés

Lynda Fortin, Direction de la planification et des orientations stratégiques

Éric Fournier, Direction générale adjointe de la performance

John Gauvreau, Bureau de programme pour l'informatisation du réseau de la santé et des services sociaux

Martin Hébert, Direction des études et des analyses

René Kirouac, Service de l'allocation des ressources

Guylaine Lajoie, Direction générale adjointe de la gestion financière et des politiques de financement

Geneviève Landry, Direction de l'organisation des services de première ligne intégrés

Dr. Jean Latreille, Direction québécoise de cancérologie

André Lévesque, Direction de la gestion intégrée de l'information

André Lussier, Service de l'allocation des ressources

Louis Martel, Service de l'allocation des ressources

Pierre Martin, Direction de la gestion financière – réseau

Suzanne Morency, Direction de la planification et des orientations stratégiques

Mélanie Rainville, Direction adjointe de l'analyse et du soutien informationnel

Michèle Rompré, Direction québécoise de cancérologie

Laurier Samson, Office of the Assistant Deputy Minister, Direction générale des technologies de l'information

Alain Saucier, Direction de la gestion intégrée de l'information

Simon Tremblay, Service des mécanismes d'accès

■ **Ministère des Finances et de l'Économie**

Rufin Baghana, Direction de l'organisation financière et des sociétés d'État

Karine Barrette, Direction générale de la politique budgétaire

Françoise Beaulieu, Direction des communications

Roger Caire, Direction de l'analyse des dépenses, des infrastructures et de la tarification

Angie-Kim Chiasson, Direction de la prévision des dépenses et de la modélisation

Alexandre Desmeules, Direction de l'analyse des dépenses, des infrastructures et de la tarification

Patrick Dutoy, Direction de l'analyse des dépenses, des infrastructures et de la tarification

Harold Fortier, Direction du suivi des opérations budgétaires et non budgétaires

Véronique Fournier, Direction de l'analyse, de la planification et de l'information budgétaire

Brigitte Giguère, Direction de la prévision des dépenses et de la modélisation

Samir Hareb, Direction de l'analyse des dépenses, des infrastructures et de la tarification

François Leclerc, Direction de l'analyse, de la planification et de l'information budgétaire

Alexandre Montelpare, Direction de l'analyse, de la planification et de l'information budgétaire

APPENDIX II – THE PEOPLE MET WITH AND THE REPORTS COMMISSIONED

❑ The Advisory Committee

Caroline Babir, Centre de santé et de services sociaux de Laval

Luc Bouchard, Association québécoise des établissements de santé et de services sociaux

Alexandra Constant, Agence de la santé et des services sociaux de Montréal

François Côté, Agence de la santé et des services sociaux de la Montérégie

Raymond Coulombe, Centre de santé et de services sociaux Alphonse-Desjardins

Martine Couture, Agence de la santé et des services sociaux du Saguenay–Lac-Saint-Jean

Jean Déry, Association québécoise des établissements de santé et de services sociaux

Geneviève Dufresne, Agence de la santé et des services sociaux de Montréal

Yolaine Galarneau, Agence de la santé et des services sociaux de la Gaspésie–Îles-de-la-Madeleine

Yvan Gendron, Centre hospitalier de l'Université de Montréal

Anne Gervais, Centre de santé et de services sociaux de Gatineau

François Latreille, Centre hospitalier universitaire de Québec

Anne Lauzon, Association des établissements de réadaptation en déficience physique du Québec

François Lemoyne, Agence de la santé et des services sociaux de Montréal

Lucie Malo, Centre de santé et de services sociaux de Saint-Jérôme

Louise Potvin, Centre de santé et de services sociaux Pierre-Boucher

Jacques Ricard, Agence de la santé et des services sociaux de la Montérégie

Dr. Hartley Stern, Jewish General Hospital, Montreal

Dr. Stéphane Tremblay, Centre hospitalier universitaire de Sherbrooke

❑ The people met with

■ Ministère de la Santé et des Services sociaux

Lise Caron, Service des mécanismes d'accès

Marlène Champagne, Direction québécoise de cancérologie

Dr. Louis Couture, Assistant Deputy Minister, Direction générale des services de santé et médecine universitaire

François Dubé, Direction de l'organisation des services de première ligne intégrés

Éric Fournier, Direction générale adjointe de la performance

Pauline Gervais, Senior Advisor, Assurance autonomie

Pierre Laflamme, Direction générale adjointe à la coordination et aux ententes de gestion

Pierre Lafleur, Direction générale adjointe à la coordination et aux ententes de gestion

Andrée Quenneville, Direction de la planification et des orientations stratégiques

Dr. Jean Rodrigue, Assistant Deputy Minister, Direction générale des services de santé et médecine universitaire

Alain Saucier, Direction de la gestion intégrée de l'information

Isabelle Savard, Direction de la main-d'œuvre médicale

Marco Thibault, Assistant Deputy Minister, Direction générale du personnel réseau et ministériel

Lise Verreault, Deputy Minister, Ministère de la Santé et des Services sociaux

■ Health and social services network

Denis Beaudoin, Centre de santé et de services sociaux de Gatineau

Jocelyn Boucher, Hôpital du Sacré-Cœur de Montréal

Dr. Fabrice Brunet, Centre hospitalier universitaire de Sainte-Justine

Gynette Caillé, Centre de santé et de services sociaux Pierre-Boucher

Michel Ferland, Centre de santé et de services sociaux de Chicoutimi

Yves Fortin, Centre hospitalier universitaire de Québec

Danielle Fournier, Centre de santé et de services sociaux Les Eskers de l'Abitibi

Pascale Gagné, Centre de santé et de services sociaux du Nord de Lanaudière

Michel Martel, Agence de la santé et des services sociaux du Saguenay–Lac-Saint-Jean

Danielle McCann, Agence de la santé et des services sociaux de Montréal

Christine Mimeault, Centre de santé et de services sociaux du Saguenay–Lac-Saint-Jean

Carole Muir, Agence de la santé et des services sociaux du Saguenay–Lac-Saint-Jean

Christian Paire, Centre hospitalier de l'Université de Montréal

Claude Paradis, Centre hospitalier de l'Université de Montréal

Micheline Riverin, Centre de santé et de services sociaux de Chicoutimi

Dr. Lawrence Rosenberg, Jewish General Hospital, Montreal

Gilles Simard, Agence de la santé et des services sociaux du Saguenay–Lac-Saint-Jean

Valérie Vandal, Jewish General Hospital, Montreal

■ **Other public agencies in the health portfolio**

Dr. Luc Boileau, Institut national de la santé publique du Québec

Joanne Gaumond, Régie de l'assurance maladie du Québec

Daniel Labbé, Commissaire à la santé et au bien-être

Nicole Lefebvre, Régie de l'assurance maladie du Québec

Jean-Frédéric Lévesque, Institut national de la santé publique du Québec

Bruno Rainville, Régie de l'assurance maladie du Québec

Dr. Juan Roberto Iglesias, Institut national d'excellence en santé et en services sociaux

Anne Robitaille, Commissaire à la santé et au bien-être

Dr. Jean Rochon, Institut national de santé publique du Québec

Dr. Denis Roy, Institut national de santé publique du Québec

Robert Salois, Commissaire à la santé et au bien-être

■ **Professional orders in the health sector**

Dr. Charles Bernard, Collège des médecins du Québec

Dr. Yves Robert, Collège des médecins du Québec

Lucie Tremblay, Ordre des infirmières et infirmiers du Québec

■ **Medical federations**

Dr. Gaétan Barrette, Fédération des médecins spécialistes du Québec

Richard-Pierre Caron, Fédération des médecins spécialistes du Québec

Dr. Diane Francoeur, Fédération des médecins spécialistes du Québec

Dr. Michèle Francoeur, Fédération des médecins spécialistes du Québec

Dr. Louis Godin, Fédération des médecins omnipraticiens du Québec

Patricia Kéroack, Fédération des médecins spécialistes du Québec

Nicole Pelletier, Fédération des médecins spécialistes du Québec

■ Association québécoise des établissements de santé et de services sociaux

Luc Bouchard, Association québécoise des établissements de santé et de services sociaux

Lise Denis, Association québécoise des établissements de santé et de services sociaux

Jean Déry, Association québécoise des établissements de santé et de services sociaux

Catherine Gervais, Association québécoise des établissements de santé et de services sociaux

Diane Lavallée, Association québécoise des établissements de santé et de services sociaux

Anne Lemay, Association québécoise des établissements de santé et de services sociaux

Michelle Pelletier, Association québécoise des établissements de santé et de services sociaux

■ Other organizations in the health sector

M^e Paul Brunet, Conseil pour la protection des malades

Normand Laberge, Québec Medical Association

Dr. Laurent Marcoux, Québec Medical Association

Robert Nadon, Québec Medical Association

■ Trade union organizations

Michèle Boisclair, Fédération interprofessionnelle de la santé du Québec

Jean Dalcé, Confédération des syndicats nationaux

Jean Lacharité, Confédération des syndicats nationaux

Andrée Lapierre, Confédération des syndicats nationaux

Régine Laurent, Fédération interprofessionnelle de la santé du Québec

Marco Lutfy, Canadian Union of Public Employees

Julie Martin, Fédération interprofessionnelle de la santé du Québec

Lucie Mercier, Fédération interprofessionnelle de la santé du Québec

Anne Pineau, Confédération des syndicats nationaux

Caroline Valiquette, Fédération interprofessionnelle de la santé du Québec

Jennifer Whiteside, Fédération des travailleurs et travailleuses du Québec

■ University sector

Claude Castonguay, Centre interuniversitaire de recherche en analyse des organisations

Joanne Castonguay, Centre interuniversitaire de recherche en analyse des organisations

Jean-Louis Denis, École nationale d'administration publique

André Fortier, École nationale d'administration publique

Erin Strumpf, McGill University

■ Private companies

Dr. Gerry Bédard, Concerto Health Group

Guylaine Chabot, Concerto Health Group

Daniel Handfield, MédiaMed Technologies

Dr. Alain Larouche, Concerto Health Group

Louis Larouche, Concerto Health Group

Dr. Jean Mireault, MédiaMed Technologies

Pierre Rhéaume, Consultant

■ Consultants and experts from other jurisdictions

■ England

Paul Corrigan, Special Advisor to Foundation Trusts and Consultant

Jamie Day, Head of IT, N A Wilson Associates LLP

Sir John Oldham, Quest 4 Quality (former director, Year of Care, NHS)

Neil Wilson, N A Wilson Associates LLP

■ Australia

Stephen Duckett, Grattan Institute

■ British Columbia

Dr. Doug Cochrane, University of British Columbia, BC Patient Safety & Quality Council

Jason Sutherland, University of British Columbia, Centre for Health Services and Policy Research

■ France

Alain Cordier, Collège de la Haute autorité de santé

Zeynep Or, Institut de recherche et documentation en économie de la santé

■ Ontario

Miin Alikhan, Ministry of Health and Long-Term Care

Helen Angus, Ministry of Health and Long-Term Care

Anna Greenberg, Ministry of Health and Long-Term Care

David Lamb, Ministry of Health and Long-Term Care

Danny Purcell, Montfort Hospital

Don Young, Ministry of Health and Long-Term Care

□ The reports commissioned

■ Reports commissioned by the Expert Panel

Anne, LEMAY, *Perspective et réflexion sur les outils nécessaires à l'implantation d'un financement axé sur le patient au Québec*, *Rapport final*, July 2013.

Madeleine, BRETON, *Avis sur le financement de la prise en charge des maladies chroniques*, *Document technique*, December 2013.

Joanne, CASTONGUAY, *Le financement de soins chroniques*, *Rapport de projet*, CIRANO, Montreal, October 2013.

Erin, STRUMPF, Samer FARAJ and Vedat VERTER, *Making Decisions about Activity-Based Financing in Health Care: Payment Mechanisms and Policy Goals*, McGill University, May 20, 2013.

Zeynep, OR, *DRG Payment in France*, IRDES, 2013.

CIM, *Focus groups sur l'appréciation de l'approche de financement par activité utilisée par le MSSS*, *Rapport final*, October 10, 2012.

Jordan, ISENBERG, *Moving Towards Activity-Based Financing: Interjurisdictional Experience and Outlook for Quebec*, August 2012.

■ Report commissioned by the Minister of Health and Social Services

INSTITUT NATIONAL D'EXCELLENCE EN SANTÉ ET EN SERVICES SOCIAUX (INESSS), Jean-Marie R. LANCE, *Le financement axé sur les patients*, *Revue de littérature sur les expériences étrangères*, [Note informative], October 2013, [Online],
[\[http://www.inesss.qc.ca/fileadmin/doc/INESSS/Reports/EtudeEconomique/INESSS_Funding_axe_patients.pdf\]](http://www.inesss.qc.ca/fileadmin/doc/INESSS/Reports/EtudeEconomique/INESSS_Funding_axe_patients.pdf).

www.santefinancementactivite.gouv.qc.ca/en/