The Senate

Standing Senate Committee on Social Affairs,
Science and Technology

The Health of Canadians – The Federal Role

One in a series of reports on the state of the health care system in Canada

Chair:
The Honourable Michael J.L. Kirby

Deputy Chair:
The Honourable Marjory LeBreton

April 2002

Volume Five: Principles and Recommendations for Reform - Part I

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Volume Five:
Principles and Recommendations for Reform - Part I

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Extract from the Journals of the Senate of March 1, 2001:

Resuming debate on the motion of the Honourable Senator LeBreton, seconded by the Honourable Senator Kinsella:

That the Standing Senate Committee on Social Affairs, Science and Technology be authorized to examine and report upon the state of the health care system in Canada. In particular, the Committee shall be authorized to examine:

a) The fundamental principles on which Canada's publicly funded health care system is based;
b) The historical development of Canada's health care system;
c) Health care systems in foreign jurisdictions;
d) The pressures on and constraints of Canada's health care system; and
e) The role of the federal government in Canada's health care system;

That the papers and evidence received and taken on the subject and the work accomplished during the Second Session of the Thirty-sixth Parliament be referred to the Committee;

That the Committee submit its final report no later than June 30, 2002; and

That the Committee be permitted, notwithstanding usual practices, to deposit any report with the Clerk of the Senate, if the Senate is not then sitting; and that the report be deemed to have been tabled in the Chamber.

After debate,

The question being put on the motion, it was adopted.

Extract from the Journals of the Senate of Tuesday, December 11, 2001:

The Honourable Senator Kirby moved, seconded by the Honourable Senator Pépin:

That, notwithstanding the Order of the Senate adopted on March 1, 2001, the Standing Senate Committee on Social Affairs, Science and Technology, which was authorized to examine and report upon the state of the health care system in Canada, be empowered to present its final report no later than June 30, 2003.

The question being put on the motion, it was adopted.

ATTEST :

Paul C. Bélisle
Clerk of the Senate

SENATORS

The following Senators have participated in the study on the state of the health care system of the Standing Senate Committee on Social Affairs, Science and Technology:

The Honourable Michael J.L. Kirby, Chair of the Committee
The Honourable Marjory LeBreton, Deputy Chair of the Committee

and

The Honourable Senators:

Catherine S. Callbeck
Joan Cook
Jane Cordy
Joyce Fairbairn, P.C.
Wilbert Keon
Yves Morin
Lucie Pépin
Douglas Roche
Brenda Robertson

Ex-officio members of the Committee:
The Honourable Senators: Sharon Carstairs P.C. (or Fernand Robichaud, P.C.) and John Lynch-Staunton (or Noel A. Kinsella)

Other Senators who have participated from time to time on this study:
The Honourable Senators Carney, Cochrane, Lawson, Léger, Maheu, St. Germain, Sibbeston and Stratton.

INTRODUCTION

In December 1999, during the Second Session of the Thirty-Sixth Parliament, the Standing Senate Committee on Social Affairs, Science and Technology received a mandate from the Senate to study the state of the Canadian health care system and to examine the evolving role of the federal government in health care. The Senate renewed the mandate of the Committee in the First Session of the Thirty-Seventh Parliament. The terms of reference adopted for the purpose of this study read as follows:

> *That the Standing Senate Committee on Social Affairs, Science and Technology be authorized to examine and report upon the state of the health care system in Canada. In particular, the Committee shall be authorized to examine:*
>
> *(a) The fundamental principles on which Canada's publicly funded health care system is based;*
> *(b) The historical development of Canada's health care system;*
> *(c) Publicly-funded health care system in foreign jurisdictions;*
> *(d) The pressures on and constraints of Canada's health care system;*
> *(e) The role of the federal government in Canada's health care system.*[1]

In response to this broad and complex mandate, in March 2001, the Committee re-launched its multi-year and multi-faceted study. Initially, the study was to comprise five major phases. Given the huge amount of testimony it received and the complexity of many of the issues it confronted, the Committee has decided to add an additional phase to its work plan. The report of this sixth phase (Volume Six) will present the Committee's recommendations on the financing and restructuring of health care. Volume Six will also address issues surrounding the growing gaps in coverage for medically necessary drugs and home care services.

Following completion of Volume Six, the Committee intends to examine several specific health-related issues. These studies will result in a series of thematic reports. These thematic reports will deal with: 1) Aboriginal health; 2) women's health; 3) mental health; 4) rural health; 5) population health; 6) home care and 7) palliative care. The following table provides information on the individual phases and their respective timeframes:

[1] *Debates of the Senate* (*Hansard*), 2nd Session, 36th Parliament, Volume 138, Issue 23, 16 December 1999.

HEALTH CARE STUDY
INDIVIDUAL PHASES AND PROPOSED TIMEFRAMES

Phases	Content	Timing of Report
One	Historical Background and Overview	March 2001
Two	Future Trends, Their Causes and Impact on Health Care Costs	January 2002
Three	Models and Practices in Other Countries	January 2002
Four	Development of Issues and Options Paper	September 2001
Five	Principles for Restructuring the Hospital and Doctor System and Recommendations on Several Health Care Issues	April 2002
Six	Recommendations with respect to Financing and Restructuring the Hospital and Doctor System and Closing the Gaps in Drug and Home Care Coverage	October 2002
Thematic Studies	Aboriginal Health, Women's Health, Mental Health, Rural Health, Population Health, Home Care and Palliative Care	To be determined

The first report of the Committee, released in March 2001, recounted the history of how the federal government helped the provinces to fund hospital and physician care. It focused in particular on the initial objectives of the federal government's involvement in health care and raised some questions about the future role of the federal government in light of the changing health care environment (e.g. increased recourse to drug therapy, hospital out-patient services, home care and community care). This first report also traced the evolution of health care spending and health indicators over the past several decades. Finally, it looked at a number of the myths that are still current concerning the delivery and financing of health care in Canada and clarified the reality surrounding each of these myths. The objective of the first report was to provide factual information as well as to clarify the major current misconceptions that recur in the health care debate in Canada.

The Committee's second report reviewed the major trends that are having an impact on the cost and the method of delivery of health services, and the implications of these trends for future public funding. In particular, the report focused on the pressures associated with the changing demographics of the Canadian population, the increasing use and growing cost of drugs and technology, and developments in the delivery of health services (e.g. the increased use of out-patient, home care and telehealth). The second report also considered issues surrounding health research, health human resource planning (including the shortage of health care providers), rural health, disease trends and the health of Canada's Aboriginal

population. Finally, it examined how a health info-structure could help improve the delivery of health services in the future.

The third report of the Committee described and compared the way that health care is financed and delivered in several other countries (Australia, Germany, the Netherlands, Sweden, the United Kingdom and the United States), and the objectives of national government health care policy in those countries. It highlighted those policies and reforms from which Canada could learn. The third report also examined briefly the operation of medical savings account systems (MSAs) in Singapore, South Africa, the United States and Hong Kong.

The Committee's fourth report outlined five distinct roles for the federal government in health and health care. These five roles are: 1) financing, 2) research and evaluation, 3) infrastructure, 4) population health and 5) service delivery. For each federal role, a list of objectives was enumerated, some constraints were identified and a wide range of potential policy options for reform and renewal were proposed. The Committee's fourth report served to launch a public debate on the challenges and options facing Canada's health care system.

The current report is based on the testimony gathered during hearings held in the fall of 2001, as well as on evidence received during the earlier phases. In total, nearly 300 individuals and organizations told the Committee which of the options presented in the Phase Four report they liked or disliked, and why.

This fifth report consists of seven chapters. Chapter One identifies three fundamental realities in Canada's health care system. At the end of Chapter One are listed twenty principles which the Committee believes should guide the restructuring and financing of the health care delivery system. Chapter Two provides the Committee's rationale for each of the principles enunciated in Chapter One. Chapter Three summarizes the findings and gives the recommendations of the Committee with respect to the financing and assessment of health care technology. Chapter Four presents the views of the Committee regarding health information systems and details its recommendations for deploying a health infostructure in Canada. Chapter Five provides the perspectives of the Committee with respect to health research. Chapter Six presents the Committee's observations and recommendations with respect to the planning of human resources in health care. Chapter Seven enumerates a number of principles which the Committee believes should apply to the population health role of the federal government, with a particular emphasis on Aboriginal health.

The Committee's sixth report, to be released in October 2002, will focus primarily on presenting a set of recommendations on how to move from the principles outlined in Chapters One and Two of this report to a concrete plan of action for restructuring the hospital and doctor system. The sixth report will also include a specific proposal for increasing federal revenue, so that it will be possible to finance the increased federal responsibilities recommended in this report and to help fund the restructuring of the hospital and doctor system.

CHAPTER ONE:

A REFORM BASED ON FUNDAMENTAL REALITIES

The purpose of this Chapter and Chapter Two is to present a set of principles which will guide the Committee's recommendations on the restructuring and financing of the health care delivery system[2] and on the role of the federal government in health care renewal. These recommendations will be presented in October 2002 in Volume Six of the Committee's study, following hearings during which witnesses will give the Committee their views on how the principles should be applied in practice.

Some of the principles presented in Chapters One and Two serve as the basis for the Committee's recommendations presented in chapters 3 through 6, which deal respectively with health care technology, health infostructure, health research and human resources planning in health care.

The set of principles reflect key findings from the first three reports of the Committee's study on health care together with the evidence presented to the Committee during extensive public hearings held across the country in the fall of 2001. The rationale for each of the principles listed at the end of this chapter is provided in Chapter Two. It is worthwhile to note that many of these principles bear a strong similarity to some of the observations and recommendations made by recent provincial task forces and commissions on health care.

Overall, the set of principles is based on the recognition of three fundamental realities:

- Canada's publicly funded health care system is not fiscally sustainable given current funding levels;
- Canadians want a strong role for the federal government in facilitating health care restructuring and renewal;
- There is a need to introduce incentives for all participants in the publicly funded hospital and doctor system – providers, institutions, governments and patients – to deliver, manage and use health care more efficiently.

The Committee hopes that the principles presented in this Chapter and Chapter Two will enhance the public's ability to understand and give thoughtful consideration to the various challenges faced by Canada's health care system. We also hope that the principles will help move us away from the uniquely Canadian debate about the role of the private sector in health care and the appropriate public/private mix. It is the Committee's view that the debate is being conducted in a counterproductive fashion, and is often responsible for diverting attempts at reforming the health care system.

[2] While the Committee usually refers to the "health care system", we acknowledge the fact that Canada currently has 13 similar, but not identical, interconnected systems, one in each province and territory.

Canadians must recognize that every Canadian province and territory has mixed public/private sector involvement in health care, as does every other major industrialized country. Physicians, for example, are private in the sense that only a tiny minority are employed by government or its agencies. In addition, most hospitals are owned and governed by boards representing the communities they serve (and some by religious orders) and they operate on a private, not-for-profit, basis. Moreover, diagnostic laboratories operate in most provinces as private, for-profit, entities delivering their services to the publicly funded system, and the great majority of pharmacies are also privately owned.

The Committee wants to stress, once again, the importance for Canadians to be willing to consider new approaches to delivering health services. It is only through such consideration that we will be able to develop options that offer opportunities to sustain Canada's publicly funded health care system. In his interim report, Roy Romanow stressed this point very well when he stated:

> *We need to be clear on what values Canadians want their health system to reflect in its policies and programs. In the past, progress on these issues has been extremely difficult with intransigent positions taken at both ends of the spectrum. This kind of acrimonious debate does nothing to move us forward to a broader consensus on the direction we want to take or the steps needed to put our health care system on a sustainable footing for the future. We need to be open to new options and ideas, be willing to engage in open and honest debate about the pros and cons of each new idea, then be prepared to act.* [3]

We now turn to a discussion of the three fundamental realities listed above.

1.1 Canada's Publicly Funded Health Care System is Not Fiscally Sustainable Given Current Funding Levels

> ***It is the view of the Committee that a fiscally sustainable health care system is a system upon which Canadians can rely both today and in the future, given government fiscal capacity and taxpayers' willingness to pay. It does not mean giving every Canadian every health service right when they want it. Neither does it mean a perfect system.***

The debate over health care financing in Canada revolves around the issue of sustainability. This concept has taken on several meanings in health care in recent years. The Committee wishes to stress that ensuring sustainability does not mean maintaining the status quo in the structure of health care delivery. Nor does it mean giving every Canadian every health service right when they want it; sustainability does not mean a perfect system. We believe that a sustainable health care system is one that provides an appropriate level of care in response to population needs today and, in the longer term, it is also one that has the capability to adapt or adjust to new and evolving realities.

[3] Commission on the Future of Health Care in Canada (Roy J. Romanow, Commissioner), *Shape the Future of Health Care*, Interim Report, February 2002, p. 4.

Given the current structure of Canada's publicly funded health care system, questions relating to the sustainability and affordability of the system are closely intertwined. This means that the central issue is one of fiscal sustainability. It is the view of the Committee that a fiscally sustainable health care system is a system upon which Canadians can rely both today and in the future, given government fiscal capacity and taxpayers' willingness to pay. That is, in considering whether the current system is fiscally sustainable, one must take into account two constraints. The first is the willingness of taxpayers to pay for the system. The second is the need for all governments, for economic development purposes, to keep tax rates relatively competitive with the OECD countries, and particularly with the United States.

Is Canada's publicly funded health care system fiscally sustainable? To answer this question, it is necessary to assess whether more money is needed, and whether it is possible to raise it from current sources, given the two constraints identified above. To begin, then, we need to examine current and projected trends in health care spending.

According to data from the Canadian Institute for Health Information (CIHI), public and private health care spending in Canada topped $95 billion in 2000, 6.9% more than the previous year. Even after adjusting for inflation and population growth, there was a 4.1% real increase in spending between 1999 and 2000.

The pace of growth in health care spending is speeding up. In fact, real spending per capita is rising faster today than at any time since the 1980s. Moreover, projections suggest that there are real, continuing upward pressures on Canada's health care costs:

- **Drug Costs**: Drug costs currently account for over 15% of total (public and private) health care spending. They are expected to climb to $14.7 billion in 2000, up 9% from the year before. The Committee noted in Volume Two that, between 1990 and 2000, drug spending per capita increased by almost 93%, more than twice the average for all health care spending (40%).[4] Original, effective but very costly drugs will be entering the Canadian market in the next decade (including a possible vaccine against AIDS, a new immunological cure for juvenile diabetes, etc.) exacerbating pressures on overall drug costs.
- **New Technology**: Canada needs to invest more in health care technology and health information systems. The Committee's Phase Two report indicated that each $1 billion investment in new medical equipment requires an additional $700 million to cover operating and maintenance costs. In fact, a further $5 billion would be required to bring Canada's investment in health care technology to a level equivalent to that of other OECD countries. Similarly, estimates suggest that between $6 and $10 billion would be required to achieve full implementation of a Canadian health-infostructure (or between $1 to $1.25 billion annually).[5]
- **Aging Population**: In 1998, 12% of Canadians were 65 or older and more than 43% of what provincial and territorial governments spent on health care

[4] Volume Two, p. 20.
[5] Volume Two, p. 41 and p. 114.

went to services for seniors. According to Statistics Canada, by 2010, seniors will represent 14.6% of the population, a percentage that rises to 23.6% as the peak of the baby boom generation enters retirement by 2031. Expensive procedures, which were not previously performed on elderly patients, are increasingly being made available to them.[6] Estimates suggest that the impact of population aging will account for an additional 1% of total health care costs each year. Although this percentage appears to be quite small, in dollar terms it amounts to approximately $1 billion annually in increased health care costs due to an aging population.

- **Cost of Health Care Human Resources**: Labour costs amount to about 75% of spending on health care. According to the Premier's Advisory Council on Health in Alberta (usually referred to as "the Mazankowski report"), in 2001-02 over half the budget increase for health care in Alberta went to salary increases. Competition for scarce human resources in health care is likely to maintain this trend, not only in Alberta but across Canada.
- **Health Research**: Unprecedented support for health research will lead to an explosion of new technologies and drugs. This year, some $US 40 billion will be spent on health research in the G-7 countries leading to effective but costly technologies in the fields of genomics, proteomics,[7] nanotechnology,[8] etc.
- **Growing Public Expectations**: Many observers have noted that public demand for health care will have a major impact on future costs. In his interim report, Roy Romanow made this point clearly: "One of the most significant cost drivers is how our own expectations have grown over the past few decades. We expect the best in terms of technology, treatments, facilities, research and drugs, and as a consequence, we may be placing demands on our governments that are not sustainable over time."[9] In fact, Canadians appear to be North American and not European in their viewpoints when it comes to public expectations. More precisely, 64% of Canadians are very interested in new medical discoveries, compared to 66% of Americans and 44% of Europeans.
- **Health Care Restructuring**: Restructuring and renewing health care will cost a considerable amount of money. For example, it has been estimated

[6] For example, cardiac procedures (e.g. PTCA) performed on the elderly are increasing by 12% annually; joint surgery (e.g. knee replacement) is increasing at an annual rate of 8%; renal dialysis is increasing by 14% a year (at a cost of $50,000 annually per patient).

[7] Proteomics is the systematic analysis of all protein sequences and protein expression patterns in tissues. Genes encode proteins that perform all of the fundamental activities within cells. Proteins are the molecular machines that carry out genetic instructions. Abnormalities in protein production or function have been connected to many diseases and health conditions.

[8] Nanotechnology is molecular manufacturing or, more simply, building things one atom or molecule at a time. A nanometer is one billionth of a meter (3 - 4 atoms wide). Nanotechnology proposes the construction of novel molecular devices possessing extraordinary properties. The possibilities include microscopic computers, billions of times faster than today's, that could control machines patrolling our bodies as artificial immune systems, and machines that could repair cells on a molecular scale, perhaps stopping or reversing the aging process.

[9] Commission on the Future of Health Care in Canada (Roy J. Romanow Commissioner), *Shape the Future of Health Care,* Interim Report, February 2002, p. 25.

that establishing primary health care teams in Quebec would cost, on average, $1 million per team.

- **Gaps in the Health Care Safety Net**: As pointed out in the Committee's fourth report, there are presently serious gaps in our health care safety net, particularly with respect to drugs and home care. For example, a number of Canadians are not protected against the consequences of having to pay catastrophic drug costs. Similarly, a significant number of Canadians have limited access to necessary home care services. If Canada is to have national standards in health care, and not only in hospital and doctor care as we do now, more money will clearly be required in the form of additional government funding in order to expand public coverage and reduce or close gaps in the health care safety net.

Given the publicly funded nature of Canada's hospital and doctor system, these multidimensional pressures put considerable strain on governments' budgets, both in the shorter and in the longer terms. This reality was well documented by provincial and territorial ministers of health in their 2000 report on cost drivers[10] as well as by many reports tabled with the Committee.

For example, a report prepared for the Ontario Hospital Association estimated that close to 38% of total provincial program spending went to health care in 2000-01, up from 33% in 1992-93.[11] For its part, the Canadian Taxpayers Federation projected that this proportion will hit 50% as early as 2007 in British Columbia and New Brunswick.[12] Similarly, the Conference Board of Canada estimated that over the period from 2000-2020, public per capita spending on health care (adjusted for inflation) will increase by 58%, while public per capita spending on all other government services and programs will increase by only 17% over the forecast period.[13]

The percentage of government spending that is devoted to health care provides the clearest indication of the short-term pressures felt by governments charged with funding health care. During the Committee's cross-country hearings, a wide range of witnesses, including health care managers, health care providers and health care consumers, expressed deep concerns about rising health care costs and their impact on governments' budgets and on patient care. Based on this testimony as well as on numerous reports, the Committee believes that rising costs strongly suggest that Canada's publicly funded health care system is not fiscally sustainable given current funding levels.

A number of individuals and organizations have suggested that operating the health care system more efficiently would save enough money so that no new sources of funding are required. The Committee has repeatedly acknowledged the critical importance of improving effectiveness and efficiency in the management and delivery of health services. In a similar vein,

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10 Provincial and Territorial Ministers of Health, *Understanding Canada's Health Care Costs – Final Report*, August 2000.
11 TEAQ Associates, *Getting the Right Balance : A Review of Federal-Provincial Fiscal Relations and the Funding of Public Services*, prepared for the Ontario Hospital Association, December 2001, p. 21.
12 Walter Robinson, *The Patient, The Condition, The Treatment – A CTF Research and Position Paper on Health Care*, Canadian Taxpayers Federation, September 2001, p. 59.
13 Glenn G. Brimacombe, Pedro Antunes and Jane McIntyre, *The Future Cost of Health Care in Canada, 2000 to 2020 – Balancing Affordability and Sustainability*, The Conference Board of Canada, 2001, p. 21.

the Fyke Commission in Saskatchewan remarked that "spending more on the current health care system without addressing its underlying problems would be irresponsible."[14] Indeed, many of the principles presented in the next chapter are designed to achieve a more efficient system than the one we now have.

At the same time, though, we have also argued that there is not convincing evidence to support the hypothesis that efficiency gains will be sufficient to avoid confronting the issue of the need for new funding sources. The Committee has stated that responsible public policy planning therefore requires the exploration of additional sources of funding for health care.

In the Committee's view, to do otherwise would be to put all our eggs in one basket. This would mean betting the future fiscal sustainability of the health care system on making changes when there is not yet evidence to demonstrate that such changes are actually achievable, and there is no reliable indication of the amount of money that can be saved through restructuring and efficiency changes. In the Committee's view, to make such a bet would be irresponsible.

We do, however, understand why some people prefer to gamble on efficiency changes being sufficient to make the system fiscally sustainable. Such an assumption evades most of the tough financing questions, and thereby ducks the most controversial health care issues.[15]

In short, prudence, combined with a careful consideration of the evidence, obliges us to confront the most difficult health care issue facing policy makers and indeed all Canadians: how should additional funds for health care be raised? Should they come from individuals or businesses to government (by way of taxes or health care insurance premiums) or should they come from individuals or businesses directly into the health care sector? The Committee will present its answers to these questions in its October report.

Both the report of the Clair Commission in Quebec and the Mazankowski report insisted that there are limits to government general revenues and that it will be necessary to diversify the revenue stream in order to sustain the health care system and respond to the future health care needs of the population.

The Clair Commission stated:

> *To ensure the sustainability of our system, it must first of all be accepted that (…) the resources that (…) society can devote to health and social services are limited. This acceptance leads to two indisputable and inextricably linked obligations: the obligation to make choices and to perform.*
>
> *(…)Leaders must make choices about the limits of financial resources and about medical technologies and insured drugs. Administrators and clinicians must also make*

[14] *Caring For Medicare*, p. 73.
[15] Volume Four, pp. 51-52.

choices or, if not, accept the choices made by others. Finally, each citizen must choose between solidarity, equity and the risk inherent in the philosophy of "everyone for himself."[16]

Similarly, the Mazankowski report stressed:

If we continue to depend only on provincial and federal revenues to support health care, we have few options other than rationing health services. On the other hand, if we are able to diversify the revenue sources used to support health care, we have the opportunity of improving access, expanding health services, and realizing the potential of new techniques and treatments to improve health.

(…)Rather than rationing health services, we need to look at a variety of options for generating additional revenue and using that revenue to expand opportunities for Albertans to access the health services they want and need on a timely basis.[17]

Therefore, Canadians are confronted with the need to balance their desire for publicly funded health services against their willingness to pay for them.

The Committee wishes to underline the fact that the federal government has significantly increased its financial support to health care in recent years and, consistent with the view expressed by many witnesses, welcomes this new infusion of funds. However, it is also important to recognize that the health care needs of Canadians are great and that their expectations are continually growing. In addition, the costs of running the hospital and doctor system will continue to increase for the reasons given earlier.

Given all the competing demands for federal expenditures, the Committee is of the view that any additional funding from federal sources will have to come from "new" money, and not from revenue transferred into the health envelope from existing sources.

Also, in considering how such additional funding ought to be raised, we must keep in mind that Canada's personal taxes are the highest of the G-7 countries and among the highest in the OECD.[18] This is why the Committee believes that Canadians are confronted with the need to balance their desire for publicly funded health services against both their willingness to pay for them and the need for Canadian tax levels to be reasonably competitive with those of other OECD countries.

[16] Commission d'étude sur les services de santé et les services sociaux (Michel Clair, Commissioner), *Emerging Solutions – Report and Recommendations*, January 2001, p. v.
[17] Premier's Advisory Council on Health (Right Hon. Don Mazankowski, Chair), *A Framework for Reform*, report to the Premier of Alberta, December 2001, pp. 52-53. This report is also referred to as "the Mazankowski report".
[18] This fact is well documented in a report by Statistics Canada, "Recent Trends in Taxes Internationally", in *Perspectives on Labour and Income*, Catalogue No. 75-001-XIE, Vol. 2, No. 1, January 2001, pp. 36-40.

Once it is recognized that the publicly funded health care system does not currently have sufficient resources to respond to all the demands that are being placed upon it, Canadians must decide what trade-offs they find acceptable. There are <u>three basic options</u>:

- The continued rationing of publicly funded health services, either by consciously deciding to make some services available and not others (that is, by delisting some services), or by allowing waiting lists to continue to grow;
- Increasing government revenue, either by raising taxes directly or through other means such as health care insurance premiums, so that the rationing of services can be reduced or eliminated and waiting lines shortened;
- Making some services available to those who can afford to pay for them by allowing a parallel privately funded tier of health services, while maintaining a publicly funded system for all other Canadians.

The Committee believes that these are the realistic choices facing Canadians. There are arguments in favour of each option. And each option evokes an emotional response from various groups and individuals. Nevertheless, the three options given above must be addressed if Canada is to sustain a health care system of which Canadians can be truly proud. Section 2.5 shows how each of these options is affected by the principles for restructuring and refinancing presented in Chapter Two.

The testimony from witnesses who argued that health care spending is rising much more rapidly than government revenues reinforces the conclusion that Canadians must make choices. Unless health care spending is to be allowed to crowd out other equally important spending, Canadians must confront, on an ongoing basis, the trade-offs inherent in the three options listed above. The challenge of sustaining Canada's health care system thus entails deciding what aspects of health care delivery are to be publicly funded and how funds are to be raised. In Volume Six, the Committee will present its recommendations with respect to federal funding of health care.

1.2 Canadians Want a Strong Role for the Federal Government in Facilitating Health Care Restructuring and Renewal

> ***The Committee believes that the federal government has a critical role to play in facilitating, encouraging and accommodating the provinces and territories in their efforts to restructuring and reconfiguring their health care system. The Committee is convinced that the vast majority of Canadians are looking to the federal government for collaborative support and partnerships in effecting needed changes in the health care system.***

Many witnesses underlined the fact that the federal government has historically played a major role in financing the health services covered under the *Canada Health Act*. The Committee believes that, given the serious challenges facing our health care system, the federal government must play a major role in order to preserve the spirit of the Medicare program that it pioneered several decades ago. In fact, Canadians overwhelmingly feel that the publicly funded health care system has served them well and they do not want "big bang" or revolutionary changes to the system. Public attitude

surveys repeatedly show that Canadians expect the federal government to continue to be a major player in Canada's publicly funded health care system.

Although the delivery of health care in Canada is primarily a provincial and territorial responsibility, the Committee believes that the federal government has a critical role to play in facilitating, encouraging and accommodating the provinces and territories in their efforts to restructure and reconfigure their health care systems. The Committee is convinced that the vast majority of Canadians are looking to the federal government for collaborative support and partnership in effecting needed changes in the health care system. In fact, there are a number of reasons why the federal government's role is important.

First, Canadians strongly support national principles in health care, and they look to the federal government to play a strong role in maintaining them. As it now stands, the capacity of the federal government to enforce acceptable standards and to recommend appropriate policies to provincial and territorial governments depends in large part on the size of its cash contribution.

Second, federal funding for health care is particularly critical during this period of reform and renewal: changes to the way the health care system operates and is structured will likely result in more rather than less money being required, at least in the short term. The Fyke Commission in Saskatchewan made a similar point, noting that "new funding must buy change, not time, and must buy quality not merely more volume."[19]

Third, and some would say most importantly, only the federal government is in a position to make sure that all provinces and territories, regardless of the size of their economies, have at their disposal the financial resources to meet the health care needs of their citizens. This redistributive role of the federal government is a fundamental part of what many call "the Canadian way".

Fourth, if fundamental changes are to be made to the health care system, they should not be made in only one or two provinces. Inter-provincial harmonization with respect to what services are insured (and ideally with respect to scope of practice rules as well) are important elements of a truly national system. There is an important federal role in encouraging such harmonization, for example by using financial incentives or penalties to persuade provincial or territorial governments to accept national standards.

Finally, the Committee wants to emphasize its strong belief that the amount of money that the federal government transfers to the provinces for health care ought to ensure that it has a seat at the table when the restructuring of the health care system is discussed. The federal government should not just give money without having a say on how that money is spent.

Canadians also want the federal government to work with the provinces and territories in a spirit of collaboration and partnership in facilitating health care renewal. They are impatient with blame-laying; they are more interested in positive results and intergovernmental cooperation. In this perspective, the Committee totally agrees with the observation made in the

[19] *Caring for Medicare*, p. 79.

Romanow report that now is the time for all levels of governments to collaborate in health care restructuring:

> *(…) Canadians want both levels of governments to stop the corrosive and unproductive long-distance hollering and finger-pointing that currently passes for debate on how to renew the health care system. They see both levels of government as bearing responsibility for the problems affecting the system and for finding solutions to them.*[20]

1.3 There is a Need to Introduce Incentives for all Participants in the Publicly Funded Hospital and Doctor System – Providers, Institutions, Governments and Patients – to Deliver, Manage and Use Health Services More Efficiently.

There is a need to introduce incentives for all participants in the publicly funded hospital and doctor system – providers, institutions, governments and patients – to deliver, manage and use health services more efficiently. The Committee strongly believes that significant change in a system as complex as the hospital and doctor system cannot be achieved through top-down, centralized, micro-management. The required changes can only be achieved by establishing an appropriate system of incentives which will:

> ***The Committee strongly believes that significant change in a system as complex as the hospital and doctor system cannot be achieved through top-down, centralized, micro-management. The required changes can only be achieved by establishing an appropriate system of incentives.***

- Introduce constructive competition among health care institutions;
- Encourage more effective use of all health care providers;
- Encourage more appropriate utilization of health care technology;
- Put in place structures that will result in a better ongoing evaluation of the system as a whole, and of health care outcomes in particular;
- Ensure that patients receive timely as well as quality care, and
- Encourage patients to make cost-effective use of publicly funded health services.

It is the view of the Committee that the key to developing an appropriate set of incentives is the separation of the three functions of financing (or insuring), delivering and evaluating health care. We are convinced that such a split is a necessary condition for being able to introduce the kinds of incentives that will foster a truly patient-oriented health care system – a system in which the patient receives the most appropriate care, in a timely fashion, by a qualified provider.

[20] *Shape the Future of Health Care*, p. 4.

Moreover, separating the functions of financing, delivering and evaluating health care will introduce a much greater degree of transparency into the system and enhance the accountability of all parts of the system, including government. It will also lay the groundwork for greater competition among health care institutions. The rationale for such a split, which we believe is critical to any meaningful reform of Canada's health care system, was discussed in the Committee's hearings as well as in recent reports.

> ***It is the view of the Committee that the key to developing an appropriate set of incentives is the separation of the three functions of financing (or insuring), delivering and evaluating health care. We are convinced that such a split is a necessary condition for being able to introduce the kinds of incentives that will foster a truly patient-oriented health care system – a system in which the patient receives the most appropriate care, in a timely fashion, by a qualified provider.***

In the Atlantic provinces and Western Canada, as well as in central Canada, the Committee was told that health care in this country operates in many ways as a "monopoly", with the government acting as the sole funder and the sole provider of many health services, without independent evaluation or competition. The Right Hon. Don Mazankowski, Chairman of the Premier's Advisory Council on Health in Alberta, explained:

> *Alberta's health care system, like other systems across the country, operates as an unregulated monopoly. Government…*
>
> - *Defines what constitutes "medically necessary services"*
> - *Pays for all insured services provided*
> - *Provides public insurance and forbids, by law, the provision of private insurance for these services*
> - *Prevents, by law, people from obtaining insured services outside the public system except where there are contracts with the public system*
> - *Directly or indirectly administers and governs care*
> - *Defines, collects and reviews information on its own performance.*[21]

The Committee heard that such government control over health care makes for an inefficient system that lacks transparency and accountability:

> *Governments in Canada are seriously conflicted with respect to health care. Governments do not only collect health insurance premiums (through taxes or by special premiums), and maintain responsibility for the delivery of health services, but also report to themselves on their own effectiveness and efficiency based on information they have decided to collect. Furthermore, the same governments then decide what information will*

[21]Premier's Advisory Council on Health (Alberta), p. 21.

be provided to the public. Governments must also decide on the interpretation of results – so health services organizations may regard 80% satisfaction rates as acceptable, when many industries would fire the management of an organization which regularly reported that 20% of customers were dissatisfied or that over half of the employees believe the organization is not a good place to work.

The conflict can be reduced or eliminated by separating the insurance function from the health care delivery function. (…) Conflict would also be reduced by distinguishing those responsible for health care system evaluation from those responsible for health services delivery, and from those responsible for collecting insurance premiums.

Eliminating the conflict that arises from government acting simultaneously as a regulator, insurer, provider and evaluator will produce an environment which encourages each sector seek appropriate information about health care system performance.[22]

In Volume Three of its study, the Committee reported that many countries faced with costly, inefficient or unresponsive health care systems have already embarked on reforms aimed at getting rid of the monopoly characteristics described above by separating the various health care functions while maintaining universal access to publicly insured health services. Examples include Sweden, the United Kingdom and the Netherlands.

…many countries faced with costly, inefficient or unresponsive health care systems, have already embarked on reforms aimed at getting rid of the monopoly characteristics described above by separating the various health care functions while maintaining universal access to publicly insured health services. Examples include Sweden, the United Kingdom and the Netherlands.

International evidence suggests that separating the role of the <u>funder</u> from that of the <u>provider</u> can contribute to making the health care system more efficient by:

- decentralizing the decision-making process;
- introducing more competition;
- better integrating health services;
- making possible more effective use of all health care providers;
- making possible more appropriate use of health care technology;
- putting the patient first, since the funding follows the patient;
- ensuring that patients receive timely as well as quality care.

Moreover, separating the role of the <u>funder</u> from that of the <u>evaluator</u> will help put in place structures that will result in better ongoing evaluation of the system as a whole, and

[22] Atlantic Institute for Market Studies, Brief to the Committee, 6 November 2001, p. 5.

of treatment outcomes in particular. This will enhance transparency and foster accountability in the use of public funds.

For all these reasons, the Committee believes that the roles of funder (or insurer), provider, and evaluator in the Canadian health care delivery system should be split from one another. The set of principles developed in this report is premised on such a split.

The Committee believes that the roles of funder (or insurer), provider, and evaluator in the Canadian health care delivery system should be split from one another. The set of principles developed in this report is premised on such a split.

The Committee recognizes that a number of these principles will have to be applied differently in various parts of the country in order to take into account important regional variations (such as the size of the population and the number of health care providers and institutions that exist within each region) and that they will have to be applied differently for different types of institutions (e.g. community hospitals and teaching hospitals). Indeed, much of our next report will focus on how to go from principle to action, and how to take into account such regional and institutional variations. Nonetheless, the Committee strongly believes that the set of principles, taken as a whole, clearly indicate how the hospital and doctor system ought to be restructured.

It is the view of the Committee that the overall impact of these principles on the health care system will be to effect a two-stage transformation. More precisely, <u>the first stage of reform</u> would involve the following changes:

1. **Split between the funder (or insurer) and the provider:** While government would continue to be the funder/insurer (as it is now), the institutions providing publicly funded health services (hospitals and clinics) would become more independent of government since they would no longer be subjected to the same degree of government control as they are now. To achieve this, the method for remunerating hospital services would have to be modified: global annual budgets for hospitals, which are currently determined by government, would disappear and institutions would be reimbursed under a service-based funding scheme (which assigns a dollar value to each type of hospital service and reimburses hospitals for the specific number and type of services they provide).

   By having government fund hospitals for each service, and by having the amounts paid for each service publicly known, the public would be able to see, for the first time, the direct connection between the level of funding and the number and types of procedures that are performed. This would allow the consequences of decisions about the level of health care funding to become more open to public scrutiny, as it would become evident what specific services were affected by various levels of government funding.

   This has the potential to change the nature of the health care debate dramatically by having it focus on the number of patients served and the number and variety

of medical procedures carried out (that is, the outputs and outcomes of the hospital and doctor system), rather than focussing only on dollars (or inputs) as the debate does now. Thus, the funding debate would be broadened and become patient-focussed and service-focussed, rather than only dollar-focussed as it is now.

The Committee believes it is essential that the funding debate become patient-focussed and service-focussed, rather than only being dollar-focussed as it is now.

2. **Split between the funder/insurer and evaluator:** Government would continue to have overall responsibility for the quality of health care delivery, and providers would ultimately be accountable to government, but the evaluator role would be considerably strengthened. Although it would continue to be funded by government, the evaluator role would be performed at arm's length from government. Much greater emphasis would be placed on measuring the quality of treatments and services, gauging the health outcomes of various procedures and assessing system and institutional performance. A system of independent evaluation, performed by agencies working at arm's length from government, would provide much more accurate and objective evidence-based information about access, outcomes and costs than is currently available.

3. **"Internal market"[23] for hospital services:** Once the service-based funding scheme for hospitals and other institutions is well in place and the independent evaluation function is being well performed, regional health authorities would become responsible for the purchasing of services on behalf of their residents by entering into contracts with hospitals and other institutions. (If a province so wished, regional health authorities could also become responsible for purchasing primary care services). This type of "internal market" reform, which has already been implemented to varying degrees in a number of countries, including Sweden, was also recently proposed in the Mazankowski report in Alberta[24]. Such an "internal market" would foster competition between institutions for the provision of hospital services and encourage both cost-effectiveness and efficiency in service delivery. The Committee is aware that reforms of this type will have to be adapted to the particular circumstances that prevail in different parts of the country in order to take into account the number of providers that operate in each region, as well as factors such as the urban/rural mix.

The second stage of reform would result in devolution of the purchasing function from regional health authorities (or from government in provinces where there are no

23 The term "internal market" was first used in reference to reforms undertaken in New Zealand and Great Britain during the 1990s that sought to introduce greater competition among health care providers (both public and private) in the context of a system that retained a single insurer.
24 Premier's Advisory Council on Health (Alberta), see footnote 1.

such regional entities) to primary health care teams.[25] This would mean that primary health care teams would assume the responsibility for purchasing health services from institutional providers on behalf of their patients. An "internal market" among institutional providers who would compete to sell their services to the various primary health care teams would thus be established. This would result in a situation similar to the GP Fundholding scheme in the United Kingdom (for more information, see the Committee's Volume Three[26]).

In Canada, this form of "internal market" was recommended by the Health Services Restructuring Commission chaired by Duncan Sinclair in Ontario[27], as well as by Jérôme-Forget and Forget[28]. This second stage of reform would also require moving away from the current fee-for-service remuneration method for physicians toward some form of blended remuneration involving capitation as well as fee-for-service. This would also involve the development of multi-disciplinary group practices and the revision of current scope of practice rules.

Devolving the purchasing function to primary health care teams would also require patients to register on an annual basis with the primary care group of their choice. A number of studies suggest that, while this could limit somewhat a patient's freedom to choose a provider (primary care provider or specialist)[29], it would provide for a better integration of health services to the overall benefit of patients. According to several witnesses, this would lead to a more patient-oriented health care system.

The Committee heard evidence that under "internal market" reforms, the overwhelming majority of institutional providers would continue to be, as they are now, privately-owned, not-for-profit institutions. However, nothing would prevent for-profit providers from competing to supply services, including hospital services, as long as they were subjected to the same quality control regulations and evaluations as public sector institutions. Such a structure is entirely consistent with the *Canada Health Act* (and is discussed more fully under Principle Eight in Chapter Two), which does not prohibit private, for-profit institutions. Having noted this, the Committee wishes to make it perfectly clear that it is not pushing for the creation of private for-profit facilities.

It is important to understand that the first stage of reform (the separation of funder/insurer, provider and evaluator) would have to be done before embarking on the second stage, because the second stage (the separation of purchaser and provider) requires that health care institutions know the cost of providing a given service to a patient. At present, the

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[25] A recent review of the various possible types of "internal market" reform can be found in Cam Donaldson, Gillian Currie and Craig Mitton, "Integrating Canada's Dis-Integrated Health Care System – Lessons from Abroad", *C.D. Howe Institute Commentary*, April 2001.
[26] Volume Three, pp. 37-44.
[27] Health Services Restructuring Commission (Duncan Sinclair, Chair), *Primary Health Care Strategy – Advice and Recommendations to the Honourable Elizabeth Witmer, Minister of Health*, Government of Ontario, December 1999.
[28] Monique Jérôme-Forget and Claude E. Forget, *Who is the Master? – A Blueprint for Canadian Health Care Reform*, Institute for Research on Public Policy, 1998.
[29] Once enrolled, patients would have to remain with their designated primary health care team for a specific period, usually a year, unless they changed their place of residence. Similarly, enrolled patients do not have direct access to a medical specialist; they must be referred to the specialist (gynaecologists, paediatricians, etc.) participating in the group practice. The primary care physician or team acts as the gatekeeper to the rest of the system.

information systems that are required to do this are not available in most institutions, and the current practice of global budgeting is a major factor that discourages their development.

The Committee is convinced that the separation of the three functions of financing (or insuring), delivering and evaluating health care is an essential step toward a truly patient-oriented health care system in Canada – a system whereby the patient receives the most appropriate care, in a timely fashion, by a qualified provider. Such a split will also introduce a much greater degree of transparency and accountability by government. More importantly, the separation makes it possible for a number of incentives to be introduced into the system – incentives which are intended to improve efficiency in the use, provision and management of health care services. While the Committee has not taken a final position on "internal market" reforms, its current inclination would be to have primary health care teams act as purchasers of all health services on behalf of their patients. We intend to review this proposal carefully and present our final recommendations in Volume Six.

1.4 Principles to Guide the Restructuring and Financing of Canada's Health Care System

Chapter Two develops the rationale for, and the implications of, the principles for reform supported by the Committee. These principles, which form an integrated whole, are listed below.

THE INSURER:

1. There should be a single funder (insurer) – the government either directly or through an arm's length agency – for hospital and doctor services covered under the *Canada Health Act*.

2. There should be stability of, and predictability in, government funding for public health care insurance.

3. The federal government should play a major role in sustaining a national health care insurance system.

4. The determination of what should be covered under public health care insurance should be done through an open and transparent process. Health services covered under the *Canada Health Act* should remain publicly insured. Other health services should continue to be funded using a mix of public and private sources, as they are now.

5. The federal government should contribute on an ongoing basis to fund health care technology.

6. The federal government should increase its investment in those areas of health and health care for which it already has a major responsibility.

7. The consequences arising from changes in the level or amount of government funding for hospital and medical care should be clearly understood by government and explained to the public, in as much detail as possible, at the time such changes are made and announced.

THE PROVIDER:

8. In the first stage of health care reform, the method for remunerating hospitals should be changed from the current annual global budget to service-based funding.

9. Regional health authorities should have the responsibility for purchasing hospital services provided by institutions within their region.

10. Primary care renewal should lead to the provision of primary care by group practices, or clinics, which operate twenty-four hours a day, seven days a week.

11. To facilitate primary care reform, the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining capitation, fee-for-service and other incentives or rewards.

12. New scope of practice rules and other measures need to be developed in order to enable all health care providers in the primary care sector to provide the full range of services for which they have been trained.

13. In the second stage of health care reform, an "internal market" should probably be created in which primary health care teams would purchase health services provided by hospitals and other health care institutions on behalf of their patients.

14. A national (not exclusively federal) strategy must be developed to achieve both an adequate supply and optimal use of health care providers.

THE EVALUATOR:

15. Accountability and transparency in health care financing and delivery require the deployment of a system of electronic health records (EHR) that can capture and translate information on system performance and outcomes.

16. Measuring treatment outcomes and system performance must become an essential part of the health information system. Such monitoring and evaluation of the health care delivery system should be performed independently at the national (not federal) level and be funded by government.

THE PATIENT:

17. Canada's publicly funded health care system should be patient-oriented.

18. Incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees for services that are deemed to be medically necessary.

19. Programs that enable people to be responsible for their own health and to stay healthy must be given high priority. The federal government can play a leadership role in this regard.

20. For each type of major procedure or treatment a maximum waiting time should be established, and made public. When this maximum time is reached, the insurer (government) shall pay for the patient to receive immediately the procedure or treatment in another jurisdiction including, if necessary, another country.

CHAPTER TWO:

PRINCIPLES TO GUIDE THE RESTRUCTURING AND FINANCING OF CANADA'S HEALTH CARE SYSTEM

2.1 Financing (or Insuring) Health Care

Principle One

There should be a single funder (insurer) – the government directly or through an arm's length agency – for hospital and doctor services covered under the *Canada Health Act*.

The most compelling argument for a single public funder or insurer is that a publicly funded hospital and doctor system is the essence of the health care system which Canadians strongly support. The Committee agrees that this central element of our system must be maintained, provided that the system meets appropriate standards for quality services delivered in a timely manner.

The Committee believes that there should be a single funder – the government directly or through an arm's length agency - for hospital and doctor services. A single-funder system yields considerable efficiencies, including administrative, economic and informational economies of scale, over any form of multi-funder arrangement. (…) As a corollary, there should not be private insurance for publicly insured hospital and doctor services.

That is, the Committee believes that there should be a single funder – the government directly or through an arm's length agency – for medically necessary hospital and doctor services. A single-funder system yields considerable efficiencies over any form of multi-funder arrangement, including administrative, economic and informational economies of scale. Furthermore, since a publicly funded hospital and doctor system has become a fundamental element of Canadian society, the Committee believes that the single funder should be government, either directly or indirectly (e.g. through a third party, such as a regional health authority or other arm's length agency). As a corollary, there should not be private insurance for publicly insured hospital and doctor services.

In addition, numerous witnesses told the Committee that by concentrating primary financial responsibility in a single funder, the Canadian health care system would lead to more efficient administration of health care insurance. They suggested that Canada's publicly financed single-insurer system for medically necessary services delivered under the *Canada Health Act* eliminates the costs associated with the marketing of competitive health care insurance policies, billing for and collecting premiums, and evaluating insurance risks.

Lee Soderstrom, professor at the Department of Economics, McGill University, described the advantages of a public, single funder for health care as follows:

> *Available evidence indicates that the cost of the public insurance would be lower because administrative costs would be lower with that public plan. These costs would be lower because the public plan would take maximum advantage of the economies of scale possible in plan administration. There would be no need for advertising costs.*
>
> *(…)The evidence understates the efficiency gains from having a single payer plan. With the public plan, users avoid administrative hassles when seeking care. They also avoid a second major problem all too familiar to Americans with private insurance: the inevitable, countless administrative difficulties involved in obtaining reimbursement for bills they have incurred.*[30]

Similarly, a document tabled to the Committee by the Atlantic Institute for Market Studies stated:

> *Under a private insurance-based model, such as predominates in the USA, the possibility of adverse selection involves high costs that contribute little to the quality of medical care provided. Pooling all citizens into a universal health insurance plan can dramatically lower such costs. The per capita cost of insurance overhead under the Canadian system, wherein the provinces operate "single payer" insurance systems, is approximately one-fifth the per capita cost in the United States where private health insurance is the norm.*[31]

Another strong argument in favour of public health care insurance is the fact that very few Canadians can afford not to be covered. It therefore makes sense to have everyone covered by a single plan. A single-insurer system providing universal coverage also means that no one will deny themselves needed health care because they have a more pressing use for their money (perhaps for food, shelter, clothing, etc.). Nor will anyone be denied necessary care due to inability to pay.

A single-funder model also implies that there will not be, within Canada, a parallel, private insurance sector that competes with public insurance for the funding of hospital and doctor services covered under the Canada Health Act, at those hospitals and with those doctors that care for publicly funded patients.

A single-funder model also implies that there will not be, within Canada, a parallel, private insurance sector that competes with public insurance for the funding of hospital and doctor services covered under the *Canada Health Act,* at those hospitals and with those doctors that care for publicly funded patients. The public funding of the Canadian health care

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[30] Professor Lee Soderstrom, Brief to the Committee, 31 October 2001, p. 4.

[31] Brian Lee Crowley and David Zitner, *Operating in the Dark: The Gathering Crisis in Canada's Public Health Care System*, Atlantic Institute for Market Studies, November 1999, p. 9.

system would still be done using revenue raised through general taxes, earmarked taxes or public health care insurance premiums, as is currently the case. Canadians should, however, still be permitted to purchase private insurance for non-publicly insured health services and to buy insurance abroad for services delivered abroad as they do now. Health care institutions would also continue to receive the additional revenue they currently derive from non-insured benefits and services.

Therefore, the Committee feels it is important that the current restrictions which prevent doctors from operating in both parallel public and private systems be maintained.

Under the current Canadian health care system, a provider can be paid from private sources for the delivery of services that are publicly insured as long as the provider opts out completely from the public system, taking no publicly funded patients. Research brought to the attention of the Committee shows that allowing doctors to function in both the public and parallel private systems disadvantages patients in the publicly funded system, both in terms of quality and timeliness of care. Therefore, the Committee feels it is important that the current restrictions which prevent doctors from operating simultaneously in parallel public and private systems be maintained.

Moreover, the Committee agrees with witnesses that no one should face excessive financial hardship or possible bankruptcy because of illness, disease, injury or disability. Access to timely and medically necessary health services should be available to all, regardless of income. This does not mean, however, that Canadians should not bear some responsibility to keep healthy or to contribute to the future sustainability of the health care system. Rather, it means that any funding mechanism or financial involvement by individual Canadians should be equitable and fairly distributed. Incentives designed to encourage responsible use of the publicly funded health care system by patients are discussed in Section 2.4 below.

Principle Two

There should be stability of, and predictability in, government funding for public health care insurance.

The Committee heard repeatedly that there is a major lack of stability and predictability in the policies and the financing of the Canadian health care system. For example, Lawrence Nestman, professor at the School of Health Services Administration, Dalhousie University, stated that the high turnover of ministers of health and their deputies, as well as that of senior civil servants, has created an atmosphere of unpredictability in federal and provincial/territorial relationships and in health care policies, particularly with regard to those policies that are related to funding.[32] This view was echoed by Jeff Lozon, President of St Michael's Hospital in Toronto and former deputy minister of health in Ontario, who said:

[32] Professor Lawrence Nestman, *Three Proposals to Improve Federal-Provincial Relations in the Health Services Field*, Brief to the Committee, p. 1.

My first point is perhaps my most strongly held. It is premised on the urgent need for predictability and stability of direction in the health care system, it is driven by the need to shelter the system from the daily parry and thrust of the political fabric. One of the least desirable, most difficult and important jobs is the leadership of the health care system at a provincial level. Without more stability and certainty, the best reform policies will fail. Consider the following. In Ontario, there have been 7 Ministers of Health in the last 10 years, and 7 Deputy Ministers in that same timeframe. Based on personal experience, I know that 3 months as Deputy Minister gives you seniority over half you colleagues, and going beyond one year constitutes long service! The job expectancy of a Minister of Health is 15 months, and a Deputy Minister about the same. It is impossible to take the system forward with that type of turnover, and long range system planning is impractical.[33]

Both Professor Nestman and Mr. Lozon recommended the creation of provincial non-profit organizations to run the health care system. In their models, these bodies would consist of a board of directors appointed by the government and supported by a staff of experts. They would exist at arm's length from the political process and would replace the current departments of health. According to Mr. Lozon:

In this way, a sense of stability and direction could emerge distanced from the day-to-day pressures of electoral politics and would continue to be responsible for high level goals established by the legislature.[34]

Similarly, the Committee was told that <u>health care funding</u> is heavily dependent on annual revenues to the government and can fluctuate significantly with changes in the economy. In his brief to the Committee, Claude Forget stated:

Governments have used the health care sector as their main deficit-fighting tool, and yet the need of those services is not sensitive to economic cycles. (…) It is difficult to manage a budget which changes unpredictably in time, largely beyond the control of managerial intervention.[35]

Witnesses also complained about the lack of strategic and long-term planning to deal with the anticipated and growing health care cost pressures resulting from an aging population, rising expectations and costly technology and drugs (see section 1.1 above). They stressed that stability and predictability in health care funding, for example in the form of multi-year funding arrangements, is a prerequisite to undertaking any systemic reform and sustaining public confidence. This observation was also made in the Romanow report:

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[33]Jeffrey C. Lozon, Brief to the Committee, 29 October 2001, p. 4.
[34] *Ibid.*, p. 5.
[35] Claude Forget, *Canadians' Health: The Role of Government*, Brief to the Committee, 31 October 2001, pp. 7-8.

> *(…) our health care system has in recent years suffered from inconsistent and erratic funding. Many key health care decisions – from building new facilities, to creating new capacity and delivering certain types of services to targeted populations – require a long planning cycle. When health care decision makers are obliged to cope with constantly shifting priorities, or when anticipated resources are reduced or eliminated, great uncertainty is the first result quickly followed by reductions in services. This lack of stable, long-term, predictable funding is jeopardizing long-term planning and, in turn, eroding public confidence in the system's future.*[36]

Many witnesses underlined the important role the federal government could play in ensuring such stability. For example, the British Columbia Health Association stressed:

> *A stable funding contribution from the federal government is essential in order to ensure that our provincial health care systems can function in an environment that is conducive to undertaking fundamental changes and implementing required innovations.*[37]

Similarly, Bill Bryant, Chair of the Southwestern regional health authority in Manitoba stated:

> *Before we can undertake dramatic and sustainable reconfiguration of the system, which we believe is needed, a stable and on-going funding framework must be assured. Some of the basic infrastructures of our health care system have suffered serious erosion over the past decade as a result of "stop-and-go" funding methodologies by both federal and provincial governments. Therefore, one of the first priorities must be a significant and sustained federal cash commitment to restore stability to the existing health care system and ultimately renew confidence in the health care system.*[38]

The Committee concurs with the witnesses that there should be stability of, and predictability in, government funding. It is our view that no industry can be expected to effectively operate if, from year to year, its revenue is subject to significant fluctuations over which it has no control. In fact, effective planning, which is an essential element of an efficiently operated industry, is impossible unless stability and predictability of funding is assured. In other words, multi-year funding is essential to running the publicly funded health care system efficiently.

The Committee concurs with the witnesses that there should be stability of, and predictability in, government funding. It is our view that no industry can be expected to effectively operate if, from year to year, its revenue is subject to significant fluctuations over which it has no control. Multi-year funding is essential to running the publicly funded health care system efficiently.

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[36] *Shape the Future of Health Care, Interim Report*, pp. 4-5.
[37] Health Association of British Columbia, Brief to the Committee, October 2001, p. 3.
[38] Bill Bryant, Brief to the Committee, 15 October 2001, p. 1.

Stability and predictability require that governments are capable of providing sufficient funding in order to meet health care needs at all times, including times of fiscal restraint. This is, of course, easier said than done, given that health care needs do not vary with economic cycles as government revenues do. The challenge, therefore, will be to ensure that spending on health care does not crowd out other vital forms of public spending, including education, infrastructure, security, and various other social services:

> *Spending on health care cannot be allowed to crowd out other vital forms of public spending, including education, infrastructure and other social services. Our future prosperity and health depend on all of these, and to the extent that it is crowding out these other forms of spending, tax-financed health care in its current form is not sustainable.*[39]

This principle does not, in itself, prescribe what sources of revenue are to be used by government in order to guarantee stability and predictability. It does, however, raise two important questions:

- First, should earmarked taxes or health care insurance premiums be used to pay for health care in order to help ensure the predictability and stability of funding?
- Second, should some form of arm's length agency, as suggested by several witnesses, including Professor Nestman and Mr. Lozon, be given the responsibility for managing the health care system, in order to shelter the system from the daily parry and thrust of elected politics?

The Committee will seek views on these questions before giving the Committee's answers to them in our October report.

[39] Premier Advisory Council on Health (Alberta), p. 31.

Principle Three

The federal government should play a major role in sustaining a national health care insurance system.

Many witnesses underlined the crucial role of the federal government in financing the hospital and doctor system and in ensuring stability in funding. Although the provision of health care is under provincial and territorial responsibility, the federal government has historically played a major role in financing the health services covered under the *Canada Health Act*. Witnesses told the Committee that a number of reasons explain why it is important that this major role be continued. These reasons were explained in Section 1.2.

…a number of witnesses suggested we should diversify the revenue sources used to support health care. This would serve to improve timely access to health care and/or to expand the basket of publicly insured health services. A national health care insurance premium would be an example of an earmarked revenue source which could be used to support health care.

On a number of occasions, provincial and territorial governments have called on the federal government to increase CHST transfer payments in order to help stabilize and sustain Canada's health care insurance system. Increasing the federal contribution to health care would likely require raising the level of federal taxation. As stated in Chapter One under Section 1.1, this could prove difficult to implement, as Canada's personal taxes are the highest of the G-7 countries and among the highest in the OECD.[40] Accordingly, Canadians need to balance their desire for publicly funded health services with their willingness to pay taxes to support the financing of those services.

…a number of witnesses suggested that it would be essential to establish a mechanism that would allow federal funding to be targeted to specific purposes, its usefulness and efficacy to be evaluated and those who spend it to be held accountable.

A major concern that was raised during the Committee's cross-country hearings was that if we continue to depend solely on the general tax base of provincial/territorial and federal governments to support health care, we may end up having to increase the rationing of publicly funded health care services. For this reason, a number of witnesses suggested we should diversify the revenue sources used to support health care. This would serve to improve timely access to health care and/or to expand the basket of publicly insured health services. A national health care insurance premium would be an example of an earmarked revenue source which could be used to support health care.

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[40] Statistics Canada, "Recent Trends in Taxes Internationally", in *Perspectives on Labour and Income*, Catalogue No. 75-001-XIE, Vol. 2, No. 1, January 2001, pp. 36-40.

A further issue has to do with whether provinces and territories should have to account for their use of new or additional federal funds. The evidence provided in the Committee's Phase One report showed that block transfers inhibit government accountability.[41] For this reason, a number of witnesses suggested that it would be essential to establish a mechanism that would allow federal funding to be targeted to specific purposes, its usefulness and efficacy to be evaluated and those who spend it to be held accountable. One such mechanism, recommended by Claude Forget, was that a portion of personal income taxes be allocated permanently to health care in order to ensure stability of the financial health care system and that this proportion be integrated into federal-provincial fiscal arrangements. The Committee's recommendations on the funding issue will be presented in our October 2002 report.

Principle Four

The determination of what should be covered under public health care insurance should be done through an open and transparent process. Health services covered under the *Canada Health Act* should remain publicly insured. Other health services should continue to be funded using a mix of public and private sources, as they are now.

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The Committee is of the view that health services covered under the **Canada Health Act** ***should remain publicly insured. Other health services should continue to be funded using a mix of public and private sources, as they are now.***

The Committee concurs with the Canadian HealthCare Association that now is the time to examine the public private mix in health care if the federal and provincial governments are to develop sound public policies. The Association, which represents provincial and territorial hospital and health organizations across Canada, stated:

> *It is time for governments, managers, trustees, providers, researchers and the public to develop and implement sound public policies to ensure that we achieve the appropriate private-public mix in our health care system.*[42]

[41] Volume One, pp. 5-30

[42] Canadian Health Care Association, *The Private-Public Mix in the Funding and Delivery of Health Services in Canada: Challenges and Opportunities*, Policy Brief, 2001, p. 3.

In this perspective, the Committee agrees with the report of the Clair Commission in Quebec and the Mazankowski report in Alberta that consideration should be given to reviewing the principle of comprehensiveness of the *Canada Health Act*. Both reports recommended the establishment of a permanent committee, made up of citizens, ethicists, doctors and scientists, to review and make decisions on services that should be publicly insured. Such a review would lead to evidence-based decision making for public health care coverage. Such a review would also set the boundaries between publicly insured and privately funded health services:

The Committee supports the establishment of a permanent committee, made of citizens, ethicists, doctors and scientists, to review and make decisions on services that should be publicly insured.

> *On an initial basis, the expert panel should review the broad categories of services currently provided and decide whether all existing services should be "grandfathered" for continued public funding. Services that are not publicly insured could be provided by the public or private health care provider but would not be paid for by public health care funds.*[43]

The Committee agrees with the intent of the above quotation, but disagrees that the panel should be composed only of experts. We strongly believe that input from those who would be directly affected by the panel's decisions – namely citizens – is essential if the process is to be truly open and is to have public credibility and acceptability. Moreover, only such an open process will make possible the essential debate of what health services Canadians are prepared to pay for through their taxes.

Thus, the Committee concurs with the Romanow Commission that the public must be involved in the process for determining publicly funded health services:

> *Canadians need a greater say in determining what health services should or should not be publicly covered. Although elected governments must always retain accountability, the ways in which decisions are currently made, and who is making them are difficult to understand and often even more difficult to justify.*[44]

Determining which services should be paid for publicly and which ones should not – that is, deciding what services are to be listed and delisted – has always been part of the way that Canadian Medicare has functioned. That is why there are some differences in what is covered in different provinces/territories. As indicated in Volume One of the Committee's study, for example, the removal of warts is no longer covered in Nova Scotia, New Brunswick, Ontario, Manitoba, Alberta, Saskatchewan and British Columbia, but it remains publicly insured in Newfoundland, Quebec and Prince Edward Island. Similarly, stomach stapling is covered in

[43] Premier's Advisory Council on Health (Alberta), p. 45.
[44] *Shaping the Future of Health Care*, p. 18.

most provinces, but it is not insured in New Brunswick, Nova Scotia or the Yukon, and patients in these provinces must pay for this procedure.[45]

Revising the comprehensive basket of publicly insured health services is not intended to reduce costs but to improve evidence-based decisions with respect to public funding. However, it is important to stress that there are limits to what the publicly funded health care system can provide. To put this simply, public health care insurance cannot do all things for all people. What is critical, however, is that the determination of what is to be covered publicly should be done through an open and transparent process, rather than the current process in which decisions about what is covered are made in secret by governments with no public input.

This point was emphasized by the Honourable Monique Bégin, who was the federal Minister of Health at the time the Canada Health Act was enacted, in a recent speech:

> *…choices are being made every day without citizens knowing…. the de-listing of services, a completely secretive process, must be made explicit as a matter of accountability.*[46]

The Committee believes that such an open process would create the possibility for there to be a public debate over whether the population would be prepared to pay more to government in order to have more services covered under the public insurance plan. We also believe that there should be national standards that define those services which are to be covered publicly in each province/territory.

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[45] Volume One, pp. 98-99.

[46] The Hon. Monique Bégin, "*Revisiting the Canada Health Act (1984): What Are the Impediments to Change?*" *delivered at* The Institute for Research on Public Policy 30th Anniversary Conference, February 20, 2002, p. 6.

Principle Five

The federal government should contribute on an ongoing basis to fund health care technology.

During Phase Two of its health care study, the Committee was told that although Canada ranks 5th among OECD countries in terms of total spending on health care (as a percentage of GDP), it is generally among the bottom third of OECD countries in the availability of health care technology. For example, Canada lags behind many other countries in terms of access to CT scanners, MRIs and lithotriptors.[47]

Availability is not the only issue with respect to health care technology. The "aging" of that technology is also of concern. For example, information provided to the Committee indicates that between 30% and 63% of imaging technology currently used in Canada is outdated. The Committee was told that the shortage of new technology and the use of outdated equipment impede accurate diagnoses and limit the quality of treatment that can be provided.[48]

The federal government has responded to the deficit in health care technology. In September 2000, it announced that it would invest a total of $1 billion in 2000-01 and 2001-02 to assist the provinces and territories in purchasing new medical equipment. The Committee welcomes this injection of new federal funds as an important step toward the acquisition of needed health care technology.

However, the Committee is concerned that there are apparently no mechanisms for ensuring accountability on the part of the provinces and territories as to exactly where money targeted towards purchasing new equipment is actually spent. This is why we strongly believe, as stated under Principle Three, that a much better accountability mechanism is needed for targeted federal funds.

> ***…the Committee is concerned that there are apparently no mechanisms for ensuring accountability on the part of the provinces and territories as to exactly where money targeted towards purchasing new equipment is actually spent. This is why we strongly believe, as stated under Principle Three, that a much better accountability mechanism is needed for targeted federal funds.***

Overall, the Committee believes that the federal government should commit to a long-term program of financing for health care technology. In our view, such a program should incorporate clear accountability mechanisms on the part of the provinces/territories on their use of these targeted federal funds. Chapter 3 of this report provides our findings and recommendations in this regard.

[47] Volume Two, p. 38.
[48] Volume Two, p. 39.

Principle Six

The federal government should increase its investment in those areas of health and health care for which it already has a major responsibility.

The Committee believes that the federal government should demonstrate its commitment to improving the health of Canadians and provide further investment in those important areas for which it has a major responsibility, such as health promotion, health protection, health research, and health information systems and health care technology assessment. In Volume Four of its study, the Committee[49] identified a number of objectives for the federal government in these areas that it feels should be actively pursued. These include:

- Fostering the development of a solid base of innovative health research in Canada that compares favourably with that in other countries;
- Laying the foundation for evidence-based decision-making in areas that affect both well-being and the delivery of health care, while ensuring the protection of privacy, confidentiality and security of personal health information;
- With respect to health protection: strengthen our national capacity to identify and reduce risk factors which can cause injury, illness, and disease, and to reduce the economic burden of disease in Canada;
- With respect to health promotion and disease prevention: develop, implement and assess programs and policies whose specific objective is to encourage Canadians to live a healthier lifestyle;
- With respect to wellness: encourage population health strategies that work on the full range of health determinants.

Aboriginal health must be a priority for the federal government. The Committee has already stated unequivocally that the health of Aboriginal Canadians is a national disgrace. The Committee believes that, given its constitutional responsibilities, the federal government must act immediately to attack the poor health and socio-economic conditions that plague many Aboriginal communities.

Specific recommendations on health care technology assessment are presented in Chapter 3. Our recommendations with respect to health information systems are provided in Chapter 4, while those pertaining to health research are detailed in Chapter 5. The issues related to Aboriginal health and health promotion are discussed in Chapter 7.

[49] See Volume Four, pp. 19-24.

Principle Seven

The consequences arising from changes in the level or amount of government funding for hospital and medical care should be clearly understood by government and explained to the public, in as much detail as possible, at the time such changes are made and announced.

The Committee believes that the consequences arising from changes to government funding for hospital and medical care should be clearly understood by government and explained to the public, in as much detail as possible, at the time such changes are made and announced. Transparency and accountability in government decision-making require that the implications of funding changes be clearly understood by both decision-makers and the public. The lack of transparency was also raised in the Romanow report which stated: "There should be more transparency in terms of how much money is being spent, by whom, on what basis and with what results."[50]

This principle would apply both to increases and to decreases in government funding. Cuts in government funding translate into the rationing of the supply of hospital and doctor services. In this case, government must explain what services will be rationed. In the event that increases in health care spending are necessary, government must clearly indicate how such increases will be funded and what impact these increases will have on the supply of health care services.

Currently, resources appear to be largely allocated by negotiation among various groups working in the health care system. The allocation is not based on systematic knowledge of either the outcomes of care or access to care or testable predictions of the consequences of changes in funding. Up to now, health care organizations and Departments of Health have been unable to inform Canadians if previous changes in health services delivery have improved, or harmed, access to and quality of health care. The deployment of an electronic patient record system, discussed in more detail in Section 2.4, is the first step towards an evidence-based decision-making process.

The most important reason for enabling the public to understand the health service consequences of changes in the amount of funding for hospitals and doctors is that it will move the debate away from being based strictly on financial data to a debate about services to be covered, the length of waiting lines, the quality of outcomes, and so on. This would move the public debate to where it ought to be – a debate about levels and standards of services to patients. At the present time,

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[50] *Shape the Future of Health Care*, p. 27.

such a debate is not possible because there is no way in which the public can translate statements about health care funding into the one thing which really matters to them, namely what is the impact of various levels of funding on the health services the public receives, their quality, and the amount of time they have to wait to receive them.

2.2 Delivering Health Care

(Note: Readers will find three diagrams at the end of this chapter that illustrate the reforms discussed by the Committee in Principles Eight through Thirteen.)

Principle Eight

In the first stage of health care reform, the method for remunerating hospitals should be changed from the current annual global budget to service-based funding.

In Canada, the global budget has been the dominant funding mechanism for virtually all acute care hospitals for about 30 years. There is good reason for this, because global budgets have some attractive features. They offer simplified accounting for both hospitals and the provincial health departments. Perhaps more importantly for government, they offer a method of cost control.

Global budgets, however, have a number of disadvantages. The first one is a progressive and permanent loss of information about what things cost. The Committee was told that it is shameful that in a system as sophisticated as the health care system, not even senior managers know, for example, what a simple appendectomy costs.

The lack of financial feedback means that there are no yardsticks to compare performance on any basis, financial or otherwise. This allows those hospitals or regions with less efficient practices to imbed those practices and continue doing what they are doing without any focus on performance. Second, the Committee heard that global budgets tend to place patients at the bottom of the list of priorities.

Les Vertesi, Chief of the Department of Emergency Medicine at the Royal Columbian Hospital (Vancouver), suggested an alternative to global budgets: the Service Based Funding (SBF).[51] SBF is a form of activity-based remuneration under which a monetary value is assigned to each type of hospital service and the institution receives payment only once it has actually provided that service. According to Dr. Vertesi, SBF would have a number of immediate advantages, apparent right away after the new mode of remuneration is implemented:

- Since it fundamentally changes the incentives, the vicious cycle of cost escalation would stop;

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51 See his *Broken Promises: Why Canadian Medicare is in Trouble and What Can Be Done to Save It* (unpublished manuscript).

- It provides a yardstick that would uncover less efficient hospitals and regions, so they can be helped;
- Health departments could develop standards and monitor hospitals;
- Waiting lists would decrease;
- Patient-centred, and patients' choices carry weight;
- Hospitals that know how to provide service at a competitive price would see some hope again and be able to offer assistance to others.

The health department or regional health authority would be responsible for setting the value of each hospital service. The fact that such value determination remains under government control means that government influence over the direction of change would be enhanced, not decreased. Instead of overall funding ceilings, targeted controls would be possible. Even small changes in the relative values could have a large impact on the direction and pace of change. Ultimately, as long as values remain under the control of the government, total funding cannot exceed what government wants to spend.

The Committee heard that such a method for remunerating hospital services would lead to the development of centres of specialization for the provision of certain surgeries or treatment of certain conditions, particularly in large urban centres. Such a change in the delivery of hospital services should be encouraged because of the efficiencies it brings. This would also contribute to improving the quality of services.

Hospitals or regions with special expertise should be able to "market" those services to other regions and enter into contracts with other regions to deliver services. In this way, regions would generate a sufficient volume of services to allow them to achieve better outcomes.

The advantages of specialization for selected hospital services were acknowledged by Provincial Premiers and Territorial Leaders who agreed, at their January 2002 meeting, to share human resources and equipment by developing "Sites of Excellence" in a number of complex surgical procedures.[52]

The Committee believes that, as much as possible, hospitals should be funded for the specific services they provide (that is, according to service based funding) rather than on the basis of an annual global budget.

The Committee believes that, as much as possible, hospitals should be funded for the specific services they provide (that is, according to service-based funding) rather than on the basis of an annual global budget. Service-based funding appears to be an appropriate form of remuneration, particularly for community hospitals. We acknowledge that another form of payment may need to be considered for teaching hospitals where clinical activities are intermingled with teaching and research and services are frequently one-of-a-kind. We are also aware of the concern that remunerating hospitals for each service

[52] Specialized hospital services include for example paediatric cardiac surgery and gamma knife neurosurgery.

performed may lead to over-servicing. The Committee will discuss these issues in more detail in Volume Six.

It is the view of the Committee that remunerating hospitals according to a pre-established value for each service provided is essential if the government and the public are to understand the implications of funding changes on the numbers and types of services that are feasible under a fixed government health care budget. It is also an essential first step in moving toward a system in which purchasers and providers are split as described under Principle Thirteen below.

Some might wonder whether it is contradictory for the Committee to recommend shifting to service-based funding for hospitals while at the same time advocating moving away from fee-for-service payments to individual doctors (as we do in Principle 11 below). In other words, why does the Committee propose the adoption of a form of funding for hospitals that is roughly equivalent to a method of payment for doctors that it feels should be abandoned?

The answer, in the Committee's view, lies in understanding the impact that a payment system has under various circumstances. Both fee-for-service and service based funding encourage providers (doctors or hospitals) to increase the volume of services that they deliver. In the case of doctors, this can lead to placing greater emphasis on numbers of patients seen rather than on the quality of care. This is why alternate forms of payment must be introduced for primary care physicians. In the case of hospitals, however, an incentive to provide more services is precisely what is needed, given the current waiting lists. Thus, a shift towards service based funding would prove beneficial. Principles 8 and 11 offer a good illustration of the Committee's efforts to find the appropriate incentives to stimulate the types of behavioural changes that the Committee believes are necessary.

The Committee wishes to stress that service based funding for hospitals, and the separation of the funder function from that of the institutional provider of services, means that ownership of the institutional service provider would not be a matter of concern. We believe that the patient and the funder will be equally well served no matter what the corporate ownership structure of a health care institution is, as long as the two following conditions are met:

1. All institutions in a province are paid the same amount of money for performing any given medical procedure or service.

2. All institutions, no matter what their ownership structure is, are subjected to the same rigorous and independent quality control and evaluation system (see Principles Fifteen and Sixteen).

The first condition ensures that the funder is indifferent to the ownership structure. The second ensures that the patient is indifferent, since it ensures that no institution can put profit above quality of care.

The Committee wants to make it clear that it is not pushing for the creation of private, for-profit, facilities. Neither do we believe that they should be prohibited, just as they are not now prohibited under the *Canada Health Act*.[53] Moreover, as we said in Chapter One (see Section 1.4), we fully expect that the overwhelming majority of institutional providers would continue to be, as they are now, privately owned, not-for-profit, institutions.

During the cross-country hearings, a number of witnesses raised the concern that introducing private sector participation through contracting out might expose Canada's publicly funded health care system to trade challenges. The report of the Romanow Commission also stated that "our ability to reform and innovate within the health care system may be affected by the rules of international trade agreements."[54]

The Committee requested information from Health Canada and the Department of Foreign Affairs and International Trade on this issue. Senior departmental personnel informed the Committee that the federal government has always maintained the same position with respect to health care and international trade agreements: Canada's health care sector is not negotiable.

A provision in the North American Free Trade Agreement (NAFTA) stipulates that Canada preserves its ability to maintain or establish any measures for a public purpose, including health care. Similarly, under the WTO General Agreement on Trade in Services (GATS), the exclusion of "services supplied in the exercise of governmental authority" from the scope of the Agreement, combined with the absence of commitments by Canada with regards to health services, provides the policy flexibility required to preserve our publicly insured hospital and doctor system. The same longstanding position is being adopted by Canada in the context of the negotiations under the Free Trade Area of the Americas (FTAA).

Overall, the Committee believes that it has obtained sufficient assurance from both Health Canada and the Department of Foreign Affairs and International Trade and is convinced that international trade agreements do not, and will not, pose a threat to Canada's publicly funded health care system.

Principle Nine

Regional health authorities should have the responsibility for purchasing hospital services provided by institutions within their region.

During the last decades, most provinces (other than Ontario) have established regional health authorities. Regional health authorities are responsible for assessing the needs of the population in a certain geographic area and for setting health care priorities and assigning

[53] As the Honourable Monique Bégin and others have pointed out, there are many misconceptions surrounding the 'public administration' provision of the *Canada Health Act* (see footnote 77 below). On this point see as well the Myths and Realities section of Vol. 1 of the Committee's study, p. 98.
[54] *Shape the Future of Health Care*, p. 44.

resources in line with those needs. Currently, hospitals and many other health care providers are overseen by these regional health authorities.

One important criticism of regional health authorities is that their control over spending is limited. For the most part, regional health authorities receive a budget from the provincial government which they simply pass to hospitals and other providers of care. In doing so, they are not able to direct the priorities and spending for which they are, in theory, responsible. Neither are they able to reward efficient providers. In particular, regional health authorities do not have control over the cost of doctor services, a control that they must have if they are to manage effectively the health services in their region.

The Committee learned that this problem can be corrected by establishing an "internal market" in which the regional health authorities are responsible for purchasing health services on behalf of the residents of their region:

...regional health authorities do not have control over the cost of doctor services, a control that they must have if they are to manage effectively the health services in their region.

> *With an "internal market", regional health authorities hold the purse strings and choose between providers on the basis of quality and cost, rather than simply funding the decisions of those using the resources.*[55]

Such a form of "internal market" has the potential to introduce competition based on both cost and quality among hospitals and other institutions. This also provides the incentives for providers to become more cost conscious and to make decisions about what to provide, to whom, and at what standard. Furthermore, such reform has the potential to reconfigure services in a way that is more in line with population needs.

The Committee believes that devolution of the purchasing function to regional health authorities is part of the first step in reforming health care in Canada. In fact, regional health authorities exist in most provinces and a large percentage of health care spending occurs in and around large cities, creating the potential for competition among providers. At the same time, the Committee is aware that this principle will have to be applied with flexibility so as to take into account the many differences in the size of the regions, as well as the rural/urban mix they contain and the number of health care providers and institutions within their jurisdiction.

The Committee believes that the devolution of the purchasing function to regional health authorities is part of the first step in reforming health care in Canada.

We believe, however, that, over time, the purchasing function should be devolved even further – to primary health care teams – as a way of decentralizing decision-making and providing care that is more responsive to patients' needs (see Principle Thirteen). This would be part of the second stage of reform, as discussed in Section 1.4.

[55] Cam Donaldson, Gillian Currie and Craig Mitton, "Integrating Canada's Dis-Integrated Health Care System – Lessons from Abroad", *C.D. Howe Institute Commentary*, April 2001, p. 8.

Principle Ten

Primary care renewal should lead to the provision of primary care by group practices, or clinics, which operate twenty-four hours a day seven days a week.

All recent provincial reports have recommended the creation of a network of primary care groups. These proposals all share some common features:

- access 7/24/365 to comprehensive primary care;
- "rostering" or enrolment of patients in the primary care group of their choice on an annual basis;
- better utilization of the spectrum of health care providers through interdisciplinary team work;
- integration and coordination of all health services through the function of "gatekeeping";
- potential for expansion of public health care coverage;
- change in the method of remuneration of physicians (from fee-for-service to either capitation or blended payment).

Consistent with the recommendations of various provincial health care commissions, the Committee believes that primary care reform should lead to comprehensive primary care being provided by group practices, or clinics, which operate twenty-four hours a day, seven days a week. This will enable patients to have access to primary care always as their initial point of contact with the health care system. This will permit a more efficient operation of the primary care sector, and will take considerable pressure off hospitals' emergency rooms.

The recommendations of these provincial reports, however, diverged on the extent to which primary care groups should be responsible for purchasing health services on behalf of their patients. The Health Services Restructuring Commission in Ontario suggested that, in addition to providing primary care, primary care groups should also assume the responsibility for purchasing a wide range of health services on behalf of their patients including; hospitals, specialists, public health, rehabilitation centres, long-term care facilities, home care, community care.[56]

[56] The Mazankowski report acknowledged and supported the movement towards primary care reform along with a change to primary care physician remuneration, but was of the view that the purchasing function should remain within regional health authorities. Accordingly, the report recommended that a portion of the budget for physicians be allocated to regional health authorities which would then contract with them for primary care services. Similarly, both the Clair Commission in Quebec and the Fyke Commission in Saskatchewan stressed that regional health authorities should organize and manage primary care group practices, contracting with or otherwise employing all providers including physicians

Although numerous provincial commissions have all recommended reforming primary care, no single model has been proposed that could be universally implemented. This observation was also made by the Romanow Commission:

> *There are an endless variety of potential models and approaches [to primary care reform], but a common element in most is that governments would fund these organizations based on some combination of the number of registered patients, population served, and the health outcomes achieved. While steps have been taken in every province to initiate primary care pilot projects, many argue that, because primary care is the key catalyst to real change in the health care system, it is time to move past the rhetoric and pilot projects and into true action.*[57]

Therefore, flexibility will be required in deciding how to apply this principle. In addition, the experience of a number of provinces and territories has shown that setting up primary care groups is neither easy nor cheap. Indeed, as explained in Section 1.1, the cost of restructuring is one of the reasons why the Committee has concluded that the current system is not fiscally sustainable. Other findings with respect to primary care reform are discussed in more detail in Chapter Six of this report.

Principle Eleven

To facilitate primary care reform, the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining capitation, fee-for-service and other incentives or rewards.

Fee-for-service payment is the dominant form of primary care physician remuneration in Canada. Almost 90% of family physicians surveyed by the Canadian College of Family Physicians in 2001 said that they received some proportion of their earnings in the form of fee-for-service payments,[58] and that these payments accounted for an average of 88 percent of their total income.[59] Although in 1999-00, over 20% of Canadian physicians received some payments for clinical care through alternate forms of payment, such as salaries or capitation, in most provinces these alternate sources were the main form of remuneration for less than 10% of physicians.[60]

Under a fee-for-service payment scheme, primary care physicians are paid a fee for each service they provide to patients according to a preset schedule of tariffs. Fee-for-service is a relatively simple and transparent payment method. It is also fairly easy to administer.

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57 *Share the Future of Health Care*, p. 34.

58 Canadian Institute for Health Information (CIHI), *Canada's Health Care Providers*, 2001, p. 73.

59 Hutchison, Brian and Julia Abelson and John Lavis, "Primary Care in Canada: So Much Innovation, So Little Change," in *Health Affairs*, Vol. 20 No. 3, May-June 2001, p. 117.

60 CIHI, op. cit., p. 74.

It has the benefit of familiarity in Canada as patients and doctors alike are aware of how it works.

Fee-for-service, however, has a number of drawbacks. According to many witnesses, fee-for-service provides the wrong signal or incentive to primary care physicians, that of "over-servicing": the more health services physicians provide, the more income they receive, irrespective of the needs of the patient receiving the service, the outcomes produced or the cost of providing the service. Moreover, because the remuneration is attached to the service, there is no financial reward for physicians to locate in areas with greater needs as long as they can satisfy their workload and income expectations by serving lesser needs in their preferred locations.

For these reasons, many provincial commissions and task forces have identified fee-for-service as incompatible with promoting the best productive use of the time and skills of primary care physicians. In addition, provincial reports pointed out that fee-for-service is also incompatible with primary care reform. Since doctors are paid for every service they provide, they have an incentive to bill for treatments that could be provided more cost-effectively by other health care professionals. This has effectively discouraged collaborative and multidisciplinary practices.

Health care commissions and task forces at the provincial level, namely the Health Services Restructuring Commission in Ontario, the Clair Commission in Quebec and the Mazankowski report in Alberta, all recommended a system of blended remuneration for primary care physicians incorporating elements of capitation[61], fee-for-service and other rewards. This recognizes the fact that "one size" does not fit all situations:

> *Research to date has not identified one funding system as ideal; every model has advantages and disadvantages. Policy makers need to assess their own situation, understand the risks and benefits of each payment model, and decide for themselves what model best address the needs of the funders, providers, and the community.*[62]

The Committee agrees with provincial commissions and task forces that the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining capitation, fee-for-service and other incentives or rewards. Blended remuneration provides incentives for general practitioners both to work hard and to care for a large number of patients as they do now (through fee-for-service

The Committee agrees with provincial commissions and task forces that the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining, capitation, fee-for-service and other incentives or rewards.

[61] Capitation refers to a payment system in which a health care unit receives an annual payment for each individual to whom the unit is responsible for providing service. The amount of the payment may depend on the age and medical history of the individual, but not on the number of service calls the individual makes to the unit during the year.

[62] Canadian Health Services Research Foundation, *Integrated Health Systems in Canada: Three Policy Syntheses – Questions and Answers*, July 1999, p. 2.

funding) and to emphasize preventive care and population health (through capitation funding). However, since physicians are not all alike in their financial expectations or in their reaction to various types of incentive, there must be flexibility in the remuneration system that is used for different group practices. Nonetheless, the Committee acknowledges that, in order to implement primary care reform, a move away from current fee-for-service is essential, otherwise there will be no motivation for family physicians to allow patients to be seen by other clinic staff members.

Most models of primary care reform require that patients enroll with a specific doctor or group practice for a pre-determined period of time, usually a year. Implementation of this kind of reform must therefore confront the perceptions that it limits patients' freedom of choice and, from a doctor's perspective, that it restricts their freedom to practice medicine as they choose.

Nonetheless, the Committee acknowledges that in order to implement primary care reform, a move away from current fee-for-service is essential, otherwise there will be no motivation for family physicians to allow patients to be seen by other clinic staff members.

Since a patient need only sign up with a family physician for a year (unless the patient moves his/her residence), this is hardly a significant constraint on patients. Similarly, encouraging doctors to make full use of the skills of all the members of their health care team (e.g. by changing the scope of practice rules so that nurse practitioners can use their full range of skills) is hardly a serious infringement on physicians' freedom to practise as they choose.

As well, the Committee is aware that the issues of how the specialists and physicians employed in teaching hospitals should be remunerated need to be addressed, and the Committee will do so in Volume 6 of its study.

Principle Twelve

New scope of practice rules and other measures need to be developed in order to enable all health care providers in the primary care sector to provide the full range of services for which they have been trained.

Issues concerning the scope of practice of various health care providers are discussed in Chapter 6. The Committee believes that new scope of practice rules and other measures need to be developed in order to enable all primary health care providers to deliver the full range of services for which they have been trained. It is also the Committee's view that there would be significant advantages to these measures being as standardized as possible across the country. National standards would also help reinforce Canadians' belief that their health care system is national, not provincial, in character.

In general, the primary care sector would function more efficiently, without loss of medical efficacy, if providers such as nurse practitioners were able to provide the full range of services for which they have been trained. This would then free up more time for general

practitioners to look after those patients who require their particular set of skills, experience and qualifications.

In addition, achieving a better mix of health care providers requires more than just changing the way they currently practice; it may also require changes to the way in which they are trained and educated.

The Committee understands that changes to the regulatory approach adopted by self-governing professions is essential to implement this principle sucessfully.

The Committee believes that new scope of practice rules and other measures need to be developed in order to enable all health care providers in the primary care sector to provide the full range of services for which they have been trained.

Principle Thirteen

In the second stage of health care reform, an "internal market" should probably be created in which primary health care teams would purchase health services provided by hospitals and other health care institutions on behalf of their patients.

During Phase Three of its study, the Committee learned a great deal about GP fundholding practices in place in the United Kingdom. In Volume Three, we explained that under such Fundholder practices GPs were given a budget from which to purchase care for their patients, including hospital services, specialist services, and prescription drugs.[63]

The Committee was told that the objective of establishing such an "internal market" in the United Kingdom was to overcome a major disincentive, whereby physicians directed a lot of health care activity and spending but without any financial repercussions for themselves and without any financial incentive to be concerned about the cost their decisions imposed on the health care system as a whole. It was also believed that general practitioners (GPs) would be more effective purchasers for their patients than a regional health authority:

> *The GP was closer to patients and thus presumably could effectively meet their needs; the GP was also more able to negotiate with local hospitals. The theory was that the need for GPs to keep within budget and patients' ability to change doctors would lead to greater fiscal responsibility and improvement in quality.*
>
> *(…) Fundholding introduced a financial incentive for those who joined the scheme to be more efficient: they were able to invest any savings from their budgets in improvements in patient care or practice improvement. Fundholders could also move funds between*

[63] Volume Three, pp. 37-44.

components of the budget, allocating resources as they saw fit. Any fundholders that repeatedly failed to meet the budget risked losing fundholding status.[64]

The Committee was told that an "internal market" reform along the lines of the GP Fundholding scheme could have great potential for implementation in Canada. More specifically, in their 1998 book, Jérôme-Forget and Forget proposed the creation of group practices (referred to as "targeted medical agencies" or TMAs), made up of family physicians, specialists and other health care providers, which would be financially responsible for all the health care needs of their patients. Jérôme-Forget and Forget believe that TMAs as purchaser agents may be more cost-effective and efficient than having this role performed by regional health authorities:

The goal of establishing physicians as the key decision makers in health care delivery is to decentralize medical decisions and financial responsibility to a level much closer to the patient. (…), many internal market reforms fall short of this objective by giving purchasing responsibility to fairly large organizations. Regional health authorities, (…), are primarily bureaucratic structures whose size makes it difficult to undertake the negotiation of contracts with providers on an individual basis. (…) The [international] experience with large purchasers indicates that they are unable to effectively promote efficient use of resources without resorting to tight regulation of physicians' behaviour – a technique at odds with Canada's tradition of physician autonomy. At the other extreme, a minimum size is necessary to take advantage of professional interaction among physicians as well as defray the additional administrative and management costs.[65]

The Health Services Restructuring Commission in Ontario made a similar recommendation.[66] In their proposal, interdisciplinary health care teams remunerated mainly through funding by capitation would be given permanent and exclusive responsibility for all the health care needs of a given population. In addition, in their role as gatekeepers, these teams would establish contracts with other institutional providers in the region. Eventually, they would be given control over the entire health care budget pertaining to the population on their roster.

It must be acknowledged that, although this network of primary health care teams could be strongly recommended to the population, it would be impossible to force Canadians to adopt it. The Committee was told that one way to make it worthwhile for patients to agree to signing up with a primary health care team would be to introduce a negative financial incentive that would apply to patients who chose to consult with doctors who were outside the network of their chosen primary health care team.

Overall, the Committee believes that an "internal market" in which financial responsibility rests on primary health care teams should probably be established. We do,

[64] "Integrating Canada's Dis-Integrated Health Care System", p. 13.
[65] *Who is the Master?*, p. 111.
[66] See its report, *Primary Health Care Strategy*, op. cit., pp. 34-40.

however, understand that some provinces/territories may prefer delegating the purchasing responsibility to regional health authorities.

Once again, the Committee wishes to stress that flexibility will be required in applying this principle so as to take into account differences between the regions in terms of the size of their population, the rural/urban mix they contain and the number of health care providers and institutions within their jurisdiction. It is our intention to devote more attention to the second stage of reform in Volume Six.

Principle Fourteen

A national (not exclusively federal) strategy must be developed to achieve both an adequate supply and optimal use of health care providers.

All national and provincial/territorial organizations representing health care providers that appeared before the Committee since the beginning of its health care study insisted that what is needed is a country-wide, long-term, made-in-Canada, human resource strategy coordinated by the federal government. Competition between the different jurisdictions for scarce human resources in health care is detrimental to the country.

It is important to stress that such a strategy must not be exclusively a federal one, with input only, or even primarily, from the federal level of government. It must involve all stakeholders, recognizing that the education and training of health care providers is a provincial/territorial responsibility.

The Committee welcomes the announcement last fall by the Minister of Human Resources Development about the funding of two important sectoral studies on the precise human resources needs for physicians and nurses. We believe that this is an important step towards the development of a national approach. Each of these studies will systematically analyze the labour market and culminate in the elaboration of a strategy designed to ensure an adequate supply of appropriately trained professionals.

The Committee strongly supports the involvement of all the key stakeholders in producing these studies. In Chapter 6, we present specific recommendations with respect to human resources in health care, including the creation of a permanent national coordinating body on health care human resources.

2.3 Evaluating Health Care

Principle Fifteen

Accountability and transparency in health care financing and delivery require the deployment of a system of electronic health records (EHR) that can capture and translate information on system performance and outcomes.

A system of electronic health records (EHR) is an automated provider-based system within an electronic network that provides complete patients' health records, including their visits to physicians, hospital stays, prescribed drugs, lab tests, and so on, all collected in accordance with a system of common standards applying to the data. Many witnesses viewed the EHR system as the cornerstone of an efficient and responsive health care delivery system that is able to improve both quality and accountability. Such a system is a necessary prerequisite to a truly patient-oriented health care system. A system of EHR is also essential if primary care reform is to be realized.

> *The electronic health record (EHR) is the cornerstone of an efficient and responsive health care delivery system, quality improvement and accountability. Without it, the prospects for a patient-friendly health care system, optimal teamwork, and efficiency are dim.*[67]

All levels of government in Canada have recognized the importance of deploying a system of EHR. In fact, on September 11, 2000, the First Ministers agreed to work together to develop an EHR system over the next three years and to work collaboratively to develop common data standards to ensure compatibility of provincial health information networks and to ensure stringent protection of personal health information. The full deployment of a system of EHR was also endorsed by various provincial task forces and commissions on health care, including the Health Services Restructuring Commission report in Ontario, the Clair Commission in Quebec, the Fyke Commission in Saskatchewan and the Mazankowski report in Alberta.

In support of the agreement reached by First Ministers, the federal government committed $500 million in 2000-01 to accelerate the adoption of modern information technologies in the health care system. The Committee was informed that this money has been invested in a not-for-profit corporation, known as Canada Health Infoway Inc., that will work with provinces and territories to create the necessary common components of an EHR over the next three to five years. We believe that this has the potential to constitute a major step towards the full integration of the various health federal/provincial/territorial infostructures.

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[67] Saskatchewan Commission on Medicare (Kenneth Fyke, commissioner), *Caring for Medicare – Sustaining a Quality System*, April 2001, p. 68.

Considerable agreement exists among the provinces and territories and other stakeholders that the federal government should foster collaboration in this area. The Committee welcomes this collaboration between the federal government and the provinces and territories and encourages the federal government to play a leadership role in promoting a system of electronic health records that is consistent across the country, to the benefit of all Canadians.

Generally, patients want to tell their medical history only once, to have their tests and care coordinated and made available to the different health care providers they consult, and to have a more seamless integration of the health services they need. This can be achieved with an EHR. However, Canadians need to have confidence that protective mechanisms are in place that give access to patient records only to those people authorized by patients themselves. The EHR system needs to be developed in a manner that balances the needs of patients for privacy with respect to their personal health information against the needs of the system to be able to provide patients with the care that they require.

Perhaps the most important benefit to be gained from the deployment of EHR across the country is access to evidence-based information that will be used to assess quality of care, system performance, treatment outcomes and patient satisfaction. This will foster accountability and transparency in decision-making regarding health care delivery and policy and promote improvement in the quality of care.

Along with numerous witnesses, the Committee believes that accountability and transparency in health care financing and delivery require the deployment of a system of EHR that will capture and translate information on system performance and outcomes. It is our view that measuring outcomes must become an essential part of the health information system. Despite advances in recent years, we still do not have nearly enough knowledge about which procedures and treatments work most effectively, or, indeed, even how best to measure health outcomes. Moving towards a uniform EHR system will facilitate the monitoring and comparison of treatment outcomes across the country.

The Committee believes that accountability and transparency in health care financing and delivery require the deployment of a system of EHR that will capture and translate information on system performance and outcomes. It is our view that measuring outcomes must become an essential part of the health information system.

The Committee acknowledges that national standards are needed, both at the level of information gathering and processing and for guaranteeing confidentiality and privacy of patient health information, and reiterates its belief that the federal government can play a leading role in helping to bring this about. Our observations and recommendations with respect to health information systems are detailed in Chapter 4.

Principle Sixteen

Measuring treatment outcomes and system performance must become an essential part of the health information system. Such monitoring and evaluation of the health care delivery system should be performed independently at the national (not federal) level and be funded by government.

As stated above, better information on access to care, quality delivery, system performance and patients' outcomes cannot be achieved without an expanded, long-term investment in information technology, including an EHR. During the Committee's hearings, witnesses stressed that partnerships among the provinces and territories, and the leverage of federal government funding for accelerated development, should be pursued.

Similarly, a recent report to the British Columbia Legislative Assembly stated:

> *The federal government should be lobbied for designated funds to deal with this significant, Canada-wide need that if properly addressed will improve the functioning of the whole health care system and the health of all Canadians. The need is urgent.*[68]

While witnesses agreed that governments should finance the health information system, many of them were of the view that governments should not be responsible for assessing health data and evaluating quality and outcomes. They explained that, currently, evaluation is done by the same people responsible for paying for, and for providing, health services. There is no independent assessment of the outcomes and no external audit of the impact of the results. In this regard, the Premier's Advisory Council on Health (Alberta) stated:

> *Tracking and monitoring outcomes and providing regular reports to the public is an essential way of improving quality in health care. However, when government and health authorities measure and assess their own outcomes and results, it can put them in a conflict of interest.*[69]

This Advisory Council recommended the establishment of a permanent, independent "Outcomes Commission" to track results, assess outcomes and report regularly to the population.

Similarly, in Saskatchewan, the Fyke Commission recommended the establishment of a "Quality Council", an evidence-based organization, working at arm's length from government. The mandate of this Quality Council would involve reporting regularly to the provincial legislature, as well as to the public on a variety of issues, including: trends in health

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[68] Select Standing Committee on Health, *Patients First: Renewal and Reform of British Columbia's Health Care System*, Report to the British Columbia Legislative Assembly, December 2001, p. 29.
[69] Premier's Advisory Council on Health (Alberta), p. 68.

status, costs/benefits of health care interventions, clinical practices and clinical errors, evaluation of technology, equipment and drugs, etc. The Fyke report stressed that:

> *(…) the Quality Council has the potential to depoliticize decisions, find creative solutions to long-standing problems, free the public from the tyranny of anecdote and ill-informed opinion about the state of care, and reveal where the system provides value for money and where it does not.*[70]

The Committee believes that it is essential to greatly improve the evaluation of our health care delivery system in order to provide care that is evidence-based and corresponds to the needs of patients. We strongly support the view of witnesses and provincial reports that the roles of the funder and provider should be separated from that of the evaluator in order to obtain independent assessment of health care system performance and outcomes. While such evaluation should be performed at arm's length from the funder/insurer, it should be financed by public funds.

The Committee believes that it is essential to greatly improve the evaluation of our health care delivery system in order to provide care that is evidence-based and corresponds to the needs of patients. We strongly support the view…that the roles of the funder and provider should be separated from that of the evaluator in order to obtain independent assessment of health care system performance and outcomes.

Moreover, it is the view of the Committee that such independent evaluation should be performed at the national (not federal) level. This would allow for the pooling of expertise, thereby making the most effective use of the limited human resources that are currently available in Canada, and result in major economies of scale. In addition, the smaller provinces, which would not otherwise be able to sustain a truly effective monitoring and evaluation system, would clearly benefit from the results of a national evaluation process.

The Committee believes that a national process for evaluating health care system performance and outcomes should be built on those national organizations that are currently devoted to the task of performing independent evaluation. More precisely, this type of evaluation should be carried out at three levels:

- First, the role of the Canadian Institute for Health Information should be strengthened. In addition to its responsibilities in the public health field, it should take the task of reporting – preferably publicly – on the performance of all regions and of all institutional providers.
- Second, the Canadian Council for Health Services Accreditation would recommend on a regular basis how to correct deficiencies that were identified in institutions delivering health services. At present, this review is voluntary but it should be made mandatory.

[70] Saskatchewan Commission on Medicare, p. 81.

- Finally, the Citizens' Council on Health Care Quality would be responsible for advising on the development of quality standards and policy to promote improving the quality of health care institutions.

The extent of the authority devolved to each of the three organizations described above would have to be specified. For example, does each organization rely exclusively on public pressure and moral suasion, or should they be able to compel providers who do not meet agreed quality standards to implement changes? There are clearly many jurisdictional issues to be resolved, regardless of the exact mandate of such national evaluative bodies. But this is an issue that must be tackled – it can no longer be ignored.

The Committee believes that a national process for evaluating health care system performance and outcomes should be built on those national organizations that are currently devoted to the task of performing independent evaluation... There are clearly many jurisdictional issues to be resolved, regardless of the exact mandate of such national evaluative bodies. But this is an issue that must be tackled – it can no longer be ignored.

2.4 Achieving a Patient-Oriented Health Care System

Principle Seventeen

Canada's publicly funded health care system should be patient-oriented.

In a quality-focussed system, the first priority should be to ensure that individuals get the kind of health care they need and that they be given the tools and support they need to stay healthy.

In Canada currently, the health care system is organized around facilities and providers, not individual Canadians. People are expected to fit into the system and get service when and where the system can provide it.

In other countries, changes have been made to put more focus on patients. This includes introducing health charters or care guarantees to ensure that people get the care they need within a certain period of time and of acceptable quality. This also includes establishing a system in which funding follows the patient.

It is the view of the Committee that patients, at all times, must be at the centre of the health care system. Services should be coordinated around their needs for safe, timely and effective care. Ideally, the goal should be an integrated, cost-effective system characterized by closer working relationships between hospitals, long-term care facilities, primary care, home care, public health, etc.

However, putting patient needs at the centre of the health care system does not mean that anything the patient wants, the patient should get. Services provided by the health care system must be based on evidence that they are safe, effective, necessary and affordable.

The Committee believes that Canadians are entitled to health care that is safe, effective, patient-oriented, timely, efficient, equitable and affordable. In our view, the set of principles we have developed will lead to a better integration of the whole range of health services into a continuum of care in which the focus is really on the needs of patients.

The Committee believes that Canadians are entitled to health care that is safe, effective, patient-oriented, timely, efficient, equitable and affordable.

Principle Eighteen

Incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees for services that are deemed to be medically necessary.

In Volume Four of its health care study, the Committee recalled that, when a national Medicare program was first debated, there was a suggestion that there should be an element of patient pay in health care. The term "patient pay" was used to mean that patients ought to pay something somewhere in the system.

Volume Four identified different forms of patient payment including user charges, premiums, medical savings accounts, income tax on health care, etc.[71] During its cross-country hearings, the Committee heard many concerns about establishing user charges paid at the point of service. On the one hand, we were told that user charges for publicly insured health care at the point of service reduce demand, and that they do so in a way that disadvantages those with low income.

On the other hand, witnesses stressed that the most expensive decisions that are made about patient care are those made by physicians, and are therefore not the responsibility of the patient.

In fact, most of the spending in the health care system and most of the waste in the system are beyond patient control; the major expenses, and the decisions which give rise to these expenses, are incurred by health care providers on behalf of their patients. These decisions are not made by the patients themselves.

Finally, witnesses pointed out that implementing modest user charges could incur such administrative costs that these costs would nearly equal the revenue generated from such charges.

[71] Volume Four, pp. 61-65.

The Committee believes that incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees that discourage access to medically necessary health services. Nor should such incentives discourage patients from receiving the treatment that health care providers believe they require. Access to hospitals and doctors should not depend on the income or wealth of individual Canadians. Studies have shown that the application of universal user fees does this and they should therefore not be used in Canada.

> ***The Committee believes that incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees that discourage access to medically necessary health services.***

Nevertheless, ways need to be found to encourage patients to use the health care system responsibly. One such way that has been proposed many times in the past is to provide each Canadian with an annual accounting of the amount of money that has been paid, on their behalf, for the health services they have received during the year. Other potential incentives need to be explored.

Making the patient aware of the costs of health services or removing the impression that they are all free is the logic behind many proposals. The philosophical principle behind these proposals is that if patients are knowledgeable about health care costs, they will understand the inherent pressures in the system and access it only when it is genuinely needed. They will also have a better understanding of the issue of fiscal sustainability in health care. The Committee believes that the key point in creating a cost-effective, sustainable health care system is not to discourage the use of the system, but to encourage appropriate use and to encourage people to take better care of their health.

> ***The Committee believes that the key point in creating a cost-effective, sustainable health care system is not to discourage the use of the system, but to encourage appropriate use.***

Principle Nineteen

Programs that enable people to be responsible for their own health and to stay healthy must be given high priority. The federal government can play a leadership role in this regard.

In 1974, the then federal Minister of Health, Marc Lalonde, released a working document entitled *A New Perspective on the Health of Canadians*. This report recognized the impact of individual behaviour on health outcomes, and stressed that individual Canadians should assume greater responsibility for their health.

Since then, many other reports have underscored the importance of encouraging Canadians to stay healthy. According to the report by the Premier's Advisory Council on Health in Alberta, this is the first step towards sustaining Canada's publicly funded health care system:

It sounds like just good common sense, but perhaps the best way to sustain [the] health care system over the longer term is to take steps to enable people and communities to stay healthy.[72]

During Phase Two of its study, the Committee was informed that the total cost of illness was estimated at $156.4 billion in 1998[73]. Witnesses suggested that the economic burden of illness could be reduced by investing more in health promotion, disease prevention and population health. They stressed that many diseases, and most injuries, can be prevented.

However, they pointed out a strong tendency for government to focus on curing diseases, rather than on their prevention. For example, clinical treatment has been the most common chronic disease strategy and there has been only a limited will on the part of government to expend resources on health promotion and disease prevention. Outcomes of such programs are generally visible only over the longer term, and are therefore less attractive politically than money invested in health care facilities, such as hospitals.

Witnesses indicated that the federal government's role with respect to health promotion, disease prevention and population health is a well established one. Moreover, the federal government has been recognized as a leader worldwide in elaborating the concept of population health. The role of the federal government in the fields of health promotion, disease prevention and population health is addressed in Chapter 7.

Principle Twenty

For each type of major procedure or treatment, a maximum waiting time should be established, and made public. When this maximum time is reached, the insurer (government) shall pay for the patient to receive immediately the procedure or treatment in another jurisdiction including, if necessary, another country.

A report tabled with the Committee suggested that a monopolistic, non-competitive environment, combined with no cost of service at the point of service, contributes to growing waiting times for publicly insured health services:

(…) in a system in which health services are free at the point of consumption, queuing is the most common form of rationing scarce health care resources. And since patient satisfaction plays no part in determining incomes or other economic rewards for health care providers and administrators in the public system, patient's time is treated as if it has no value. There are no penalties in the system for making people wait. [74]

[72] Premier's Advisory Council on Health (Alberta), p. 14.
[73] Volume Two, p. 49.
[74] *Operating in the Dark*, p.8.

The following case was recently brought to the Committee's attention. An MRI done on April 19th, 2001, revealed that a patient had two herniated discs in his neck. As his condition was not improving, on May 24th of the same year he was placed on a waiting list for surgery. His condition was classified as 'elective but urgent', a category that includes most of the hospital's cancer surgery, with a guideline of surgery within 2 weeks. As of January 18th, 2002, that is, 8 months after being placed on the waiting list, the patient still had not undergone his surgery, and still does not know when it will be performed.

The Committee was told that this case illustrated what is called a 'static queue.' It is a waiting list that does not move because the people who are on it are always being bumped by more urgent cases. These higher priority cases occur at a faster rate than the queue is able to handle. The surgeon who was to treat the patient in question had 96 patients on his waiting list (about average for the four neurosurgeons on staff at the hospital), of whom 74 were graded elective but urgent, and could not guarantee a firm date for surgery for any of them.

It appeared that the only way for the patient in question to move to the top of the list was for his condition to deteriorate. It was not enough for him to be in constant pain and unable to work. Were he to experience actual paralysis, he could then be admitted through the emergency ward, and have his surgery within a few days. Otherwise there was no way to accelerate his surgery without denying someone else with an even more urgent case.

In spite of significant investments in the health care system in the past few years by all levels of government, public perception is that waiting times for selected services are continuing to grow. There is sufficient anecdotal evidence in support of that impression to lead to increasing worry on the part of Canadians that the health care system may not be there when they need it. On many occasions witnesses told the Committee that, if there is one thing Canadians should be able to expect from their publicly funded health care system, it is access to health services when they need them. Clearly, a truly patient-oriented health care system is one in which needed care is provided in a timely fashion.

In Sweden, the government enacted a "care guarantee" to ensure timely access to necessary health care. This guarantee established a maximum waiting time for diagnostic tests (90 days), certain types of elective surgery (90 days), and consultations with primary care doctors (8 days) and specialists (90 days). Sweden has also put in place a system where waiting times for major procedures are posted daily on a website. People can check the website and choose to go to the hospital with the shortest waiting times as long as they are prepared to travel and to use the next available physician.

Based on a review of the Swedish experience, the report of the Premier's Advisory Council on Health in Alberta recommended the establishment of a care guarantee of 90 days for selected services. According to the Advisory Council, this guarantee would provide an incentive for health care providers and regional health authorities to take appropriate action to manage and shorten waiting lists. Their report stressed that patients may need to give up their preference for a specific physician or hospital if they want to be treated within the 90-day period. In addition, if regional health authorities are unable to provide service within this period, they would have to consider other options, such as getting the service from another region. Services could be arranged from either a public or a private provider.

The Committee was told that the current lack of accurate information on waiting lists is a major impediment to the development of a care guarantee in Canada. There is, in fact, no standardized data on waiting lists in Canada. However, the Committee was told about a pilot project funded by Health Canada (through its Health Transition Fund) which, according to many witnesses, provides potential for effective management of waiting lists for elective health care. This pilot project – called the "Western Canada Waiting List Project" or WCWL – led to significant progress in the development of valid and reliable tools for evaluating and managing waiting lists in five clinical specialty areas: cataract surgery; general surgery (including breast cancer, colorectal cancer, inguinal hernia, and laparascopic cholecystectomy); hip and knee replacement; MRI scanning; and children's mental health.

The standardized waiting list developed by the WCWL is based on an assessment of a patient's overall urgency (pain, suffering), clinical findings (x-rays, co-morbidity, psychopathology), as well as on an assessment of the impact of the disease on the patient's quality of life. The Committee was told that this approach represents a fair and consistent way to rank-order patients waiting for needed elective care. It both promotes better use of health care resources and is patient-oriented.

The Cardiac Care Network in Ontario uses a similar methodology in the management of access to cardiac surgery in that province. The use of such priority scoring systems has the potential to yield a significant improvement to the health care system, as it has with heart patient cases in Ontario.

In the Committee's view there are two main causes to the growing waiting list problem in Canada. First and foremost are the shortages of all types of human resources as well as of many types of diagnostic equipment. Second, there is a need to improve the management of waiting lists.

With regard to this second cause, it is clear to the Committee that more needs to be done to ensure the effective management of waiting lists. In the same spirit that it supports all efforts to improve the efficiency of the system, the Committee welcomes attempts to find better ways to manage waiting lists so that patients in the greatest need are tended to first and that wherever possible waiting times are kept to a minimum.

However, the Committee feels it is extremely important to recognize that better management of waiting lists will not, on its own, suffice to resolve the waiting line problem. This is because the more significant cause of the problem is a lack of human, technological and infrastructural resources, that has resulted from a series of decisions on the part of governments who have attempted to control costs over the past decade by reducing expenditure in these areas.

Beginning in the early 1990s, funding for the education and training of many categories of health care professionals was cut, as a way of reducing future as well as current health care expenditures. More generally, massive cuts in public spending on health care were made, especially during the first half of the decade. As a consequence, there is today a severe shortage of both people and equipment to meet the growing health care needs of the population.

One reason that this kind of cost-cutting has been attractive to government, and that they have been able to implement it relatively easily, is that, to date, government has not had to bear the costs that result from its decisions. Instead, these costs have been largely borne by patients who face longer waiting times and by the front-line professionals who have seen their conditions of work deteriorate and their ability to provide care diminish.

The Committee believes that, for each type of major procedure or treatment a maximum waiting time must be established, and made public. When this maximum time is reached, the insurer (government) shall pay for the patient to immediately receive the procedure or treatment in another jurisdiction including, if necessary, another country (the United States).

The Committee believes that, for each type of major procedure or treatment a maximum waiting time must be established, and made public. When this maximum time is reached, the insurer (government) shall pay for the patient to immediately receive the procedure or treatment in another jurisdiction including, if necessary, another country (the United States). The point at which the waiting time guarantee would kick in for each procedure would be based on an assessment of when a patient's health would deteriorate irreversibly as a result of waiting for the procedure. Waiting times would be established by scientific bodies using evidence-based criteria.

Since government has responsibility for ensuring the adequate supply of the essential service of hospitals and doctors, this responsibility carries with it the obligation to meet reasonable standards of patient service. This is the essence of a patient-oriented system and of the health care contract between Canadians and their governments.[75] A maximum waiting time guarantee of the type described in Principle Twenty would meet this obligation. Were it implemented, this guarantee would mean that government would have to shoulder the responsibility for not delivering needed care in a timely fashion. Increased waiting times would no longer represent a cost-free option for government, since they would be required to pay to have patients be treated in other jurisdictions.

The Committee feels that this would introduce a powerful incentive for government to deal with waiting times that exceed the agreed upon limits. It would also constitute a major step in re-establishing the health care contract between citizens and their government. (The exact nature of this contract is discussed in the next section.)

In closing the discussion of Principle Twenty, it is worth making the observation that using diagnostic and hospital facilities in the United States may be the most economical way of meeting the care guarantee. To meet maximum waiting times within Canada, it will be necessary for the health care system to have some excess capacity or redundancy in order to cover peak periods of demand for service. Whether it is cheaper to build such excess capacity in Canada or purchase it from the United States is an issue that will need to be studied if a care guarantee is implemented.

The Committee acknowledges that a care guarantee can only be implemented and enforced once consensus is reached on the definition, estimation and management of

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[75] See section 2.5, below.

waiting times/lists. We believe that it is absolutely imperative that Canada move forward immediately with the setting of maximum waiting times for major categories of treatment. It is the next critical piece of work that needs to be addressed.

The Committee acknowledges that the care guarantee will cost money, particularly if many patients have to be sent to the United States for treatment because they have exceeded the maximum waiting time for the treatment they require. We have already noted in Section 1.1 that the current hospital and doctor system is not fiscally sustainable, and it is clear that it will be even less so when the costs of the care guarantee are added on to existing costs. Nonetheless, The Committee regards the care guarantee as an essential component of the health care contract between Canadians and their governments.

The Committee recognizes, as it has said several times in Chapters 1 and 2, that new sources of federal and provincial/territorial funding will be needed in order to implement the changes the Committee proposes. The Committee will discuss its specific federal funding proposals in its October report.

2.5 The Health Care Contract Between Canadians and their Governments

In Volume Four, the "Issues and Options Paper", the Committee endorsed two major public policy objectives for Canada's publicly funded hospital and doctor system:

- *To ensure that every Canadian has timely access to all medically necessary services regardless of their ability to pay for those services, and*
- *To ensure that no Canadian suffers undue financial hardship as a result of having to pay health care bills.*[76]

The pursuit of these objectives has involved a "contract" between Canadians and their governments – federal, provincial and territorial. The nature of this contract is that Canadians have agreed to pay taxes to their governments who have then used the money to fund a universal, comprehensive, portable and accessible hospital and doctor insurance plan. Since the funder of the plan is government, the plan is described as being publicly administered.[77] (The principles of universality, comprehensiveness, accessibility, portability and public administration are the five principles of the *Canada Health Act.*)

The contract requires governments, acting as insurers, to meet the two policy objectives stated above. In particular, the contract requires governments – federal and provincial/territorial – to provide Canadians with access to publicly insured, medically necessary, hospital and doctor services in a timely fashion.

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[76] Volume Four, p. 16.

[77] In a recent speech, the Honourable Monique Bégin, who was the federal Minister of Health when the *Canada Health Act* was introduced, said the following about the public administration conditions of the *Canada Health Act:* "Public administration" does not mean what the public believes it means. It is most misleading…[I]n Canada, the funding/financing is public but … the delivery of services is private, in that physicians are not civil servants and hospitals have boards, not deputy ministers. The program criterion of the legislation reads as follows: "(…) the health care insurance plan (hospitals and doctors) of a province must be administered and operated on a non-profit basis by a public authority (…) responsible to the provincial government (…)" … *Op. cit*. p. 6.

The problem Canadians face today is that, increasingly, timely access to all medically necessary services is not provided. Principle Twenty is designed to address this problem by forcing governments to meet reasonable standards of patient (customer) service, either in their own jurisdiction, elsewhere in Canada or, if necessary, in the United States. Meeting reasonable patient service standards is an essential part of the health care contract between Canadians and their governments. It is part of the bargain.

Another possible approach to making governments fulfill their part of the contract would be to use a patient's charter of rights as the means of enforcing maximum waiting time standards. Such an approach would be consistent with the Charter of Rights and Freedoms in that it would use the courts to enforce rights, in this case the right to timely treatment. Such an approach has been used with mixed success in Australia, New Zealand and the United Kingdom (see Section 7.5 of Volume Four of the Committee's study).

However, the Committee prefers the simpler and less legalistic approach of Principle Twenty. In choosing this approach, we acknowledge (as indicated in our discussion following Principle Twenty) that this would require that Canadians agree to pay for the improved, and more timely, access to service. If they so agree, then Canadians would, in effect, be choosing the second of the three options the Committee outlined at the end of Section 1.1.[78]

If, after public discussion, Canadians decide that they are not willing to pay more for hospital and doctor services, or if the insurer (government) decides not to implement the care guarantee as described in Principle Twenty, then the result would be that the first of the three options in Section 1.1[79] would have been selected, with continued rationing of services and continued lengthening of waiting times.

Under this circumstance, where there is no maximum waiting time guaranteed by the public insurer, the question must be asked: should Canadians who may find that their health is deteriorating while waiting for medically necessary care, have the right to buy private health care insurance to protect themselves against excessive waiting times, and to receive treatment in Canada? That is, should Canadians who can afford to do so have the right to purchase privately a care guarantee for service delivery in Canada? (Canadians already have the option of buying insurance to cover the costs of treatment provided outside Canada, namely in the United States. Such insurance products are now on the market in Canada.)

While the Committee hopes that this issue will never arise because the insurer will fulfill its part of the health care contract by meeting the policy objective of "timely access to all medically necessary services", it is important to recognize that the question raised at the start of the preceding paragraph will have to be addressed if Principle Twenty is not fully

[78] At the end of Section 1.1, having established that the current health care system is not fiscally sustainable, this report said that there are three basic options from which Canadians must choose as they deliberate about the future of our health care system. These are: (1) the continued rationing of publicly funded health services, either by consciously deciding to make some services available and not others (that is, by delisting some services), or by allowing waiting lists to continue to grow; (2) increasing government revenue, either by raising taxes directly or through other means such as health care insurance premiums, so that the rationing of services can be reduced and waiting lines shortened; (3) making services available to those who can afford to pay for them by allowing a parallel privately funded tier of health services, while maintaining a publicly funded system for all other Canadians.

[79] See preceding footnote.

implemented. If this question is answered in the affirmative, then the third of the options presented in Section 1.1[80] would have been selected.

2.6 Concluding Remarks

There are two themes which run through the set of principles presented in this chapter. The first is the need to restructure hospital and doctor care in order to make it operate more efficiently. The second is to make information about the system, its costs, its waiting times, its performance and its outcomes, available to the public in order to improve transparency and make decision-makers – funders and providers – more accountable to the public.

Both these themes are designed to re-establish the health care contract between Canadians and their federal, provincial and territorial governments. This involves, on the one hand, having Canadians understand where their health care dollars are being spent and why more money is needed in order to make the system fiscally sustainable. On the other hand, it involves pushing government to operate the system more efficiently than it is now and to improve service delivery under the contract by, among other things, putting a cap on the length of waiting time for various procedures.

These themes are driven, in part, by an important observation about Canadians' attitudes towards the health care system, made by Darrell Bricker and Edward Greenspon in their recent book, *Searching for Certainty*.[81] Based on extensive public opinion polling by Ipsos-Reid, Bricker and Greenspon conclude that Canadians will not support additional spending to close the gaps in the health care safety net until they see compelling evidence that the current health care contract with their governments is being honoured. In other words, the current system must be perceived by the public to be working reasonably well – that is, public confidence in the system must be restored – before Canadians will support its expansion.

The two themes of improved efficiency and increased transparency and accountability are designed to restore the confidence of Canadians in the health care system. Only once the twenty principles the Committee has outlined in this chapter have been implemented can Canada proceed to expand public coverage of health care services. The Committee believes that any such expansion will have to be done not by launching new universal programs, but by closing the gaps in the safety net, in particular with respect to drug therapy and home care.

The need to close these gaps is clearly illustrated by the fact that hospitals and doctors now account for only 46% of total health care expenditures.[82] Contrary to popular belief, and unfortunately contrary to most political rhetoric, Canada does not have a national health care system. Rather, it has a national hospital and doctor system, which now accounts for less than half of all health care expenditures.

Given the objectives of health care policy, as stated at the beginning of Section 2.5, the phrase "all medically necessary services" should be applicable to the full range of

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[80] See footnote 78.

[81] *Searching for Certainty,* Inside the New Canadian Mindset, by Darrell Bricker and Edward Greenspon, Doubleday Canada, 2002.

[82] CIHI, December 2001.

health care services and not just to hospital and doctor services. This implies that some expansion of coverage – to close gaps in the health care safety net – is required if the objective of Canada's health care policy is to be met.

The Committee believes that restructuring Canada's publicly funded health care system in order to make it more efficient is necessary to ensure its long-term fiscal sustainability. It is our view that the experience of other countries with respect to internal markets in health care can be instructive in deciding what the elements of this restructuring should be. We believe that restructuring health care in Canada must be based on devising a set of incentives that will lead all participants to change their behaviour in ways which will benefit the system as a whole and patients in particular. Our list of twenty principles is intended to achieve this.

For example, implementation of Principle Seven[83] would give government an incentive to think carefully about the health care consequences of making changes to budgets for funding hospital and doctor services. Once Canadians are able to translate budget dollar amounts into service levels and numbers of procedures to be paid for, they will then be able to evaluate more clearly the appropriateness of the size of the health care budget and to engage their government in a meaningful discussion, including a discussion on whether they were willing to pay more taxes (or health care insurance premiums) in order to improve levels of services. Currently, such a discussion is not possible because Canadians do not have the information that would enable them to translate budget levels into levels of services delivered to patients.

Similarly, Principle Eight[84] gives institutions incentives to operate more efficiently by putting them in competition with one another. There may be a need to develop a specific set of incentives which are targeted at the managers of health care institutions (and perhaps even at their trustees or directors) and another set of incentives for the health care providers they employ. These questions will be further explored in the Committee's October 2002 report.

Principle Eleven[85] introduces incentives for behavioural change on the part of primary care providers that would lead to a more efficient primary care sector. In fact, experience suggests that when providers/institutions are given responsibility for decisions on health care spending, they tend to provide the right treatment in the most cost-effective manner.

Finally, Principle Eighteen[86] provides incentives for patients to use the health care system efficiently. This principle could, for example, require the imposition of a surcharge

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83 Principle Seven reads: The consequences arising from changes in the level or amount of government funding for hospital and medical care should be clearly understood by government and explained to the public, in as much detail as possible, at the time such changes are made and announced.

84 Principle Eight reads: In the first stage of health care reform, the method for remunerating hospitals should be changed from the current annual global budget to service based funding.

85 Principle Eleven reads: To facilitate primary care reform, the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining capitation, fee-for-service and other incentives or rewards.

86 Principle Eighteen reads: Incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees for services that are deemed to be medically necessary.

on patients who choose to seek treatment from providers outside of their chosen primary health care team.

In every part of our system of incentives, there is a critical need for appropriate and timely information. Principle Fifteen ensures that a system of electronic health records, linking all health care providers, will make the "right information" available in a timely fashion to the appropriate provider and provide a better way of allocating resources to the benefit of patients.

As was stated in the introduction to this section, and as was illustrated above, the theme of providing more information to the public also runs through our twenty principles. This information is needed for three reasons:

- first, to make more transparent the processes by which resource allocation decisions – principally with regard to money, but including human resources as well – are made;
- second, to enhance accountability on the part of the people, institutions and governments who make decisions about what types of services will be covered by public insurance and how much of any service will be provided;
- third, and perhaps most importantly, to change the public debate from a debate about dollars to a debate about services and service levels. Canadians have a right to debate the question of whether they are willing to pay more for improved levels of service. Canadians have a right to understand the linkages between funding levels and service levels. Changing the nature of the public debate about health care will be a significant step towards gaining public support for restructuring the publicly funded hospital and doctor system. Ultimately, this will lead to restoring public confidence in the system so that we can move on to closing the gaps that remain in the publicly funded health insurance system.

There is also a need for improved accountability throughout the system. Under Principle Thirteen, the introduction of an "internal market" in Canada's publicly funded health care system would enhance the accountability both of health care providers/institutions and of governments.

Principle Twenty – the care guarantee principle – would make government accountable for meeting the timely access to treatment condition of its health care contract with Canadians.

The Committee has developed its twenty principles in recognition of the fact that Canadians want health care to be delivered equitably to all, based on need, not on income. In addition, consistent with our patient-oriented view (Principle Seventeen), our list of principles has been designed to address the primary concerns of Canadians with respect to the quality (Principle Sixteen) and timely provision of health services (Principle Twenty).

It is important to stress that the set of principles that the Committee has outlined in this chapter form an integrated whole. If one of these principles is rejected, then it may make the implementation of other principles in the set impossible.

A clear example is provided by the relationship between the first (single funder) and the last (care guarantee) principles. Should government refuse to introduce a waiting time guarantee (or should the public not wish to pay the additional funding that would be required to make the care guarantee a reality), it then becomes necessary to ask whether individuals should be allowed to buy private insurance that would enable them to have access to treatment by using a privately funded care guarantee. However, to allow people to purchase private insurance that would be used to pay for medically necessary services once the pre-defined waiting period has been exceeded would contradict Principle One which stipulates that there should be a single funder or insurer for all medically necessary hospital and doctor services.

The Committee does not advocate the introduction of private insurance and its preferred option is for all its principles to be accepted and applied. But it is necessary to be aware of the fact that if the set of principles is not embraced as a whole, then the rejection of one principle could very well lead to the undermining of others. In this case, the rejection of Principle Twenty could lead to Principle One being abrogated as well.

The Committee fully recognizes that its set of principles will be subject to close critical scrutiny. That is entirely understandable in such a value-laden public policy issue as health care. In fact, it is likely that each reader of this report will support his/her own unique subset of the principles.

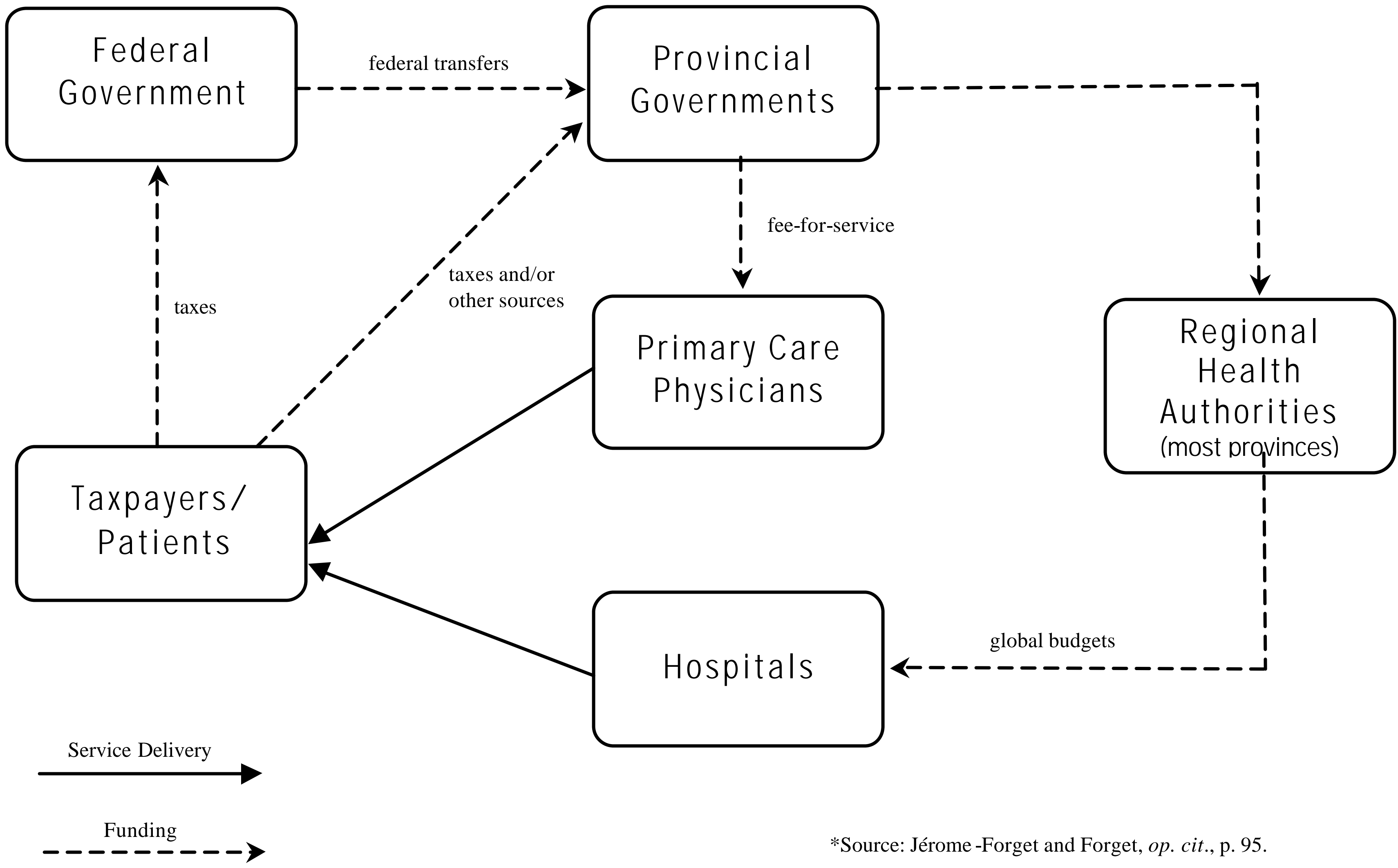
We ask readers, however, to keep in mind that no major reform of any large system, particularly one as complex and deeply personal as the hospital and doctor system, is ever perfect. There is no perfect solution. Everyone involved will have to be prepared to compromise in order to make reform work for the benefit of all Canadians, and reforms will have to be tailored to the specific circumstances that prevail in the different regions of the country.

Insisting on perfection, or attempting to obtain everything one wants, will doom reform to failure. Similarly, reform will fail if people insist on addressing all health care problems before beginning to make progress on the hospital and doctor system. These tendencies, along with an excessive focus on self-interest by those employed in the system, explain why reform has failed in the past.

Recognizing the dangers, we have worked hard to develop a set of principles which we believe are pragmatic, middle of the road in ideological terms, workable and that will lead to substantial improvements in the hospital and doctor sectors of the health care system. We believe that a steady pace of reform is the way to make the restructuring and renewal of Canada's health care system possible.

We trust that those involved in the sector will consider the principles with the same pragmatic approach as the Committee and that everyone will be prepared to make some sacrifices in order to meet our common goal: having a fiscally sustainable health care system of which Canadians can be truly proud.

Figure 1
*Current Structure of Publicly Funded Health Care Insurance**



*Source: Jérome -Forget and Forget, *op. cit*., p. 95.

Figure 2
Phase One Reform – The Introduction of Service Based Funding for Hospitals

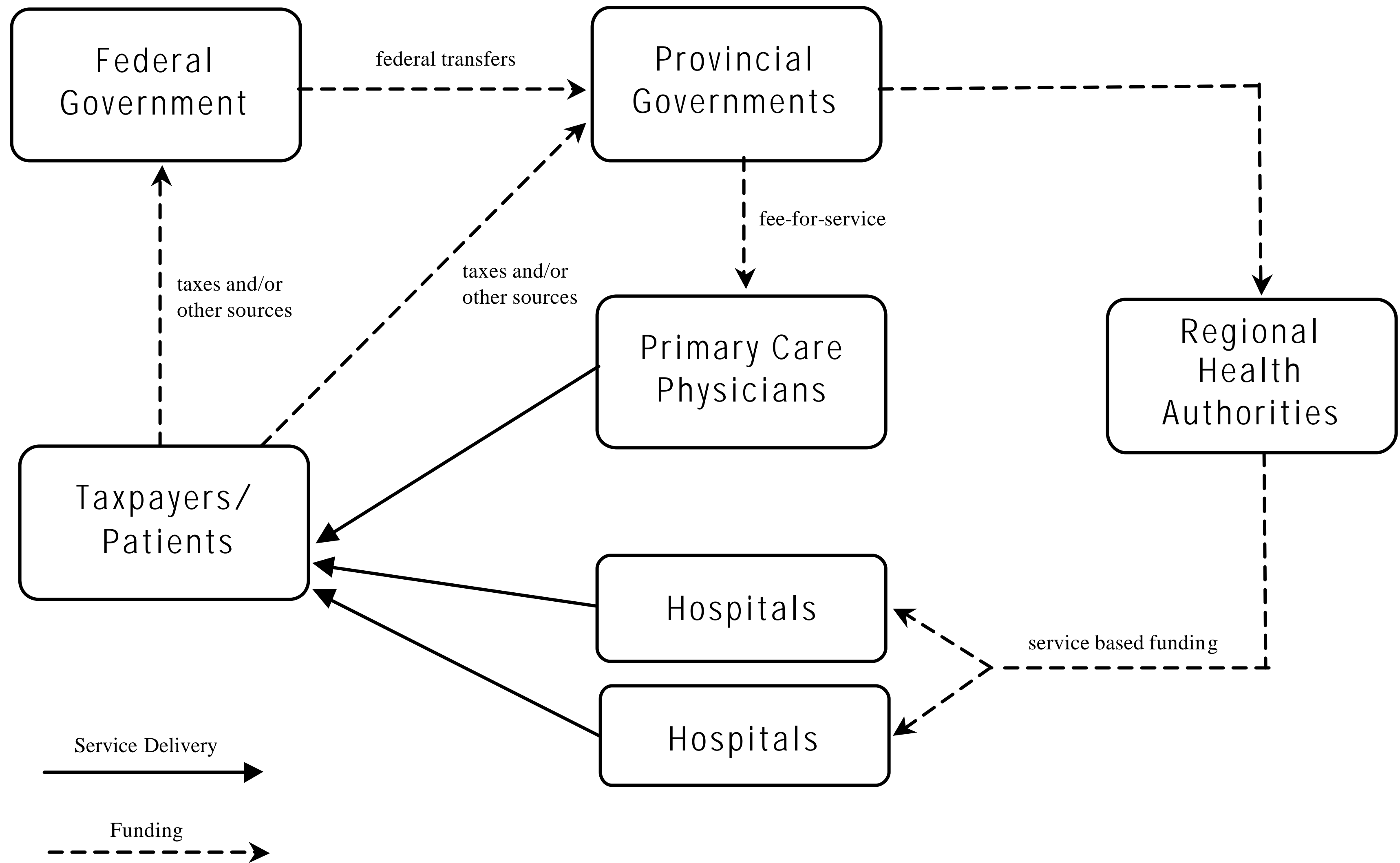
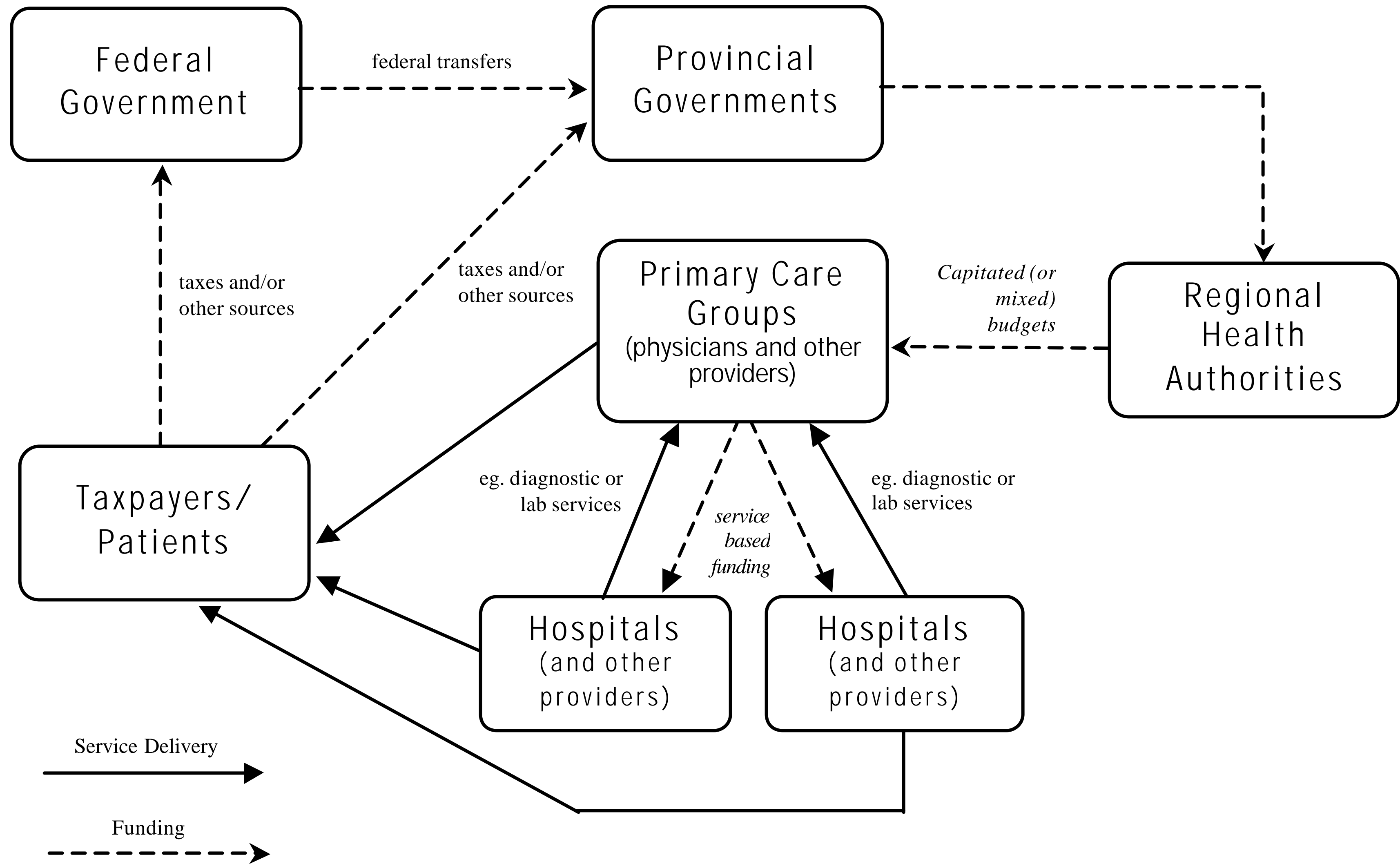


Figure 3
Phase Two Reform – Primary Care Groups Purchase Services on Behalf of their Patients



CHAPTER THREE

FINANCING AND ASSESSING HEALTH CARE TECHNOLOGY

Health care technology is a very broad concept that can be defined as "the set of techniques, drugs, equipment, and procedures used by health care professionals in delivering medical care to individuals and the systems within which such care is delivered."[87] Although this definition encompasses drugs, this chapter will discuss issues related to "hard" technologies only. Issues related to drugs will be addressed in the Committee's Volume Six (October 2002).

Everybody agrees that health care technology constitutes an important component of health care delivery in advanced countries. Health care technology can improve the speed and accuracy of diagnosis, cure disease, lengthen survival, alleviate pain, facilitate rehabilitation, and maintain independence. For example, a brief tabled with the Committee by Medical Devices Canada (MEDEC) stated:

> *Modern medical devices and technologies have not only improved the health outcomes for Canadian patients, but by enabling less invasive procedures and shorter hospital stays, have also supported cost-effectiveness in the health care system.*[88]

However, many concerns were raised during Committee hearings about the availability, financing and assessment of both new and existing health care technologies. The Committee believes that these issues need to be addressed if Canadians are to derive the maximum benefits health care technology can provide, while sustaining an affordable health care system.

The Committee believes that the issues over the availability, financing and assessment of health care technology need to be addressed if Canadians are to derive the maximum benefits health care technology can provide, while sustaining an affordable health care system.

3.1 Availability of Health Care Technology

Despite the importance of health care technology in delivering quality health services, the availability of many new technologies is disproportionately low in Canada given its level of health care spending. In its Phase Two report, the Committee provided data that showed that, although Canada is the 5th highest among OECD countries in terms of total spending on health care (as a percentage of GDP), it is generally among the bottom third of OECD countries in the availability of health care technology. For example, Canada ranks 21st of 28 OECD countries in the availability of CT scanners, 19th of 22 in availability of lithotriptors,

[87] David Feeny, *The Generation, Evaluation and Application of Health Care Technologies in Canada*, Brief to the Committee, 29 March 2001, p. 5.
[88] Medical Devices Canada, *The Role of Medical Devices and Technologies in the Canadian Health Care System*, Brief to the Committee, 29 October 2001, p. 4.

and 19th of 27 in availability of MRIs. Its only favourable ranking is in the availability of radiation equipment, where it ranks 6th out of 17.[89]

The availability of many of new technologies is disproportionately low in Canada given its level of health care spending. Data also showed that this technology gap is widening.

Data also showed that this technology gap is widening. For example, Canada's deficit in the availability of MRIs worsened between 1986 and 1995 relative to other leading OECD countries including Australia, France, the Netherlands and the United States.[90]

The Phase Two report also stressed that availability is not the only issue with respect to health care technology. The "aging" of that technology is also of concern. For example, information provided to the Committee indicates that between 30% and 63% of imaging technology currently used in Canada is outdated. The outdated nature of health care technology depends on both the number of years of usage and the relative effectiveness of the equipment in terms, for example, of the quality of the image or the dose of radiation.[91]

It is not clear why Canada is not introducing and making use of health care technology at the same pace as other OECD countries and why it does not routinely replace aging equipment. Indeed, two factors seem to contribute to this situation. First, Canada imports most of its health care technology. This contrasts sharply with countries such as Germany, France and the United States which have a strong health care technology industry. This "trade deficit" in health care technology might be explained in part by low levels of government incentives towards the development of this industry in Canada. Second, fiscal pressures faced by all levels of government throughout the 1990s have resulted in low levels of capital investment in Canada's health care system.

The Committee is concerned that the shortage of health care technology and the use of outdated equipment impedes exact diagnosis, inhibits high quality treatment and limits access to needed health care. Enhancing the availability of new health care technologies and the appropriate replacement of outdated equipment can serve to reduce waiting times and ensure timely access to the best available diagnoses and treatments.

Along with numerous witnesses, the Committee is concerned that the shortage of health care technology and the use of outdated equipment impede exact diagnosis and inhibit high-quality treatment. As stated in our Phase Two report, not only can this situation negatively impact on the health of a patient, but it also raises concerns about the liability of health care providers.[92]

Moreover, the Committee is concerned that the deficit in health care technology has translated into limited access to needed care and lengthened waiting times. In our view, and in accordance with Principle Twenty enunciated in Chapter 2, timely access to

[89] Data are for 1997. See Volume Two, p. 38.
[90] Volume Two, p. 38.
[91] Volume Two, p. 39.
[92] Volume Two, p. 39-40.

diagnosis and treatment is a crucial objective that must be ensured in Canada' publicly funded health care system.

Overall, the Committee believes that health care technologies are key to providing Canadians with an optimal level of quality health care. Enhancing the availability of new health care technologies and the appropriate replacement of outdated equipment can serve to reduce waiting times and ensure timely access to the best available diagnoses and treatments. Faster and more effective services in turn have the potential to alleviate some of the cost pressures on the health care system in general.

3.2 Financing the Acquisition and Upgrading of Health Care Technology

Health care policy-makers should forecast future technology needs and develop an appropriate investment plan for action.

As mentioned above, many witnesses stressed that fiscal pressures faced by all levels of government throughout the 1990s have resulted in low levels of capital investment in Canada's health care system. They suggested that the current deficit in health care technology requires a serious re-evaluation of the way in which equipment is acquired and funded in Canada. Moreover, witnesses contended that the aging of the Canadian population as well as increased public expectations will greatly influence future needs for health care technology. Accordingly, in addition to increased investment by governments, witnesses recommended that health care policy-makers should forecast future technology needs and develop an appropriate investment plan for action.

The federal government has recently responded to the deficit in health care technology. In September 2000, it announced that it would invest a total of $1 billion in 2002-01 and 2001-02, to assist provinces and territories in the purchasing of new medical equipment. This funding was made available upon passage of the legislation in October 2000, allowing provincial and territorial governments to start making immediate acquisitions of necessary diagnostic and clinical equipment.

Although witnesses have welcomed this injection of new federal funds, a number of concerns remain. First, witnesses indicated that some provinces have not applied for their share of this fund, possibly because the federal government requires matching grants and some of the smaller provinces have difficulty financing the provincial share of the matching funds. Second, additional resources are required to operate the equipment. Even if provinces can afford their share of the capital investment, they may have difficulty funding the ongoing operating costs.[93] Estimates provided to the Committee suggest that a $1 billion investment in new equipment necessitates an additional $700 million to cover operational costs.[94] Third, the investment does not address the problem of the old equipment that needs to be upgraded. It was estimated that a further $1 billion investment would be required for the upgrading of

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[93] Moreover, even if provinces can purchase health care technology, a shortage of technologists may hamper the full utilization of the new equipment. Similarly, once new technology is acquired, there is a need for training to enable technologists to operate new high-tech equipment. These issues are examined in more detail in Chapter Six.

[94] Canadian Association of Radiologists, *Timely Access to Quality Care – The Obligation of Government, the Right of Canadians*, Brief to the Committee, March 2001, p. 2.

existing equipment.[95] Fourth, even with this new funding, Canada would still not rank at a level comparable to that of other OECD countries. Lastly, the Committee heard that there are apparently no mechanisms for ensuring accountability on the part of the provinces and territories as to exactly where money targeted towards purchasing new equipment is actually spent.

The Committee welcomes the injection of new federal funds as an important step towards the acquisition of needed health care technology. We do, however, believe that additional funding is required.
(…)
Furthermore, we are concerned about the lack of accountability mechanism for ensuring that provinces and territories use federal funds in accordance with the intended purpose.

Along with witnesses, the Committee welcomes the injection of new federal funds as an important step towards the acquisition of needed health care technology. We do, however, believe that additional funding is required. Such additional federal investment should be structured in such a way as to make the grant more attractive to the provinces and territories. We believe that, at the same time, the federal government should ensure that any new funding for health care technology be spent on incremental purchases of medical equipment and not be used to subsidize already planned expenditures.

Furthermore, the Committee is concerned about the lack of accountability mechanisms for ensuring that provinces and territories use federal funds in accordance with the intended purpose. This is why we feel, as stated under Principle Three (Chapter 2), that a better accountability mechanism is needed for targeted federal funds. Therefore, the Committee recommends:

That the federal government initiate a long-term program to assist provinces and territories in financing both the acquisition and ongoing operation of health care technology. Such a program should incorporate clear accountability mechanisms on the part of the provinces and territories on their use of these targeted federal funds.

Finally, it is the view of the Committee that the decision to acquire new health care technology should also be based on the appropriate assessment of its efficacy and cost-effectiveness. This issue is discussed in more detail below.

3.3 Investing More in Health Care Technology Assessment

During Phase Two of its study, the Committee learned that health care technology assessment (HTA) provides information on safety, clinical effectiveness and economic efficiency. HTA often also considers the social, legal and ethical implications of the use of existing or new health care technologies. A brief tabled with the Committee explained:

95 *Ibid.*

Health Technology Assessment (HTA) is the process of evaluating medical technologies (devices, equipment, procedures and drugs) and their use. HTA researchers collect, synthesize and critically evaluate the available research on medical technologies. Based on an interdisciplinary approach, an assessment can encompass analyses of safety, efficacy, effectiveness, quality of life and patient use. Other important factors such as economic, ethical, and social implications and other effects which may be unintended, indirect or delayed, may also be considered.[96]

HTA can assist in deciding whether a new technology should be introduced and when an existing technology should be replaced. More importantly, HTA contributes in many ways to improving the quality of health care: it ensures that health care technologies are effective, that they are applied in the appropriate cases and conditions, and that the least costly technology is used to achieve the desire outcome.

In recent years, the federal and provincial governments have supported the creation of various health care technology assessment agencies. The first provincial HTA agency in Canada was established in 1988 in Quebec – the *Conseil d'évaluation des technologies de la santé du Québec*. A national agency, the Canadian Coordinating Office for Health Technology Assessment (CCOHTA) was established in 1989. The British Columbia Office of Health Technology Assessment was established in 1990. The Health Technology Assessment unit of the Alberta Heritage Foundation for Medical Research was established in 1996. Health services utilization agencies, with close links to their respective provincial governments, which undertake some HTA activities, have been formed in Manitoba, Ontario and Saskatchewan. At the national level, CCOHTA plays three major roles: it co-ordinates all HTA activities across the different jurisdictions; it attempts to minimize duplication by other national or provincial/territorial organizations; and it performs HTA activities on its own.

The Committee was told that, despite the work performed by these agencies, not enough attention is devoted to HTA in Canada. On a worldwide basis, Canada spends less in HTA activities than other countries with which Canada ought to at least be on a par. For example, all levels of government invest less than $8 million in Canada (some $4.3 million by CCOHTA and about another $3 million by provincial agencies), whereas the United Kingdom provides some $100 million to its national HTA body – the National Institute for Clinical Evidence (NICE). As a result, health care technologies are often introduced into Canada's health care system with only superficial knowledge of their safety, effectiveness and cost.

Martin Zelder, Director of Health Policy Research at the Fraser Institute, suggested that Canada should use the results of HTA undertaken offshore.[97] Other witnesses cautioned, however, that we cannot simply translate the results of HTA studies realized elsewhere. The application of foreign research is complicated by certain factors such as differences in demography and patterns of disease, differences in the costs of various health care resources, and differences in patterns of practice. Although CCOHTA shares information on health care technology with similar organizations in other countries, there are limits to the overlap in international technology assessments:

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[96] Canadian Coordinating Office For Health Technology Assessment, Brief to the Committee, 29 March 2001, p. 2.
[97] Martin Zelder, *Evidence on Canada's Medical Technology Gap*, Brief to the Committee, 29 March 2001.

The efficacy of the technology may generalize, the effectiveness may not, and definitely cost will not. A US cost effectiveness analysis is not a Canadian one. There are different relative prices embodied in those cost figures than exist in Canada.[98]

Another important issue raised before the Committee relates to the poor dissemination of the evidence generated by HTA activities to health care providers and managers. An improvement in this regard would certainly raise the quality of health care delivery and strengthen the formulation of public health care policy.

The Committee agrees with witnesses that health care technology assessment is a critical activity and that more HTA needs to be undertaken when considering the introduction of a new technology or the replacement of existing medical equipment. We also agree that, given the rapid advancement in health care technology, the capacity to disseminate the outcomes of HTA activities should be enhanced.

Overall, the Committee agrees with witnesses that health care technology assessment is a critical activity and that more HTA needs to be undertaken when considering the introduction of a new technology or the replacement of existing medical equipment. We also agree that, given the rapid advancement in health care technology, the capacity to disseminate the outcomes of HTA activities should be enhanced. It is the view of the Committee that the federal government, through its role in financing innovative health research, should devote more funding to the assessment of new and existing health care technologies. Therefore, the Committee recommends:

That the federal government increase the funding it provides to CCOHTA and other HTA agencies.

That this additional funding be used to strengthen HTA capacity in Canada as well as to improve the dissemination and promotion of HTA findings to health care providers and managers.

Finally, the Committee was told that little information exists in Canada about the precise contribution of technology to the costs of health care. Attempts to quantify the connection between technology and rising health care expenditures have suffered from a lack of reliable data. The majority of studies to date have treated technology as a "residual", attributing to technology that portion of the increase in health care spending not accounted for by more easily identifiable factors.

Therefore, we do not know how much Canada spends on health care technology nor do we know the extent to which health care technology has an impact on the health and quality of life of Canadians. It is not possible to know whether the cost of health care technology represents an "add-on" or whether it is offset by reductions in the actual costs of the

[98] Committee Proceedings, 2nd Session, 37th Parliament, 29 March 2001 (5:20).

treatments they permit. Witnesses unanimously pointed to the need to undertake research in this area.

The Committee concurs with witnesses that there is currently an under-production of relevant and timely information on the costs and consequences of the use of health care technologies and that more research in this area would greatly benefit the whole health care system. Therefore, the Committee recommends:

> **That the federal government provide additional funding to the Canadian Institutes for Health Research and the Canadian Health Services Research Foundation to support research into the potential impact of health care technology on health care costs.**

CHAPTER FOUR

DEPLOYING A NATIONAL HEALTH INFOSTRUCTURE

Health care is a sector that relies intensively on information. With the "right information", a health care provider can order the right treatment, prescribe the most appropriate medication or recommend the best preventive approach. With the right information, an individual is better able to make good decisions with respect to his/her health and lifestyle. With the right information, health care policy makers and managers can decide on how to allocate financial, physical and human resources in the most cost-effective and efficient way.

Currently, in Canada, it is often not possible to access the right information in order to deliver, manage and use health care. During the Phase Two hearings, the Committee was told that Canada's health care system is not making use of modern information and communications technology to the same extent as do other information intensive industries. Witnesses suggested that greater use of information and communications technology would enhance the availability of, the accessibility to, and the sharing of the "right information". This would significantly improve evidence-based decision making by health care providers, health care managers and health care policy makers, as well as by patients.

The use of information and communications technology in the field of health care is often referred to as "telehealth". As explained in Volume Two of the Committee's study, the telehealth applications that are envisioned in Canada for improving the sharing of the "right information" and enhancing health care quality include the following:

- a system of electronic health records (EHR). The EHR is an automated provider-based system within an electronic network that provides complete patients' health records in terms of visits to physicians, hospital stays, prescribed drugs, lab tests, and so on.
- Tele-medicine and tele-homecare. These telehealth applications offer the possibility of delivering care over large and small distances.
- An internet-based health information network. The purpose of this network is to empower individuals to make informed choices about their own health and well-being, their health care system and health care policy.[99]

Telehealth is the foundation of what many Canadians call the "health infostructure". Various components of a health infostructure are currently being implemented at all levels of government. However, these initiatives are all at different stages of development. In addition, they are isolated within organizations, institutions and provinces and currently constitute "a patchwork of unconnected projects, whose value would increase immensely if part of a coherent whole."[100] The key challenge is to bring all these diverse infostructures together into a uniform and comprehensive information system. This challenge clearly requires federal

[99] Volume Two, pp. 106-108.
[100] Report of the National Conference on Health Info-Structure, February 1998, p. 19.

and provincial/territorial collaboration. As a first step, Canada needs to move towards the development of electronic health records.

4.1 Establishing a System of Electronic Health Records

A system of electronic health records (EHR) is certainly the first step in gathering health-related information that will allow for evidence-based decision making throughout the whole health care system:

> *With sound and timely information on health determinants and outcomes of previous decisions, health care providers will be able to make informed decisions in their patients' interests. With better understanding of health impacts and costs of previous actions, policy makers and managers will be able to make the evidence-based decisions needed to carry forward reform and sustain the health care system. Better health information will allow the general public to engage more fully in the health care policy debate and hold the health care system to account. As consumers, they will be able to shop around knowledgeably for the health care providers and services that meet their needs.*[101]

The Committee believes that a system of EHR offers tremendous opportunities to integrate the various components of Canada's health care system which currently work in silos. We believe that, at the present time, the lack of integration impedes the establishment of a direct relationship between the inputs used in the health care system and the resulting outputs or outcomes.

An important characteristic of an EHR system is that it can make patient data available to health care providers anywhere on a need-to-know basis by connecting interoperable databases that have adopted the required data and technical standards. The Committee believes that a system of EHR offers tremendous opportunities to integrate the various components of Canada's health care system which currently work in silos. We believe that, at the present time, the lack of integration impedes the establishment of a direct relationship between the inputs used in the health care system and the resulting outputs or outcomes. This creates a significant barrier in evidence-based decision-making with respect to health and health care.

During the Committee's hearings, many witnesses described the EHR system as the cornerstone of an efficient and responsive health care delivery system that is able to improve both quality and accountability. Such a system, they stated, is a necessary prerequisite to a truly patient-oriented health care system. The Fyke report in Saskatchewan expressed similar views:

> *The electronic health record (EHR) is the cornerstone of an efficient and responsive health care delivery system, quality improvement and accountability. Without it, the*

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[101] Advisory Council on Health Info-structure, *Connecting for Better Health: Strategic Issues*, Interim Report, September 1998, p. 2.

prospects for a patient-friendly health care system, optimal teamwork, and efficiency are dim.[102]

In addition to the Fyke Commission, the full deployment of a system of EHR was also endorsed by other provincial commissions on health care, including the Health Services Restructuring Commission in Ontario, the Clair Commission in Quebec, and the Mazankowski report in Alberta.[103]

All levels of government in Canada have recognized the importance of deploying a system of EHR. In fact, on September 11, 2000, the First Ministers agreed to work together to develop an EHR system over the next three years and to work collaboratively to develop common data standards to ensure compatibility and interoperability of provincial health information networks and to ensure stringent protection of personal health information.

In support of the agreement reached by First Ministers, the federal government committed $500 million in 2000-01 to accelerate the adoption of modern information technologies in the health care system. The Committee was informed that this money has been invested in a not-for-profit corporation, known as Canada Health Infoway Inc. (or *Infoway*), that will work with provinces and territories to create the necessary common components of an EHR over the next three to five years. Currently, *Infoway* is working on two different initiatives:

- First, it has created a National Registry of EHR that will document – organizationally, regionally, provincially and nationally – the state of developments in building EHR.
- Second, and jointly with CIHI and other stakeholders, it is developing coordinated and consistent standards for collecting, exchanging and sharing information in the pharmacy arena.[104]

The Committee believes that the work undertaken by *Infoway* represents a major step towards the full integration of the various health infostructures. We welcome this collaboration between the federal government and the provinces and territories. In our view, such collaboration should foster the development of a unique model of EHR. We believe that both Canadians and their publicly funded health care system will benefit most greatly if the system of electronic health records is national in scope. To achieve this, the federal government must provide leadership and the necessary resources. Therefore, the Committee recommends:

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[102] Saskatchewan Commission on Medicare (Kenneth Fyke, commissioner), *Caring for Medicare – Sustaining a Quality System*, April 2001, p. 68.

[103] Health Services Restructuring Commission (Duncan Sinclair, Commissioner), *Primary Health Care Strategy – Advice and Recommendations to the Honourable Elizabeth Witmer, Minister of Health*, Government of Ontario, December 1999; Commission d'étude sur les services de santé et les services sociaux (Michel Clair, Commissioner), *Les Solutions Émergentes – Rapport et recommandations*, January 2001; Premier's Advisory Council on Health (Right Hon. Don Mazankowski, Chair), *A Framework for Reform*, report to the Premier of Alberta, December 2001.

[104] According to information provided on Infoway's Website at http://www.canadahealthinfoway.ca/.

That, once the three- to five-year period is over, the federal government provide additional financial support to Canada Infoway Inc. so that *Infoway* develop, in collaboration with the provinces and territories, a national system of electronic health records.

The Committee is aware that the public has certain misgivings about the computerization and networking of personal health records, and more particularly in regard to the nature of the information gathered and how it is collected, stored and used. We concur with the Advisory Committee on Health Infostructure that guidelines for the collection, storage and use of information must be developed to ensure a harmonious integration. Therefore, the Committee recommends:

That the federal government, in collaboration with all stakeholders involved in the computerization of health records, define standards and rules for the collection, storage and use of such information.

Perhaps the most important benefit to be gained from the deployment of EHR across the country is access to evidence-based information that will be used to assess quality of care, system performance and patient satisfaction. The EHR will also enable the evaluation of outcomes of various procedures. This will foster accountability and transparency in decision-making regarding health care delivery and policy and promote improvement in the quality of care.

4.2 Evaluating Quality, Performance and Outcomes: the Need for Independent Assessment

The Committee is convinced that long-term investment in information and communications technology, including an EHR, will allow the collection of better and more timely information on access to care, quality delivery, system performance and patients' outcomes. We also agree with witnesses that governments should finance the deployment of a EHR system and the development of a broader, health infostructure that is national in scope.

Moreover, we acknowledge the concern raised by many witnesses that, while governments must finance the EHR, they should not be responsible for assessing health data and evaluating quality and outcomes. These witnesses explained that, currently, collection and evaluation of health-related information is done by the same people who are responsible for paying for, and for providing, health services – that is governments. There is no independent assessment of outcomes and no external audit of the impact of various procedures on patients.

This concern was also raised in recent reports by provincial commissions on health care. For example, the Premier's Advisory Council on Health (Alberta) stated:

Tracking and monitoring outcomes and providing regular reports to the public is an essential way of improving quality in health care. However, when government and health authorities measure and assess their own outcomes and results, it can put them in a conflict of interest.[105]

This Advisory Council recommended the establishment of a permanent, independent "Outcomes Commission" to track results, assess outcomes and report regularly to the population.

Similarly, in Saskatchewan, the Fyke Commission recommended the establishment of a "Quality Council", an evidence-based organization, working at arm's length from government. The mandate of this Quality Council would involve reporting regularly to the provincial legislature, as well as to the public on a variety of issues, including: trends in health status, costs/benefits of health care interventions, clinical practices and clinical errors, evaluation of technology, equipment and drugs, etc. The Fyke report stressed that:

(…) the Quality Council has the potential to depoliticize decisions, find creative solutions to long-standing problems, free the public from the tyranny of anecdote and ill-informed opinion about the state of care, and reveal where the system provides value for money and where it does not.[106]

In other words, these provincial reports recommended that the role of the evaluator of the health care system be separated from that of the insurer and provider. This was also suggested in a recent report, which stated:

(…) unbundling the functions – insurer, service provider, and evaluator of health care quality – that governments now play in the health care system (…) will improve incentives to collect information and make it widely available, allow consumers to hold providers accountable by abandoning those with unacceptable waiting times or treatment outcomes, and allow governments to exercise a more vigorous and demanding standard or regulatory oversight.[107]

The Committee believes that the evaluation of our health care delivery system is essential in order to provide care that is evidence-based and corresponds to the needs of patients. We strongly support the view of witnesses and provincial reports that the roles of the funder and provider should be separated from that of the evaluator in order to obtain independent assessment of health care system performance and outcomes.

The Committee believes that the evaluation of our health care delivery system is essential in order to provide care that is evidence-based and corresponds to the needs of patients. We strongly support the view of witnesses

[105] Premier's Advisory Council on Health (Alberta), p. 68.
[106] Saskatchewan Commission on Medicare, p. 81.
[107] Dr. David Zitner and Brian Lee Crowley, *Public Health, Private Secret*, Research Report, the Atlantic Institute for Market Studies, January 2002, p. ix.

and provincial reports that the roles of the funder and provider should be separated from that of the evaluator in order to obtain independent assessment of health care system performance and outcomes. While such evaluation should be performed at arm's length from the insurer and the provider, it should be financed by public funds.

Moreover, and as stated under Principle 16 (Chapter Two), it is the view of the Committee that such independent evaluation should be performed at the national (not federal) level. This would allow for the pooling of the expertise, thereby making the most effective use of the limited human resources that are currently available in Canada, and result in major economies of scale. In addition, the smaller provinces, which would not otherwise be able to sustain a truly effective monitoring and evaluation system, would clearly benefit from the results of a national evaluation process.

The Committee believes that such a national process for evaluating health care system performance and outcomes should be built on those national organizations that are currently devoted to the task of performing independent health care system evaluation. More precisely, evaluation of this type should be carried out at three levels:

The Committee believes that such a national process for evaluating health care system performance and outcomes should be built on those national organizations that are currently devoted to the task of performing independent health care system evaluation.

- First, the role of the Canadian Institute for Health Information (CIHI) should be strengthened. In addition to its responsibilities in the public health field, it should take the task of reporting – publicly or confidentially – on the performance of all regions and all institutional providers.
- Second, the Canadian Council on Health Services Accreditation should on a regular basis recommend how to correct deficiencies that it has identified in institutions delivering health services. At present, this review is voluntary; it should be made mandatory.
- Finally, the Citizens' Council on Health Care Quality should be responsible for advising on the development of standards and policy with respect to health care system performance and outcome evaluation.[108]

The extent of the authority devolved to each organization would have to be specified. Do they rely exclusively on public pressure and moral suasion, or would they be able to compel providers who do not meet agreed quality standards to implement changes? There are clearly many jurisdictional issues to be resolved, regardless of the exact mandate of such national evaluative bodies. But as a first step, the Committee recommends:

[108] The creation of a Citizens' Council on Health Care Quality was announced in the January 2001 Speech of the Throne. More precisely, the federal government stated that it will work with the provinces and territories to create this council whose objective will be to ensure that the public's perspective is considered in developing meaningful indicators of health system performance.

That the federal government, in collaboration with the provinces and territories, undertake the establishment of a national system of evaluation on health care system performance and outcomes. Such a national system of evaluation should: 1) be built on existing expertise and institutions; 2) remain independent from governments; and 3) receive appropriate funding from the public purse. The federal government should devote substantial funding to this very important undertaking.

4.3 Fostering Accountability

Numerous witnesses acknowledged that the deployment of a system of EHR, that will capture and translate information on system performance and treatment outcomes, will enhance transparency in health care financing and delivery. Moving towards a uniform EHR system will also facilitate the monitoring and tracking of the use of public health care funds. This, overall, will foster accountability throughout the health care system.

But what does "accountability" mean exactly? In the view of the Committee, accountability refers to the obligation to demonstrate and take responsibility for system performance when measured against a set of agreed targets or goals. As mentioned in our Volume Four, there are two directions to government accountability. The first involves governments reporting to Canadians on their policies and programs with respect to health and health care (public accountability). The second involves provincial/territorial reporting to the federal government on the use of federal funding (government to government accountability).[109]

A major step towards greater public accountability was accomplished in February 1999 with the signing of the Social Union Framework Agreement (SUFA) by federal and provincial/territorial governments (excluding Quebec).[110] Under SUFA, federal and provincial/territorial governments are committed to increasing transparency and accountability to the Canadian public on social policy outcomes – including health care policy – so that Canadians can assess the performance of social programs. More specifically, SUFA states that each level of government agrees to:

- Monitor and measure outcomes of its social programs and report regularly to its constituents on the performance of these programs;
- Share information and best practices to support the development of outcome measures, and work with other governments to develop, over time, comparable indicators to measure progress on agreed objectives;
- Publicly recognize and explain the respective roles and contributions of governments.[111]

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109 Volume Four, p. 104.

110 *A Framework to Improve the Social Union for Canadians*, An Agreement between the Government of Canada and the Governments of the Provinces and Territories, 4 February 1999.

111 *Ibid.*

In addition to recognizing the need to strengthen public accountability, governments signatory to SUFA agreed to "use funds transferred from another order of government for the purposes agreed and pass on increases to its residents".[112] In the view of the Committee, developing such information on the use of public funds would significantly contribute to government-to-government accountability.

In the view of the Committee, developing information on the use of federal funds would significantly contribute to government to government accountability.

Currently, provinces and territories are not required to report explicitly on their utilization of federal transfer payments provided under the Canada Health and Social Transfer (CHST). The government-to-government accountability mechanism rests, at this moment, on compliance with the five principles of the *Canada Health Act*. This legislation also requires provincial and territorial governments to voluntarily provide an annual statement describing the operation of their health care insurance plans as they relate to the principles of the Act. The information provided by the provinces/territories serves as a basis for the *Canada Health Act* annual report.

SUFA also provides for greater transparency and public accountability with respect to disputes related to the *Canada Health Act*. With respect to transparency, SUFA establishes a process for dispute avoidance and resolution that will apply to the interpretation of the principles of the Act and that "should be simple, timely, efficient, effective and transparent".[113] With respect to public accountability, the Agreement states that "governments will report publicly on an annual basis on the nature of intergovernmental disputes and their resolution."[114]

Such a dispute resolution mechanism for the interpretation of the *Canada Health Act* has not been developed yet. When they met in January 2002, provincial Premiers and territorial Leaders asked Premier Klein to take the lead in working with the federal government to finalize, by April 30, 2002, the process for resolution of disputes under the *Canada Health Act*. It is the hope of the Committee that such a dispute resolution mechanism will be available soon and that, as a result, progress will be made to enhance transparency and accountability in the interpretation and enforcement of the *Canada Health Act*. We believe that such progress would significantly contribute to the renewal and restructuring of health care in Canada.

4.4 Ensuring Confidentiality and Protection of Personal Health Information

The issue of privacy, confidentiality and security related to personal health information in the context of an EHR system, as well as in the broader context of a national health infostructure, was perhaps the most sensitive one raised during the Committee's hearings on this question. While these three terms are sometimes used interchangeably, they are, in fact, entirely separate issues:

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[112] *Ibid.*
[113] *Ibid.*
[114] *Ibid.*

- *Privacy* refers to the right of individuals to control their personal health information – including the collection, use and disclosure of that information.
- *Confidentiality* deals with the obligation of health care providers to protect the personal health information of their patients, to maintain secrecy and not misuse or wrongfully disclose it.
- *Security* refers to the set of standards in and around information systems that protect access to the system and the information it contains.

In other words, privacy drives the duty of confidentiality and the responsibility for security. Protection of privacy in Canada is a shared responsibility between the federal and provincial/territorial governments. Currently, the legal framework for protecting individual privacy is composed of a patchwork of various laws, policies, regulations and voluntary codes of practice. The Committee was told that the first step that needs to be made is to gain support for the harmonization of legislation and regulation across Canada so that the privacy of Canadians will be protected in a reasonably uniform way in matters of health across the country.

The Committee was pleased to learn that a resolution for the harmonization of legislation is being examined by all jurisdictions and that an agreement is expected soon. We also fully support *Infoway* in promoting a common position on information privacy, confidentiality and security relating to the deployment of EHR systems across the country.

Moreover, the Committee acknowledges that the *Personal Information Protection and Electronic Documents Act* or PIPEDA, promulgated in June 2000, has stimulated intensive debate and study of this question in the past two years. We are pleased that several groups in the health sector have seriously addressed many of the concerns raised by PIPEDA, and in particular, the need to protect personal health information, while at the same time allowing restricted use of such information for essential purposes such as health care management – which includes the provision, management, evaluation and quality assurance of health services – and health research.

Like other Canadians, the members of the Committee place a very high priority on the protection of personal health information. Though protection of personal health information is understandably of very high importance, we must recognize what else is at risk if access is summarily rejected because of perceived threats to privacy and confidentiality. This being said, the Committee believes that if Canadians are to allow restricted access to personal health information for essential functions, such as health research and health care management, it is imperative that their personal health information be adequately protected. Our main observations and recommendations with respect to privacy of personal health information are detailed in Chapter Five, under Section 5.7.4.

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4.5 Investing in Telehealth in Rural and Remote Communities

Not only can telehealth applications enhance the sharing of the right information among various health care providers and health care settings, but they also offer the possibility of delivering care over large distances. Telemedicine is a form of telehealth application that can greatly improve quality and timely access to care, particularly in rural and remote Canada.

As indicated in the Committee's Phase Two report, up to 30% of Canada's population lives in rural, remote and northern areas of the country.[115] Accessibility to health care is one of the four patient-oriented principles of the *Canada Health Act*. However, rural Canadians are increasingly voicing concern regarding disparities between services available in rural and remote areas and those in urban areas.

The federal government has responded to the concerns of rural Canadians in a number of ways. For example, the Office of Rural Health was established in September 1998 to ensure that the views and concerns of rural Canadians are better reflected in national health policy and health care system renewal strategies. In February 1999, the federal government announced funding of $50 million over three years (from 1999-00 to 2001-02) to support pilot projects under the "Innovations in Rural and Community Health Initiative".

In June 2000, the federal government announced a National Strategy on Rural Health that it sees as an important milestone on the road to ensuring that all Canadians have reliable access to quality health care. Then, in July 2001, the federal government announced the establishment of a Ministerial Advisory Committee on Rural Health to provide advice to the federal Minister of Health on how the federal government can improve the health of rural communities and individuals.

The Committee believes that telemedicine is a critical component of the overall rural health policy of the federal government.

The Committee believes that telemedicine is a critical component of the overall rural health policy of the federal government. In the context of rural health, telemedicine offers the following advantages: it addresses the shortage of rural health care providers and medical training; it improves rural health infrastructure; it allows for conformity with the accessibility principle of the *Canada Health Act*; and it ensures a more equitable development of health information systems across the country. Therefore, the Committee recommends:

That the federal government maintain its support to rural health and invest in telehealth applications that will enhance access to care and improve the quality of health services in rural and remote communities.

Given the unique health and health care needs of rural and remote communities, the Committee has decided to devote specific hearings on this subject and to release a thematic report with detailed recommendations in the coming year.

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115 Volume Two, p. 137.

4.6 Investing in Tele-Homecare

Technology in various telehealth applications is seen as vital to the timely delivery of quality home care services. Tele-homecare offers numerous benefits by:

- Reducing unnecessary visits to emergency rooms;
- Reducing unscheduled visits to primary care physicians;
- Providing early intervention or prevention of repeat hospitalizations;
- Teaching the patient how to manage early symptoms, thus avoiding the development of an acute pathological condition, and
- Gathering information on vital signs' data fluctuations within a 24-hour period, an important component of differential diagnosis and early prevention.[116]

Witnesses told the Committee that tele-homecare is not a substite for any of the already available health services. Rather, it complements and reinforces the health care infrastructure by providing a continuum of care with a particular focus on patient's needs.

As indicated in the Committee's Phase Two report, the ability to connect a patient's in-home monitoring equipment to local health care facilities over telephone lines is already a reality.[117] Other possibilities are close to realization. In fact, tele-homecare applications are numerous and include for example: telemedicine involving medical consultations, diagnosis, rehabilitation for the home care patient from a distance; tele-education for information exchange between health care providers and the home care patient; telemonitoring where patients undergoing hemodialysis, cardiac, oncological treatments can be monitored or elderly persons can be assisted at home.

According to the Office of Health and the Information Highway (Health Canada), Canadian tele-homecare is in its early stages of development. Several existing projects are utilizing a range of applications from a telephone information line equipped with high performance diagnostic software to a tele-monitoring device that can transmit vital signs data over the telephone line. Currently, tele-homecare projects in Canada are primarily directed at tele-monitoring and tele-consultation following a visit to the hospital or as a replacement for a visit. A number of large home care organizations are using information and communication technologies to transmit administrative and case management information by qualified personnel from the point-of-care to central databases and to community health information networks.[118]

Many witnesses pointed out the need to develop a national vision of home care in which tele-homecare plays a significant role. Once a national vision is clearly developed, specific tele-homecare activities, national in scope, should be developed. The success of such a national undertaking requires, according to witnesses, strong federal leadership along with

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116 Office of Health and the Information Highway, *Tele-homecare: An Overview*, Background Paper for Discussion, Health Canada, May 1998, p. 3.
117 Volume Two, p. 107.
118 See their website at http://www.hc-sc.gc.ca/ohih-bsi/tele/hmcare_e.html.

collective and immediate action on the part of all stakeholders. The Committee will detail its final recommendations on tele-homecare in its thematic report on home care.

4.7 Investing in Internet-Based Health Information

An Internet-based health information network is a system that empowers individuals to make informed choices about their own health and well-being, their health care and about health policy. Health information to the general public via the Internet could include for example: 1) general health information (health promotion and disease prevention); 2) information on treatment options and drugs, as well as on illness management (e.g. blood pressure, diabetes or obesity); information on public health issues (e.g. quality of air, water and food); 4) information on the effects of health determinants; 5) health and health care policies at the federal, provincial and territorial levels as well as the policies of other countries; 6) data on health outcomes of public policies; 7) accountability data (such as report cards on the performance of the health services and providers).

A recent report by the Federal/Provincial/Territorial Advisory Committee on Health Infostructure[119] stated that the public sector has a limited presence in providing health information to the public in an electronic form. According to the report, the most notable effort in Canada is the Canadian Health Network. The Canadian Health Network, which is a collaborative effort by the federal government and some health organizations across Canada, is considered by many as among the best in the world. The Network provides health promotion and disease prevention information to Canadians. The private sector, on the other hand, especially American firms, have entered this end of the market with highly specialized ventures providing dynamic, graphic information content. The criticism levelled at these private sector initiatives is whether their health-related information is objective and can be trusted, especially if the content is sponsored.

The report of the F/P/T Advisory Committee on Health Infostructure stressed that, despite public and private sector initiatives, there is still significant amounts of information missing that the public would like to access, for example for certain population groups.

The F/P/T Advisory Committee recommended the creation of a national portal for the Canadian public that would provide comprehensive and trusted health-related information to support self-care decision making. This portal should build on the success of the Canadian Health Network and be strategically linked to provincial and territorial website services to ensure consistency of health-related information across Canada.[120] The national portal should allow better access by specific populations, which currently have restricted access to quality health-related information (e.g. Aboriginal Canadians, rural and remote communities, etc.).

The Committee believes that providing access to objective, trusted, health-related information can significantly improve the ability of Canadians to make health and health care

[119] F/P/T Advisory Committee on Health Infostructure, *Tactical Plan for a Pan-Canadian Health Infostructure – 2001 Update*, Office of Health and the Information Highway, Health Canada, November 2001.
[120] Examples of provincial websites include BC's HealthGuide, Calgary Health Region's "Your Health", and CapitalHEALTHLink.

decisions. Consistent with Principle Nineteen (Chapter 2), it is our view that initiatives enabling people to be responsible for their own health and to stay healthy must be given the highest priority. Based on this principle and on the observations by the F/P/T Advisory Committee on Health Infostructure, the Committee recommends:

That the federal government, in collaboration with the provinces/territories and stakeholders, develop a national health information portal, building on the success of the Canadian Health Network and the integration of provincial/regional portals.

- **As a matter of priority, investments into this national portal should be made in locations where the basic systems infrastructure is inadequate, especially in rural, remote and Aboriginal communities. This would greatly enhance the capacity of all Canadians to access timely and objective electronic health information.**

CHAPTER FIVE

NURTURING EXCELLENCE IN CANADIAN HEALTH RESEARCH

Health research is about creating and applying new knowledge with respect to health and health care. Health research encompasses a full spectrum of activities that range from biomedical research, to clinical research, to health services research, and to population health research:

- **Biomedical research** pertains to biological organisms, organs, and organ systems. For example, this type of research would use animal or human tissues or cell culture to understand how the body controls the production of blood cells in the bone marrow, how those controls break down in leukemia, and how normal controls might be re-instated by treatment with drugs.
- **Clinical research** relates to studies involving human participants, healthy or ill. An example would include clinical trials on humans to test the toxicity and effectiveness of a possible new treatment for leukemia that has shown promising results in basic biomedical research, and then to compare the new drug with other drugs in terms of their net benefit to patients.
- **Health services research** embraces health care delivery, administration, organization and financing. An example might be research into the mechanisms for handling patients with leukemia, from the means for diagnosis, through their treatment in hospital, on an outpatient basis, or at home, to their long-term follow-up through hospital or community care.
- **Population health research** focuses on the broad factors that influence health status (socio-economic conditions, gender, culture, literacy, etc.). An example might be a study using large databases of personal health information gained from a number of sources to learn whether the incidence of leukemia is associated with environmental or other factors.

Health research is the source of new knowledge about human health, how to maintain optimal health, how to prevent, diagnose and treat disease, and how to manage our health care system. Health research leads to the development of new or improved drug therapy, treatment, medical equipment and devices and new ways of organizing and delivering health care. Health research also contributes to a better understanding of the complex interplay of the social, economic, environmental, biological and genetic determinants that affect our health and our susceptibility to disease.

The Committee was told that health research fosters the creation of knowledge-based employment, which in turn contributes to reversing the brain drain observed in the country. Overall, witnesses stressed that health research improves the personal and economic health of Canadians and enhances our international competitiveness:

Health research provides enormous economic, social and health care rewards to society. The jobs that are created by these investments are high-quality, well-paying, knowledge-based positions that generate worldwide recognition for Canadians. These investments also support the rejuvenation of academic institutions across the country. They help train new health professionals in the latest technologies and techniques and they provide important support for the health care delivery system in Canada. Most importantly, the results of these activities lead directly to better ways to treat patients, which ensures a healthier and more productive population. [121]

The Committee also heard that health research could serve as a catalyst to regional economic development and that the health services innovations generated through health research activities could greatly contribute to enhancing the quality and sustainability of Canada's health care system. As health research activity spreads out from the academic health science centres and government and into more community-based settings, we can anticipate that standards of care will improve, as health care providers engaged in health research will be better connected with the most recent information. Overall, health research provides tremendous opportunities for both economic and health care progress.

The Committee believes that Canada must actively engage in health research to capture its share of benefits. The Committee also strongly believes that the federal government has a critical role to play as a facilitator, catalyst, performer, consensus builder and co-ordinator in the overall effort to nurture excellence in health research. This chapter addresses a series of issues, including funding, partnerships and ethics, which we believe deserve close attention if Canada is to achieve the highest standard of excellence in health research.[122]

The Committee believes that Canada must actively engage in health research to capture its share of benefits.

5.1 Assuming Leadership in Canadian Health Research

As Table 1 shows, health research in Canada is characterized by a complex network that involves a wide range of disciplines and a multiplicity of performers carrying out their research activities in a variety of locations. In Canada, health research is performed by universities, teaching hospitals, business enterprises, government, and non-profit organizations. This research is financed from a variety of public, private, Canadian and foreign sources.

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[121] Dr. Barry D. McLennan, Chair of the Coalition for Biomedical and Health Research (CBHR), *The Improving Climate for Health Research in Canada,* Brief to the Committee, 9 May 2001, p. 2.

[122] The Committee wishes to say that sections 5.1 and 5.2 of this chapter were inspired by a speech given by Dr. Kevin Keough, Chief Scientist at Health Canada, at the third annual Amyot Lecture organized by Health Canada. We found his lecture very useful in highlighting some of the challenges and opportunities facing health research.

TABLE 1
THE CANADIAN HEALTH RESEARCH NETWORK

DISCIPLINES	LOCATIONS	SOURCES OF FUNDING
▪ Clinical Disciplines ▪ Social Sciences and Humanities ▪ Epidemiology ▪ Life Sciences ▪ Cellular and Molecular Biology ▪ Chemistry ▪ Engineering ▪ Computing and Mathematical Sciences ▪ Health Services	▪ Academe (Universities, Teaching Hospitals, Research Institutes) ▪ Industry ▪ Government ▪ Physicians' Practices ▪ Community Organizations ▪ Community Hospitals ▪ Others	▪ Governments (Federal, Provincial, Departments, Funding Agencies) ▪ Non-Government Organizations and National Voluntary Organizations ▪ International Sources ▪ Industry ▪ Universities ▪ Others

The different stakeholders in health research collaborate with each other in various ways: government-university, university-industry, government-industry. In fact, the Committee was told that science is a continuum and the multiple components of health research cannot exist independently of the others. Each component has an important, albeit changing, research role to play in ensuring maximum health benefits for Canadians.

The federal government has always played an important role in health research as a funder, performer and user of research. The federal government financially supports health research carried out in universities, teaching hospitals and research institutes (extramural research); it performs health research in its own laboratories (intramural or in-house research); and, it utilizes the outcomes of health research carried out elsewhere. Moreover, the federal government has an important role to play in setting national priorities for health research.

The Committee agrees with a 1999 report of the Council of Science and Technology Advisors that health research performed, funded and used by the federal government must be of the highest quality. It must be demonstrated to meet or exceed international standards of excellence in science, technology and ethics.[123]

The Committee agrees that health research performed, funded and used by the federal government must be of the highest quality. It must be demonstrated to meet or exceed international standards of excellence in science, technology and ethics.

The Committee was informed that, as the cost, complexity and pace of advancement in health research accelerate, individual organizations no longer have the resources or expertise to work in a vacuum:

[123] Council of Science and Technology Advisors, *Building Excellence in Science and Technology (BEST): The Federal Roles in Performing Science and Technology*, December 1999, p. 5.

Traditionally, investigators have worked in isolation, pursuing their own research agendas and living grant-to-grant. This scattered, ad hoc approach simply won't work in today's world when the complexity of science requires the pooling of resources.[124]

At the third annual Amyot Lecture organized by Health Canada, Dr. Kevin Keough, Chief Scientist at Health Canada, stated that it is necessary to adopt an inclusive (or horizontal) approach to health research and to find new ways to partner – that is, to bring together multi-disciplinary teams of scientists from across the whole health research system to combine their intellectual, financial and physical resources in conducting the research required to better understand the complex and highly interconnected world in which we live.[125]

The Committee agrees that it is critical to sustain effective partnerships and to distribute the effort of individual partners in a manner that will maximize the output of Canadian health research.

The Committee agrees with Dr. Keough that it is critical to sustain effective partnerships and to distribute the effort of individual partners in a manner that will maximize the output of Canadian health research. In our view, complementary and collaborative approaches to health research are not only feasible and cost-effective, but they also contribute to better research outcomes for all stakeholders. This overarching goal can only be met if the role of the federal government continues to adapt to the changing health research environment. In addition to being a performer, funder and user of health research, the federal government must become more active as a catalyst and a facilitator.

The Committee strongly believes that the federal government should assume leadership in Canadian health research and, therefore, we recommend:

That the federal government set, on a regular basis, national goals and priorities for health research in collaboration with all stakeholders.

That the federal government foster multi-stakeholder collaborations when performing, funding and using health research. This should contribute to capitalizing on the best available resources while minimizing overlap and duplication.

Dr. Keough stressed that, as a starting point, the federal government should encourage interchange of health research scientists between government, academia and the private sector. A freer flow of scientists would enhance the quality of Canadian health research, improve science and research advice to government, maximize the contribution of Canadian

[124] The Western Canadian Task Force on Health Research and Economic Development, *Seizing the Future – Health as an Engine of Economic Growth for Western Canada*, Summary of the Report, August 2001, p. 2.
[125] Dr. Kevin Keough, Amyot Lecture, October 2001.

scientists to the whole health research community, and contribute to the renewal of the science base in all sectors. The Committee shares similar views and, therefore, we recommend:

> **That the federal government take a leadership role, through the Canadian Institutes for Health Research and Health Canada, in developing a strategy to encourage interchange of research scientists between government, academia and the private sector, including national voluntary organizations.**

The Committee wishes to acknowledge the important role played by national voluntary organizations in health research. These organizations act as a key bridge at the national level between health research and its application through knowledge transfer of information to researchers, health care providers and the general public. It is the view of the Committee that, given the knowledge and experience these national voluntary organizations bring, as well as the significant proportion of the health research enterprise which they support, they must be included in the multi-stakeholders collaboration in health research.

5.2 Engaging the Scientific Revolution

Witnesses told the Committee that health research in Canada and throughout the world is currently undergoing a scientific revolution. They explained that this revolution in health research is fuelled by the ongoing advances in genomics, engineering and cell biology. Research in these scientific disciplines will have a profound effect on the detection, diagnosis and treatment of various genetically linked diseases. Elucidation of the physiological processes associated with various conditions will require years of efforts to identify the relevant genes and to determine how they interact.

> *We are in the midst of a profound global revolution being driven by our rapidly emerging understanding of the molecular basis of life, of human biology and of disease. Like prior revolutions in science, this revolution is being driven by the collision of diverse disciplines and approaches: genetics, molecular biology, the broader bio-sciences, [information technology] and computational methodologies, small molecules and surface chemistry, bioethics, epidemiology, health economics, and the social sciences and humanities. The pace of this health research revolution is still accelerating, driven by significant global investments by governments, industry and philanthropy.*[126]

As the human genome project approaches completion, the next challenge is to understand the function of the 30,000-40,000 genes that humans appear to possess. These genes encode the entire protein set or proteome estimated at 2 million. Thus, the next frontier in biology appears to be proteomics, the cataloging and functional description of all proteins in living organisms, which is far more complex and promising than genomics.

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[126] Dr. Alan Bernstein, president of the CIHR, *Health Research Revolution – Innovation Will Shape This Century*.

Similarly, advances in biomedical engineering and miniaturization on the molecular scale will push development of more sophisticated devices for diagnosis and therapy – targeted delivery of drugs, biological testing, molecular imaging, and tissue and organ repair. Canada has a real opportunity to become a world leader in this field of "nanotechnology" or "nanomedicine".

The study and use of stem cells is another good example of the potential impact that health research can have on health and health care. Stem cells have the unique property, whatever their origin, of becoming specialized cells. Currently, both the research community and related stakeholders are very enthusiastic about the potential of stem cells, both from embryonic and adult sources. It is anticipated that research on these cells will lead to treatments for serious diseases such as Parkinson's, Alzheimer's, diabetes and spinal cord injuries. It is also widely believed that these cells can ultimately be manipulated to grow into virtually any tissue or organ thus providing much needed organs for transplant.

Recent research has been successful in programming human embryonic stem cells into producing insulin. Normally, this function is performed by specialized pancreatic islet cells. Should this treatment prove to be able to provide a cure for diabetes, which is presently being treated by regular injection of insulin, it will not only improve the quality of life for the individual, but will also ease the economic burden of disease. In a different study, stem cells isolated from the skin of animals were coaxed into becoming neural, muscular and fat cells.

Other areas where the scientific revolution has a definite impact are chemistry and computer science where advances in molecular modelling combined with synthetic chemistry change the way novel drugs are discovered. Bioinformatics and robotics are also areas that will benefit health research.

The scientific revolution in health research is not limited to basic and biomedical research; it is also creating tremendous opportunities for research into health services and population health. More than ever before, research is undertaken in Canada and abroad to find new ways of delivering quality care and to understand the implications of the interaction of the determinants that affect the health of a population.

At the third Amyot Lecture, Dr. Keough stressed that advances in health research, and the need for governments and individuals to accommodate them, will continue to accelerate. This means that governments must be able to both perform and rely on good science, which is based on sound research harnessed for the public good. The government's effectiveness in integrating progresses from emerging areas such as biotechnology and nanotechnology depends on this principle.

The Committee agrees with Dr. Keough that it is imperative for Canada to take up the challenges wrought by the scientific revolution. We are convinced that countries with a strong health research network are more capable of translating advances and innovations into cost-effective health services, modern and internationally competitive policy and regulatory frameworks, new or adaptive products, and new health promotion activities. An energetic health research environment contributes to improved health, higher quality of life, and an efficient health care system. This in turn engenders public confidence, a vibrant business environment and strong economy.

Along with Dr. Keough, the Committee believes that good science is good economics and that the government has a crucial role in maximizing the gains for Canada and its citizens. Clearly, the costs of doing good science are high; but the costs of not doing it are even higher. These scientific developments are rapidly expanding and there is fierce competition in the field. Along with numerous witnesses, the Committee is convinced that Canada cannot afford to fall behind. The potential pay-off is a fast and economically beneficial transfer of knowledge and its conversion into tangible benefits for the Canadian population.

The Committee believes that good science is good economics and that the government has a crucial role in maximizing the gains for Canada and its citizens.

It is the opinion of the Committee that such a formidable challenge can be met only through a concerted effort by government, industry, academia, non-governmental organizations and international organizations. Each of these partners has its own specific role. However, coordination and support should be provided by the federal government, through its agencies and departments, especially CIHR and Health Canada. Therefore, the Committee recommends:

That the federal government, through both Health Canada and the Canadian Institutes of Health Research, coordinate and provide resources to ensure that Canada contributes to and benefits from the scientific revolution to maximize the economic, health and social gains for Canadians.

5.3 Securing a Predictable Environment for Health Research

The Phase Two report of the Committee showed that the federal government has had a long tradition in financing health research.[127] The most recent estimates by Statistics Canada indicate that the majority (some 79%) of federally funded health research is "extramural" as it takes place in universities and hospitals (68%), private non-profit organizations (6%), and business enterprises (4%).[128]

The principal federal funding body for health research is the Canadian Institutes of Health Research or CIHR. In fact, CIHR is the only federal entity whose budget is entirely devoted to health research. Its creation in 2000 involved a major evolution of the mandate of the Medical Research Council of Canada (MRC) and incorporation of the National Health Research and Development Program (NHRDP), formerly Health Canada's main financing instrument for extramural health research. Despite the creation of CIHR, Health Canada is still involved in the financing of some extramural health research in a wide range of fields (children's health, women's health, Aboriginal health, etc.).

[127] Volume Two, pp. 93-104.
[128] Statistics Canada, *Estimates of Total Expenditures on Research and Development in the Health Field in Canada, 1988 to 2000*, Catalogue No. 88F0006XIE01006, April 2001.

There are, also, a number of federal research-oriented bodies whose funding focuses entirely on health-related research. These include namely the Canadian Health Services Research Foundation (CHSRF) and the Canadian Coordinating Office for Health Technology Assessment (CCOHTA). Many feel that for a country of the size of Canada, there are too many federal funding organizations.

In addition, there are several secondary sources of extramural federal health research funding. More precisely, the federal government is responsible for a number of research councils, agencies and programs that devote (to various extents) a portion of their budget for health-related research. These include the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), the Canada Foundation for Innovation (CFI), the Canada Research Chairs (CRCs), and the Networks of Centres of Excellence.[129] The federal government has also funded Genome Canada, a not-for-profit corporation dedicated to develop and implement a national strategy in genomic research.

The remainder of the federally funded health research (some 21%) is "intramural" or "in-house" research, that is research conducted in federal government facilities. Federal facilities in which health-related research is performed include Health Canada, Statistics Canada, the National Research Council, Human Resources Development Canada, Agriculture Canada, Environment Canada (in partnership with Health Canada) and the Canadian Food Inspection Agency.

5.3.1 Federal Funding for Health Research

The federal government has, on many occasions, demonstrated its commitment to health research. The Committee applauds the high priority for research given in the 2001 Speech from the Throne and particularly its announcement to increase funding for health research:

> *Our government's overriding goal is nothing less than branding Canada as the most innovative country in the world – as the place to be for knowledge creation; where our best and brightest can make their discoveries; where the global research stars of today and tomorrow are born; becoming the magnet for new investments and new ventures.*
>
> *(…) The Government of Canada will (…) provide a further major increase in funding to the Canadian Institutes of Health Research, to enhance their research into disease prevention and treatment, the determinants of health, and the effectiveness of the health care system.*[130]

[129] The NCEs are supported and overseen by the three Canadian granting agencies (CIHR, NSERC and SSHRC). It is worth noting that eight networks, of the currently funded 22 NCEs, conduct health research in the fields of: arthritis, bacterial diseases, vaccines and immunotherapeutics for cancer and viral diseases, stroke, health evidence application, genetic diseases, stem cells and protein engineering. Some of the other NCEs may have impact on health and health care (e.g. Institute for Robotics and Intelligent Systems or Canadian Water Network).

[130] Government of Canada, *Speech from the Throne*, First Session of the 37th Parliament, 30 January 2001.

The Committee also recognizes the creation of CIHR as a major achievement in health research. We laud the increased funding for CIHR announced in the December 2001 Budget Speech, despite the severe financial pressures the federal government faces. In addition, the creation of, and funding for, the Canada Foundation for Innovation in 1997, followed by the Millennium Scholarships, the Canada Research Chairs, and Genome Canada, are clear indications that health research and innovation are integral to public health-related policy in Canada.

Throughout the hearings, the Committee was told that while the increase in federal funding represents significant support for health research, Canada still does not compare favourably with other industrialized countries in this regard. In fact, the role of national government in financing health research, expressed in purchasing power parity (PPP) per capita, is much higher in the United States, the United Kingdom, France and Australia than in Canada. For example, as stated in the Committee's Phase Two report, the American government provided in 1998 four times more funding per capita to health research than did the Canadian government.[131]

Throughout the hearings, the Committee was told that while the increase in federal funding represents significant support for health research, Canada still does not compare favourably with other industrialized countries in this regard.

Witnesses unanimously recommended that the federal government's share of total spending on extramural health research be increased to 1% of total health care spending in Canada, from its current level of approximately 0.5%. This could involve increasing CIHR's current budget to $1 billion from the current level of $560 million. Additional resources should also be devoted to federally performed health research (discussed in the following section). Overall, increased investment in extramural and in-house health research would bring the level of the federal contribution to health research more in line with that of national governments in other OECD countries. More importantly, this would help maintain a vibrant, innovative and leading edge health research industry.

Another concern brought to the attention of the Committee related to the long-term nature of research in contrast to existing budgetary program planning. High quality research is very competitive internationally and requires long-term commitments. Young researchers, on whom Canada's future in research depends, commit their careers on the basis of their perceptions of the long-term environment for research. Canada will not attract or keep excellent people without providing an excellent environment for research. Research pays little attention to national borders. The world recognizes excellence, and competes vigorously for it.

The Committee strongly supports the view that health research money is money to support the best and brightest minds.(…). Ultimately, Canada's challenge in health research is a challenge to attract and retain outstanding people.

131 Volume Two, p. 97.

The Committee strongly supports the view that health research money is money to support the best and the brightest minds. At least two-thirds of funds for health research go to salaries and training stipends for highly qualified and motivated researchers, research assistants, technicians, research trainees, etc. Ultimately, Canada's challenge in health research is a challenge to attract and retain outstanding people.

The role of the federal government is central to this competition for excellent researchers. In particular, CIHR is the long-term source of research funds for the health research activities stimulated by the Research Chairs, the Canadian Foundation for Innovation, and Genome Canada, all of which are adding greatly to Canada's capacity for excellence in research. CIHR is also an essential partner for research stimulated by the many health research charities.

Overall, the Committee believes that the federal government must establish and maintain long-term stability in the Canadian health research environment. Providing an adequate and predictable level of funding is a necessary prerequisite. Health research is a long-term investment; many research projects span a researcher's whole career, and grants are usually awarded for three- to five-year terms, which are simply not consistent with the one-year-at-a-time budget allocation to CIHR. Therefore, the Committee recommends

That the federal government:

- **Increase, within a reasonable timeframe, its financial contribution to extra-mural health research to achieve the level of 1% of total Canadian health care spending.**
- **Set and adhere to clear long-term plans for funding health research, particularly through the Canadian Institutes of Health Research. More precisely, the federal government should commit to a five-year planning horizon for the CIHR budget.**
- **Provide predictable and appropriate investment for in-house health research.**

5.3.2 Federal In-House Health Research

A report by the Council of Science and Technology Advisors identified a clear need for the federal government to perform in-house research. This report stressed that the federal government must have the an adequate research capacity to deliver the following key roles:

- Support for decision making, policy development and regulations.
- Development and management of standards.

- Support for public health, safety, environment and/or defence needs.
- Enabling economic and social development.[132]

In other words, the ability of the federal government to set policy and enforce regulations requires it to have an appropriate in-house research capacity. In addition, the government needs to have access to the highest possible quality scientific and technological information in a time frame that meets its needs. Failure to use the best available data and analysis could expose the government to liabilities for damages caused by those decisions.

The major key player in federal intramural health research is Health Canada, for which this function is critical to the fulfillment of its mandate. The department is mandated to help the people of Canada maintain and improve their health and to ensure their safety. Thus, in addition to access to top-quality scientific and technological information, Health Canada must obtain advice to set policy and enforce regulations. The required in-house research capacity includes expertise in:

- the state and spread of disease;
- ensuring the safety of food, water and health products, including pharmaceuticals;
- air quality issues; and,
- fulfilling health promotion obligations.

To undertake these responsibilities, Health Canada's researchers must possess independent knowledge and skills over a wide range of scientific disciplines, ranging from the behavioural sciences to cellular and molecular biology. In addition, Health Canada must have an adequate in-house capacity to assimilate, interpret and extrapolate the knowledge obtained from other health research partners. Finally, the department must be able to draw widely on expertise and facilities that are not available in-house.

Overall, the Committee learned that Health Canada has a unique role. In order to meet its mandate, the department must be able to provide the best possible independent science advice related to its legislated responsibilities, to undertake a wide range of scientific activities related to its role as regulator and policy advisor, and to provide evidence-based health services and programs. This unique obligation requires Health Canada to have the necessary science and research capacity to fulfill these three functions.

The Committee feels it is important to acknowledge that Health Canada has taken an important step in ensuring, through the appointment in 2001 of a Chief Scientist, that it possess the ability to meet its mandate. The Chief Scientist and his office play a pivotal role in bringing leadership and coherence to Health Canada's scientific responsibilities and activities by championing the principles of alignment, linkages and excellence espoused by the Council of Science and Technology Advisors.

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[132] Council of Science and Technology Advisors (CSTA), *Building Excellence in Science and Technology (BEST): The Federal Role in Performing Science and Technology*, 16 December 1999, p. 12. The CSTA consists of a group of external experts providing the federal government with on science and technology issues.

The Committee strongly believes that there is a clear need for the federal government to perform health research and that it must have the capacity to deliver its mandate. The Committee also acknowledges the importance for Health Canada of partnering with stakeholders outside of government when necessary. Therefore, the Committee recommends

The Committee strongly believes that there is a clear need for the federal government to perform health research and that it must have the capacity to deliver its mandate.

That Health Canada:

- **Be provided with the financial and human resources in health research that are required to fulfill its mandate and obligations.**
- **Engage actively in the establishment of linkages and partnerships with other health research stakeholders.**

5.4 Enhancing Quality in Health Services and in Health Care Delivery

As indicated in Chapter One of this report, the Canadian health care delivery system is facing a very serious situation, marked by rising costs, a high degree of dissatisfaction and high expectations. While many recommendations for change to the publicly funded health care system have been made over the years, most of them have not been based on scientific evidence, but rather have been grounded on anecdotal evidence or political posturing. For these reasons, research on all aspects of Canada's publicly funded health care system is, at the present time, very critical for health care policy makers and managers.

Areas in need of more research are varied and include:

- health promotion policies
- disease and disability prevention strategies (at both the individual and population levels)
- determinants of health
- approaches to primary care management
- new modes of remuneration for health care providers and institutions
- decision-making by health care providers and users
- organizational care delivery models
- health care policy management
- health care resources allocation

- impact of selected areas of privatized health care
- pharmaco-economics, and
- assessment and utilization of health care technology and equipment.

Clinical research and the involvement of health care providers themselves in health research are key elements in ensuring that fundamental research is translated into better health and health care. Clinical trials and large-cohort population health research studies are under-supported in Canada, in part due to the large, long-term financial commitment that is required before such studies can be launched. Urgent investment in training and subsequent career support is needed for clinician investigators in Canada. Harassed by ever increasing demands for clinical service, they find it increasingly difficult to remain competitive in competitions for grants and awards.

In Canada, a wide range of organizations are involved in health services research. It is the view of the Committee that, at this critical time for our health care delivery system, it is essential that this type of research be well funded and that these research centres and their investigators take part in the present debate about the future structure of the Canadian hospital and doctor system and about how the growing gaps in health care coverage can be closed.

The Committee believes that the federal government, given its unique role in health research, should commit a significant investment in promoting, in partnership with the provinces and territories, the adoption of research findings in clinical practice.

Moreover, many studies have shown that there is a major gap between new knowledge and its application in every day medicine. For example, only 46% of elderly patients were given pneumococcal vaccine, though it is the group most at risk for suffering from such infections. Aspirin, although recommended for all adult diabetic patients, was prescribed in only 20% of cases, and counselling on HIV transmission was given to less than 3% of adolescents during physician's office visits.[133] In addition, wide variations in practice patterns and outcomes persist across regions as well as across provinces. The Committee believes that the federal government, given its unique role in health research, should commit a significant investment to promoting, in partnership with the provinces and territories, the adoption of research findings in clinical practice. This must be done while continuing to support new research on priority health issues and the development of new tools, so that in the future this knowledge and the new tools can be translated into and implemented to produce improved health and enhanced health care.

Overall, the Committee acknowledges that more health research should be undertaken in order to enhance quality in health services and in health care delivery. Therefore, we recommend:

That the federal government, through the Canadian Institutes of Health Research, Health Canada and the Canadian Health Services Research Foundation, devote additional funding to health services research and clinical

[133] *JAMA*, vol. 286, p. 1834 (2001).

research and that it collaborate with the provinces and territories to ensure that the outcomes of such research are broadly diffused to health care providers, managers and policy-makers.

5.5 Improving the Health Status of Vulnerable Populations

There are many groups in Canadian society that have, for numerous reasons, less immediate access to health services appropriate to their specific needs. Examples include individuals with mental health problems, individuals with addiction problems, people with physical disabilities, some ethnic minorities, women in difficult circumstances, people living in rural and remote communities, the homeless and the poor. The Committee acknowledges that there is an urgent need in Canada to support cross-disciplinary health research that will provide new evidence on the diverse factors that influence health status, and on approaches to improving access to needed health care for vulnerable groups. CIHR has recently set up a strategic plan through three of its Institutes to study this crucial problem, but more resources are needed. Therefore, the Committee recommends:

That the federal government, through the Canadian Institutes of Health Research and Health Canada, provide additional funding to health research aimed at the health of particularly vulnerable segments of Canadian society.

In Volume Four of its health care study, the Committee stated that the health of Aboriginal Canadians is a national disgrace. There is a disproportionately, and completely unacceptable, large gap in health indicators between Aboriginal and non-Aboriginal Canadians. Aboriginal peoples experience much higher incidence of many health problems, including: significantly higher rates of cancer, diabetes and arthritis; heart disease among men; suicide among young men; HIV/AIDS; and morbidity and mortality related to injuries. Infant mortality rates are twice to three times the national average, with high rates of foetal alcohol syndrome and foetal alcohol effects (FAS/FAE), and poor nutrition. Approximately 12% of Aboriginal children have asthma, in comparison with 5% of all Canadian children. This last trend is attributable, at least in part, to environmental health issues, such as the presence of moulds in houses.[134]

The Committee believes that research is perhaps the most important element that will help improve the health status of Aboriginal Canadians.

The Committee believes that research is perhaps the most important element that will help improve the health status of Aboriginal Canadians. In our view, the creation of CIHR's Institute of Aboriginal Peoples' Health is an important step in this direction. Health Canada, which delivers numerous programs and services to

[134] Volume Four, pp. 129-135.

First Nations and Inuit communities, needs to strengthen its research capacity as well as its capacity to translate health research into effective public policy. In particular, Health Canada requires a strong research capacity to:

- compile and analyze available population-based information to identify trends, emerging issues, and differences across geographic regions or communities;
- review programs and services to identify the most effective practices in First Nations and Inuit communities and to assess timely progress in addressing key health issues; and
- maintain and augment the capacity to analyze research both nationally and internationally, and integrate best practice into policy and program development, implementation and evaluation.

Therefore, the Committee recommends as a matter of urgency:

That the federal government provide additional funding to CIHR in order to increase participation of Canadian health researchers, including Aboriginal peoples themselves, in research that will improve the health of Aboriginal Canadians.

That Health Canada be provided with additional resources to expand its research capacity and to strengthen its research translation capacity in the field of Aboriginal health.

Research into the field of health in developing countries is also of concern. The Committee learned that very little research activity is directed towards health problems that affect developing countries. In fact, data suggest that less than 10% of health research is devoted to diseases or conditions that account for 90% of the global disease burden.

The primary causes of morbidity and mortality in developing countries can be grouped under four general areas: malnutrition, poor sexual and reproductive health, communicable diseases, and non-communicable diseases including injuries. A recent report by the World Health Organization shows that long-term economic growth is impossible where large numbers of people are malnourished, sick or dying.

It is the view of the Committee that, given its expertise and excellence in health research, Canada should assume a leadership role in this area. The federal government has taken a step in the right direction. In a first-ever collaborative effort, four Canadian government organizations have joined their forces to formalize a shared commitment to address the problems of global health through research. The Canadian International Development Agency (CIDA), CIHR, the International Development Research Centre (IDRC) and Health Canada have formed the Global Health Research Initiative. Not only will this joint undertaking allow

the four partners to operate their programs and research more effectively, it will also contribute to a great humanitarian cause – the health protection of citizens of all countries, including Canadians. This is the beginning; much more needs to be done. Therefore, the Committee recommends:

That the federal government provide increased resources to the Global Health Research Initiative.

5.6 Commercializing the Outcomes of Health Research

One outcome of health research is the creation of new knowledge. New knowledge is in itself of great value to society but the overall impact of health research is maximized when new knowledge is translated into social and economic benefits. Commercialization of health research outcomes represents one way to achieve this knowledge translation.

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Commercialization of health research can happen at many different stages of research and each stage faces different challenges. For example, one of the main challenges facing commercialization of academic health research (occurring in universities and hospitals) is that their early stage of development makes the investment of capital by private sector very risky, thus speculative. By contrast, once a product is marketable, such as the late stage clinical trials (mainly performed by large research-based pharmaceutical firms), the main challenges relate to intellectual property and the patent regime, as well as to approval and monitoring of drugs. Commercialization of health research outcomes brings numerous benefits including:

- improved health, resulting in a more productive workforce;
- enhanced health services quality;
- increased efficiency in health care system delivery;
- expanded research funding leveraged from commercialization and research partnerships;
- enhanced job creation with newly formed companies;
- and greater economic activity from the manufacturing, marketing and sales of new health care products and services.

In its brief to the Committee, the Council for Health Research in Canada indicated that spin-off biotechnology companies formed by CIHR-funded scientists are an important by-product of public investment in health research:

For instance, 23 companies have been formed at the University of British Columbia employing 732 people. At McGill, 18 companies have been formed employing 392 people. At the University of Ottawa, 10 companies have been formed employing 459 people. Such companies cannot flourish without public investments to fund a steady discovery pipeline.[135]

Visudyne is one example of Canadian health research that has produced some powerful advances in health care. The drug, which is approved for use in over 30 countries, is the only approved treatment for age-related macular degeneration, the leading cause of age-related blindness. This treatment was developed at the University of British Columbia (UBC) and was funded, in part, by the federal government. UBC assisted in the start-up of QLT Inc. to commercialize this product that has head offices in Vancouver, employs over 350 people and has a market capitalization of $1.5US billion.

Another example is 3TC, the only inhibitor of HIV reverse transcriptase with few or no side effects and a common component of treatment for HIV/AIDS, which also arose out of federally funded research performed in Montreal. BioChem Pharma Inc., prior to its acquisition by Shire Pharmaceuticals plc. (based in the United Kingdom), had head offices in Montreal, employed 278 people, and had a market capitalization of $3.7US billion.

These examples illustrate the potential of health research to treat disease, create employment and generate economic benefits for Canada. While many academic technologies are licensed to foreign companies, it is reasonable to expect that value should be created and retained in Canada wherever possible and appropriate when the federal government has made investments in health research.

As stated in Section 5.2, "good science is good economics". However, during his testimony, Dr. Henry Friesen, Team Leader of the Western Canadian Task Force on Health Research and Economic Development, told the Committee that the conditions are not presently in place to enable publicly funded health research to maximize the returns to Canadian taxpayers.[136] In the opinion of this Task Force, the capacity for research commercialization is sub-optimal and clearly unacceptable.[137]

Similar findings were presented in a 1999 report published by the Advisory Council on Science and Technology (ACST) and prepared by its Expert Panel on the Commercialization of University Research.[138] The Expert Panel made the case that research results from federal funding of university research, where there is commercialization potential, should be managed as an asset that can return benefits to the Canadian economy and Canadian taxpayers. The Expert Panel also showed that the United States has a much better track record in commercialization of university-based research than Canada, despite a growing private sector involvement in funding research at Canadian universities.

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135 Council for Health Research in Canada, *Health Research: The Engine of Innovation*, Brief to the Committee, 30 December 2001, p. 2.

136 See Committee Proceedings, Issue No. 30.

137 Western Canadian Task Force on Health Research and Development, *Shaping the Future of Health Research and Economic Development in Western Canada*, August 2001, pp. 19-20.

138 Expert Panel on the Commercialization of University Research, *Public Investments in University Research: Reaping the Benefits*, Advisory Council on Science and Technology, 4 May 1999.

Most major research institutions (universities and research hospitals) in Canada have in-house technology commercialization offices that are funded by university sources and, in cases of successful offices, by revenue derived from operation. Currently, the expenses associated with commercialization activities are not covered by direct federal research funding. The Committee learned that the vast majority of these technology commercialization offices have costs that exceed their revenue. They are operated as a cost centre and not as a profit centre for the institution. However, while their function is not critical to the research enterprise (creation of new knowledge), an argument could be made to include costs of operating these offices in the calculation of indirect research costs since technology commercialization is a research-related activity.

The question of funding indirect costs in Canadian research by the federal granting agencies has been one of contention in recent years. It has been recognized as one element to explain the lower level of competitiveness of Canadian researchers. Indirect costs are those expenses associated with administration, maintenance, commercialization and the salary of the principal investigator that is attributable to the research project. The ACST in its 1999 report[139] and subsequent publications has made the recommendation that the federal government increase its investment by supporting the indirect costs of sponsored research. Similarly, the brief of the Council for Health Research in Canada stressed:

> *[The] indirect costs of research must be funded in order to provide a cutting-edge research environment that will fully realize the benefits of the government's Innovation Agenda. (…) The Council believes it should be a priority for the government to develop a specific, long-term plan to address this issue as soon as possible.*[140]

The Committee acknowledges that, in its December 2001 Budget, the federal government provided a one-time investment of $200 million through the granting councils to help alleviate the financial pressures that are associated with the rising indirect costs of research activities, including commercialization. We both hope that universities and research hospitals will use some of these funds to improve their commercialization abilities, and that the federal government will make this investment permanently recurrent.

The Committee agrees with witnesses and recent reports that there is a need to find ways to maximize the returns to Canadians from the commercialization of federally funded health research. We believe that the federal government should establish the necessary conditions to enable researchers and those technology commercialization offices providing support and services to researchers to perform to their full potential in commercializing the results of federally funded health research.

The Committee agrees with witnesses and recent reports that there is a need to find ways to maximize the returns to Canadians from the commercialization of federally funded health research. We believe that the federal government should establish the necessary conditions to enable researchers and those technology commercialization offices providing

[139] *Ibid.*
[140] Council for Health Research in Canada, Brief to the Committee, p. 5.

support and services to researchers to perform to their full potential in commercializing the results of federally funded health research.

Further, the Committee believes that CIHR, Canada's premier vehicle for funding health research with a legislated mandate to translate knowledge into improved health, is uniquely positioned to assess the recommendations made by the Western Canadian Task Force, the ACST's Expert Panel and other studies on technology commercialization as they apply to health research. We believe that CIHR should use these reports as the basis for developing and delivering on an innovation strategy that considers programs, policies and people. In our view, such a strategy would see CIHR support and strengthen the capacity of academic technology commercialization offices to maximize the transfer of technologies to market, thereby creating of Canadian companies and jobs and enhancing Canada's innovation capacity. In addition, we believe that this innovation strategy must be developed within a framework that includes governing principles of public good and benefit to Canada so that any strategy to maximize the social and economic impact does not threaten academic freedom or influence the direction of research or the delivery of health care. Therefore, the Committee recommends:

That the federal government require an explicit commitment from all recipients of federally funded health research that they will obtain the greatest possible benefit to Canada, whenever the results of their federally funded research are used for commercial gain.

That the Canadian Institutes of Health Research, while not ignoring the social value of health research that does not result in commercial gain, seek to facilitate appropriate economic returns within Canada from the investments it makes in Canadian health research, whenever the results of investments in Canadian health research are used for commercial gain. In doing so, CIHR should develop an innovation strategy aimed at accelerating and facilitating the commercialization of health research outcomes.

That the federal government invest additional resources to enhance the output of Canadian health researchers and strengthen the commercialization capacity of performers of federally funded health research through CIHR's innovation strategy. This new funding would be additional to the current health research investment. In particular, the funding of the indirect costs of research by the Canadian granting agencies should be made permanent. Health research performers should be made accountable for the use of these commercialization funds.

One aspect of the commercialization of health research outcomes that generated controversy recently is the issuance of patents for higher life forms. This subject goes deeply into ethical, intellectual property, and economical issues. Although these questions are highly relevant to Canadian health research and the work of this Committee, they are debated elsewhere. Indeed, the Canadian Biotechnology Advisory Committee (CBAC) has been mandated by the federal government to provide advice on this crucial issue. The CBAC published an interim report on the subject at the end of 2001 where it recommended that human beings at all stages of development, are not patentable.[141] Further, the report recommended that a systematic research program be undertaken to assess the impact of biotechnology patents on various aspects of health services. It is clearly an issue that deserves serious consideration, but is beyond the scope of this report.

5.7 Applying the Highest Standards of Ethics to Health Research

The preceding sections have demonstrated Canada's growing excellence in, and high priority for, health research. However, history has shown that the pursuit of new knowledge in health research can lead, for example, to abuse of the people who are involved as the subjects of research, to invasions of privacy, and to abuse of animals. In various ways, numerous reports have emphasized that new knowledge must not be gained at the expense of abuse of humans and other life forms, and that excellence in health research requires excellence in ethics.

But what is ethics? Laura Shanner, Professor at the University of Alberta, told the Committee that "ethics" is a "systematic, reasoned attempt to understand and make the best possible decisions about matters of fundamental human importance."[142] When we refer to ethical issues informed by biological knowledge in medicine, we refer to "bioethics". Dr. Nuala Kenny, Professor of Pediatrics at Dalhousie University (Nova Scotia), defined bioethics as follows:

> *Bioethics is a particular understanding of ethics that brings the discipline of philosophy to assist in making value-laden decisions. It is about the right and the good. It is a practical discipline. Bioethics is ethics in the realm of the biosphere, human biology. It is actually broader than human health, but most people use it in that context.*
>
> *It asks how, in a pluralistic society, do you lay out the values, the issues and the interests at stake when making a decision about the right and the good, generally about an individual patient situation. Then, how do you assist the relevant parties in establishing*

141 Canadian Biotechnology Advisory Committee, *Biotechnology and intellectual property: patenting of higher life forms and related issues*, Interim report to the Government of Canada Biotechnology Ministerial Coordinating Committee, Ottawa, November 2001.

142 Laura Shanner, *Ethical Theories in Bioethics and Health Law*, University of Alberta, Brief to the Committee, 2000, p. 1.

some kind of priority, so that if there are competing goods or competing harms, you make your choices in a responsible way.[143]

In many fields, difficult decisions often involve consideration of numerous factors, each implicating different – and often conflicting – values, principles, viewpoints, beliefs, expectations, fears, hopes, etc. When facing such difficult decisions, people may reach different conclusions not only because they consider different factors, but also because they weigh them against each other in different ways. The practical effect of the discipline of ethics is to help those who face complex decisions to identify the inherent values and principles, to weigh them against each other, and to come to the best possible decision. Though based on strong theoretical foundations, ethics in health care and health research deals with real life situations.

Because research seeks constantly to expand the forefront of knowledge, it poses the most challenging questions of ethics. The purpose of this section is to survey some of the major areas of research ethics in terms of the policies and mechanisms now present and/or needed in Canada, to ensure that health research is carried out in a manner that meets the ethical standards of Canadians.

5.7.1 Research Involving Human Subjects

Health research must involve humans as research subjects. While research with other life forms can provide much essential knowledge, in the end only research directly on human beings can tell us, for example, whether a potential new approach to prevention, diagnosis or treatment of disease is safe enough to use in humans, whether it actually helps patients, what its side effects are, and whether it is better than a treatment that is already available.

Research subjects, often patients with diseases whose treatment is under study, bear the risks of the research so that others may gain from the knowledge that research is intended to provide. Research involving humans poses many risks: abuse of people, misuse, exploitation, breaches of privacy, confidentiality, etc. Because health research raises such a wide range of issues, an international consensus has developed over the last 50 years or so. This international consensus, which started with the Nuremberg Code (1947) and the Declaration of Helsinki (1964, revised in 2000), requires that the ethical aspects of any research project involving humans be reviewed and approved, with modifications if needed, by an appropriately constituted ethics committee (in Canada called "Research Ethics Board" or REB) before the research project is started.

Research subjects, often patients with diseases whose treatment is under study, bear the risks of the research so that others may gain from the knowledge that research is intended to provide.

The Research Ethics Board "is a societal mechanism to ensure the protection of research participants."[144] REBs are multidisciplinary local institution-based boards, independent of the investigator and research sponsor, established to review the ethical standards of research

143 Dr. Nuala Kenny (42:59-60).
144 National Council on Ethics in Human Research, *Protecting Human Research Subjects: Case-Based Learning for Canadian Research Ethics Boards and Researchers*, Ottawa, 2000, p. 7.

projects within their institutions. They have the power to approve, reject, request modifications to, or terminate any proposed or ongoing research involving human subjects. In effect, the REB attests, for each research protocol, that the proposed research, if it is carried out in the manner agreed to by the REB, meets or exceeds standards of ethics that Canadians expect.

The dominant national policy for the ethics of research involving humans, the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS), was published by CIHR, the SSHRC and NSERC in 1998. The TCPS followed earlier policies (MRC, 1978, 1987, and SSHRC, 1976). The Panel and Secretariat on Research Ethics, launched in November 2001 by the three federal research funding agencies, are responsible for coordinating the evolution and interpretation of the TCPS. The objective is to keep the TCPS up-to-date in response to the rapidly evolving advances in knowledge, research and technology.

The *Tri-Council Policy Statement* has been adopted by academic institutions (where the majority of health research involving humans is carried out) and by some governmental departments and agencies, including the Department of National Defence (DND) and the National Research Council (NRC).

Health Canada is establishing its own Research Ethics Board, which will also use the TCPS, to assess the ethical acceptability of in-house research, research that is contracted to non-Health Canada researchers which requires ethical review and research applications to CIHR or other funding agencies. Health Canada has also adopted the International Conference on Harmonization (ICH) guidelines applying to clinical trials involving the participation of human subjects.[145]

Since the 1970s, in accord with national policies governing ethics in research involving humans, some 300 local REBs in Canada have been established in a variety of settings including universities, government laboratories, community organizations and teaching and community hospitals. In many teaching hospitals, at least 50% of the research protocols reviewed by REBs are clinical trials that are sponsored by industry for purposes of testing new pharmaceutical interventions in human health so as to meet the regulatory licensing requirements of Health Canada and the USA Food and Drug Administration. In addition, some company-based and private for-profit REBs have developed over the last few years to allow REB review of privately sponsored research outside academic institutions, and hence without access to local REBs. In Alberta, all physicians who are not covered by an institutional REB are required to use the REB of the Alberta College of Physicians and Surgeons. Newfoundland is moving towards establishing a single REB for all health research in the province.

In 1989, the National Council on Ethics in Human Research (NCEHR) was created by the MRC with the support of Health Canada and the Royal College of Physicians and Surgeons of Canada. NCEHR works to foster high ethical standards for the conduct of research involving humans across the country by offering advice on the implementation of the TCPS, primarily through educational activities and site visits to local REBs. NCEHR is now funded by CIHR, SSHRC, NSERC, Health Canada and the Royal College of Physicians and Surgeons.

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[145] Despite the care taken by the three federal granting agencies and Health Canada in the international harmonization of guidelines applying to clinical trials involving human subjects, the Committee would like to be in no doubt that any Canadian participating in clinical trials from outside Canada be protected by ethical standards that are at least as stringent as those applying here.

5.7.2 Issues With Respect to Research Involving Human Subjects[146]

The *Tri-Council Policy Statement*, in effect Canada's national statement of policy for ethical conduct in health research involving humans, appears to be consistent with world standards. For the most part, REBs in Canada seem to operate to a high standard, building on more than two decades of experience and the dedication of many people across the country. However, the Committee learned that serious gaps have been identified in a number of reports released in recent years by NCEHR and CIHR, as well as by the Law Commission of Canada.[147] A summary of the main issues or gaps identified in these reports is presented below:

- Although the *Tri-Council Policy Statement* sets very high standards, there is currently no oversight mechanism to ensure compliance with these standards. On the one hand, there is no process of certification, accreditation or regular inspection of the research ethics review procedures performed by REBs. On the other hand, and though more REBs are starting to address this issue, few monitor the conduct of research once a research protocol has been approved. In other words, REBs often have limited knowledge of what happens after they have approved a research protocol.
- Some concerns were raised about real or perceived conflicts of interest by researchers or institutions. Though international consensus suggests that REBs would be established within research institutions, and that the work of REBs requires close collaboration with other institutional responsibilities, REBs must be able to operate free from institutional or researcher pressures.
- Similarly, a lack of public oversight of private REBs that act independently or through Contract Research Organizations hired by drug companies raises concerns about their independence and conflicts of interest.
- There is a basic need for more resources for REBs. As the work becomes increasingly complicated with globalization, technology and commercialization, REBs are struggling to find committee chairs or even members.
- There are currently no standard training requirements for Canadian REB members and researchers in research ethics. However, in the absence of similar Canadian standards, Canadian researchers must meet American

[146] The following section does not deal with the ethical boundaries surrounding research into human reproductive health as federal legislation is expected to be tabled soon in the House of Commons. The Committee recognizes that this area is at the cutting edge of applied research and evolves rapidly. In our view, all research involving human reproductive material, human organisms derived from such material, other human cell lines, or part of any of them (including human genes) should be subject to full ethical review by REBs and application of the TCPS and other applicable legislation.

[147] More specifically, see the following four reports: 1) NCEHR (formerly National Council on Bioethics in Human Research or NCBHR), "Protecting and Promoting the Human Research Subject: A Review of the Function of Research Ethics Boards in Canadian Faculties of Medicine", *NCBHR Communiqué*, Volume 6 (1), 1995, pp 3-28; 2) Draft report of the Task Force established by the NCEHR to study models of accreditation for human research protection programs in Canada, September 28, 2001; 3) McDonald, Michael (Principal Investigator), *The Governance of Health Research Involving Human Subjects*, research sponsored by the Law Commission of Canada, Ottawa, May 2000; 4) Draft Report of the Task Force on Continuing Review, CIHR, 2001.

educational standards for American funded health research involving human subjects.

- The current ethics review processes are "producer-driven" rather than "consumer-driven". In other words, there is a lack of representative participation in governance on the part of research subjects.
- There is an urgent need for empirical research on the effects of health research on human subjects as well as on the effectiveness of the ethics governance procedures.

To sum up, the governance, transparency and accountability of the ethics review processes in Canada need to be improved:

> *(…) we were surprised to see how substantial the gaps were between the ideals expressed in policy and the ground arrangements for accountability, effectiveness and the other criteria for good governance.*[148]

The Committee agrees with many reports that the central question for Canada is the public accountability of the overall processes for assuring the ethics of research involving humans.

The Committee agrees with many reports that the central concern for Canada is the public accountability of the overall processes for assuring the ethics of research involving humans. We recognize the excellent work that has been done across Canada by dedicated people in many environments who have strived to ensure that health research involving human subjects meets the highest standards of ethics, and we are confident that the standards achieved in Canada are as good as any in the world. Indeed, the report released by the Law Commission of Canada stated:

> *We are also very much impressed with the calibre of scholarly, ethics and legal expertise represented on many REBs. And, at a general level, Canadians scholars are prominent internationally in research regarding legal and ethical aspects of human subjects research.*[149]

We urge the various leading stakeholders of health research involving human subjects to work together to develop a governance system for health research involving human subjects that can meet the following objectives: the promotion of socially beneficial research; the protection of research participants; and the maintenance of trust between the research community and society as a whole.

However, the Committee believes that the present varied structures and approaches to health research ethics are inconsistent with the public accountability that an area of this importance requires. Accordingly, we urge the various leading stakeholders of health research

[148] Professor Michael MacDonald, Law Commission of Canada.
[149] *Ibid.*, p. 300.

involving human subjects to work together to develop a governance system for health research involving human subjects that can meet the following objectives: the promotion of socially beneficial research; the protection of research participants; and the maintenance of trust between the research community and society as a whole.[150] This initiative should involve Health Canada, CIHR, other federal funding agencies, the Panel and Secretariat on Research Ethics, industrial research sponsors, research institutes, health professional licensing bodies and associations, NCEHR, the newly created Canadian Association of Research Ethics Boards, etc. Therefore, the Committee recommends:

> **That Health Canada initiate, in collaboration with stakeholders, the development of a joint governance system for health research involving human subjects for all research that the federal government performs, that it funds, and that it uses in its regulatory activities.**

> **That Health Canada, in the development of this ethics governance system, regard the following components as essential to progress:**
>
> - **Work initially on all (health) research that the federal government performs, funds, or uses in its regulatory activities, to develop an effective and efficient system of governance that will become accepted as the standard of care across Canada;**
> - **Give prime importance in the governance system to effective education and training mechanisms for all who are involved in research and research ethics, with certification as appropriate to their different responsibilities;**
> - **Develop standards, based on the *Tri-Council Policy Statement*, the International Conference on Harmonization guidelines applying to clinical trials involving human subjects, and other relevant Canadian and foreign standards, against which research ethics functions or Research Ethics Boards can be accredited or certified as meeting the levels of function that are consistent with the expectations of Canadians and with those in other countries;**
> - **Ensure that the *Tri-Council Policy Statement* is updated and is maintained at the forefront of**

[150] These objectives correspond to those that were identified in the McDonald report cited in the previous footnote.

international policies for the ethics or research involving humans;

- **Remove inconsistencies between the various policies under which research involving humans is now governed, and make Canadian standards consistent with those of other countries that affect Canadian research;**
- **Establish an accreditation or certification process for research ethics functions that is at arm's length from government, but clearly accountable to government;**
- **Develop the governance system through open, transparent and meaningful consultation with stakeholders.**

5.7.3 Animals in Research

Because animals are biologically very similar to humans, animals are used in research to develop new biological knowledge that has a high chance of applicability to the human condition. However, because animals are not identical to humans, new knowledge that arises from research with animals must be tested in humans before it is applied to human health.

Ethical concerns about the use of animals by humanity, particularly their use in research, have been recognized since the 19th century, especially in England. In Canada, these concerns caused MRC and NRC to undertake studies leading in 1968 to the creation of the Canadian Council on Animal Care (CCAC). Currently, CCAC receives 87% of its $1.2 million budget from CIHR and NSERC to cover CCAC services to the research institutions that they fund. CCAC obtains the rest of its revenues from fees for service charged to governmental and private institutions.

CCAC awards the Certificate of Good Animal Practice® to institutions that it determines are in compliance with its standards. Compliance is determined through site visits by assessment panels. CIHR and NSERC make participation in the CCAC program mandatory for all those who wish to receive their research funding and inform institutions that they will withdraw funds from institutions that CCAC states are not in compliance with its standards. The CCAC reports that institutions generally comply with its recommendations.[151]

In its brief to the Committee, the Coalition for Biomedical Health Research stated that CCAC standards are recognized both nationally and internationally:

> *(…) research that complies with CCAC guidelines and policies constitutes ethically sound and responsible activity.*

[151] Louis-Nicolas Fortin and Thérèse Leroux, "Reflections on Monitoring Ethics Review of Research with Human Subjects in Canada", *NCEHR Communiqué*, Summer 1997.

(…) CCAC's nationally and internationally accepted standards (…) provide the needed balance between the protection of animals and the benefits that are gained by the use of animals in science.[152]

The formal structure of the CCAC, along with its monitoring program, is regarded by many, in Canada and abroad, as an optimal model enabling it to work effectively at arm's length from and with government.[153] In addition, recent report suggested that such a model could be considered in the field of research involving human subjects. For example:

An interesting model in Canada and one, which I think we need to look at seriously with regard to an accreditation process for human research, is the Canadian Council on Animal Care. (…) it now has remarkable credibility with international recognition. (…) It remains a very interesting and almost uniquely Canadian model. It has federal fiscal support and yet, functioning on its own, setting standards and having a very respected accreditation process for animal research.[154]

The Committee acknowledges that CCAC performs a world class service to Canadians at a remarkably low cost.

The Committee acknowledges that CCAC performs a world class service to Canadians in a cost-effective manner. Though there is no doubt that some Canadians will disagree, mainly those who reject any use of animals in research, the Committee believes that the CCAC offers clear evidence that a very sensitive area that requires minute by minute attention and care can be effectively managed by an approach based on:

- Belief, until proven wrong, that institutions and individuals are seeking to work in a manner that reflects the values of Canadians;
- A firm foundation in increasing awareness and training of individuals on issues and standards;
- An assessment approach that is based on internationally recognized standards and that leads to certification of facilities and processes, that involves experts and lay persons, and that operates in a collegial manner until the point when there is evidence of wrongdoing and failure to take the necessary corrective measures.

While not advocating simply copying CCAC's mechanisms into the challenge of governance of research involving humans, the Committee believes that much can be learned from CCAC's experience. The Committee, however, identifies a gap in the interactions between the CCAC and the federal government. Though numerous departments and agencies place themselves under CCAC's assessment program for research involving animals that is carried out in their own facilities, and CIHR and NSERC require compliance with CCAC's standards as a

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152 Coalition for Biomedical and Health Research, Brief to the Committee, p. 8.

153 Sub-Committee on Ethics, *The Ethics Mandate of the Canadian Institutes of Health Research: Implementing a Transformative Vision*, Working Paper prepared for the Interim Governing Council of the CIHR, 10 November 1999, pp. 18-19.

154 Dr. Henry Dinsdale, Speech to the National Workshop of the NCEHR, March 2001, p. 5.

condition of receiving research funds, we believe that this is not enough. Therefore, we recommend:

That all federal departments and agencies require compliance with the standards of the Canadian Council on Animal Care for:

- **All research that is carried out in federal facilities, and**
- **All research that is funded by federal departments or agencies but performed outside federal facilities, and**
- **All research that is carried out without federal funding or facilities, but that is submitted to or used by the federal government for purposes of exercising its legislated functions.**

5.7.4 Privacy of Personal Health Information

All personal information is precious to individuals, but information about personal health is probably the most sensitive to most people. Health information goes to a person's most intimate identity, not only because it directly affects the individual him or herself, but also because it can affect family members and others, as well as other aspects of the person's life, such as his/her employment or insurability.

The right to privacy and confidentiality of personal health information is a very important value for Canadians.

The right to privacy and confidentiality of personal health information is a very important value for Canadians. Now more than ever, Canadians need reassurance that their privacy and confidentiality will be respected in this era of rapidly advancing technology. However, the quality of their health and health care is also a value that Canadians cherish very dearly. Health care providers, health care managers and health researchers need access to personal health information to improve the health of Canadians, strengthen health services and sustain a high quality health care system. The present challenge for Canadians is to set acceptable limits around the right to privacy, on the one hand, and the need for access to information (by health care providers, managers and researchers) on the other, in order to achieve an appropriate balance between them.

The *Personal Information Protection and Electronic Documents Act* or PIPEDA, promulgated in June 2000, has stimulated intensive debate and study of this question in the past two years. The health sector had not recognized the potential effects of this legislation on health research and health care management until the legislative review of the Bill was well advanced through the House of Commons. Representatives from various parts of the health sector therefore intervened strongly in hearings before this Senate Committee in late 1999. Their testimony clearly demonstrated that the health sector was not part of the broad consensus supporting the bill, and also that there was no consensus within the health sector itself as to an

appropriate solution to the issues about privacy of health information which are raised by the bill. As a result, the Committee concluded that there was a significant degree of uncertainty surrounding the application of PIPEDA to personal health information that required clarification. In response to the Committee's recommendation[155], therefore, the federal government decided to delay the application of PIPEDA to personal health information until January 1, 2002. This delay would allow one extra year from the time of proclamation to motivate government and relevant stakeholders in the health sector to resolve these uncertainties and formulate a solution that is appropriate for the protection of personal health information.

The Committee is pleased that several groups in the health sector have seriously addressed many of the concerns raised by PIPEDA, and in particular, the need to protect personal health information, while at the same time allow restricted use of such information for essential purposes such as health research and health care management (which includes the provision, management, evaluation and quality assurance of health services).

Over the past two years, CIHR has undertaken a wide-range analysis of the privacy issues and initiated a broad consultation process with various stakeholders, culminating in recommendations for the interpretation and application of PIPEDA to health research.[156]

CIHR's recommendations set out precise legal wording in the form of proposed regulations under PIPEDA that, without changing the Act, would facilitate its interpretation and application in the area of health research. These recommendations were presented to the Committee as the most realistic, short-term solution, recognizing that PIPEDA would not likely be amended before January 1, 2002. CIHR emphasizes that its proposed regulations, though significantly limited by the current wording of PIPEDA, could nevertheless provide the necessary guidance to help clarify certain ambiguous terms in a manner that will achieve the objectives of the Act without impeding vitally important research. CIHR is also of the view that regulations, as legally binding instruments, are necessary to enable researchers, and Canadians in general, to understand what the law expects of them and how to govern their conduct accordingly. Furthermore, such regulations could provide the necessary basis on which provinces and territories could develop substantially similar legislation before January 1, 2004, as provided for by PIPEDA.[157]

Finally, CIHR recognizes the need for further work with various stakeholders and the provinces to establish an overall, more coherent, comprehensive and harmonized legal or policy framework for the health sector. Ultimately, whatever law or policy governs this area needs to be interpreted and applied in a flexible and feasible manner, and users need to develop more detailed guidelines for promoting best information practices in their daily work.

The Committee has considered the regulations proposed by CIHR and we commend CIHR for its efforts in this regard. We fully support the intent of the proposed

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155 Second report of the Standing Senate Committee on Social Affairs, Science and Technology, 36th Parliament, 2nd Session, 6 December 1999.

156 CIHR, *Recommendations for the Interpretation and Application of the Personal Information Protection and Electronic Documents Act in the Health Research Context*, 30 November 2001. CIHR's proposed regulations are available on the CIHR Website at http://www.cihr.ca/about_cihr/ethics/recommendations_e.pdf.

157 Indeed, the Act gives provinces and territories until January 1, 2004, to develop substantially similar legislation.

regulations. As stated in its Fourteenth Report dated December 14, 2001[158], the Committee believes that these regulations should be given serious consideration and, therefore, we recommend:

> **That regulations such as those proposed by the Canadian Institutes of Health Research receive their fullest and fairest consideration in discussion about providing greater clarity and certainty of the law with the view to ensure that its objectives will be met without preventing important research to continue to better the health of Canadians and improve their health services.**

A second and parallel initiative was undertaken by a Privacy Working Group composed of representatives from the Canadian Dental Association, the Canadian Healthcare Association, the Canadian Medical Association, the Canadian Nurses Association, the Canadian Pharmacists Association, and the Consumers Association of Canada. The Privacy Working Group addressed the need to access personal health information for the purposes of health care management. In a report submitted to Health Canada, the Privacy Working Group enunciated the following principles.[159]

- Confidentiality of information in health care delivery is of great importance to Canadians. Fear of disclosure to others of personal health information is likely to harm the trust that is essential in the relationship between patients and providers, and hence limits the willingness to seek care, or to impart information that is important to patient care.
- While an individual's right to privacy of personal health information is of great importance, it is not absolute. This right is subject to reasonable limits, prescribed by law, to appropriately balance the individual's right to privacy and societal needs, as can be reasonably justified in a free and democratic society.
- Individuals have the right to: privacy of their personal health information; decide whether and under what conditions they want such information collected, used or disclosed; know about and have access to their health records and ensure their accuracy; and have recourse when they suspect a breach of their privacy.
- In parallel, health care providers and organizations have obligations to: treat personal health information as confidential; safeguard privacy and confidentiality using appropriate security methods; use identifiable information only with the individual's consent except when the law requires disclosure or there is compelling evidence for societal good under strict

[158] Standing Senate Committee on Social Affairs, Science and Technology, *Fourteenth Report*, 37th Parliament, 1st Session, 14 December 2001.
[159] Privacy Working Group, *Privacy Protection and Health Information: Understanding the Implementation Issues*, report submitted to Health Canada, December 2000.

conditions; restrict the collection, use and disclosure of personal health information to de-identified information, unless the need for identifiable information is demonstrated; and, implement policies, procedures and practices to achieve privacy protection.

When the Committee met in December 2001 to examine progress made with respect to the application of PIPEDA to health care, we were informed that, while the members of the Privacy Working Group agreed on many issues, they had not yet achieved a definitive and unified position. The Privacy Working Group was of the view that progress towards achieving consensus would require the active involvement and leadership of the federal government. The federal government, however, has taken the position that the concerns of the Privacy Working Group should be resolved between the members of the group and the Privacy Commissioner.

The Committee believes that further guidance and direction is needed in respect of the provision, management, evaluation and quality assurance of health services. For this purpose, constructive and collective efforts by *all* affected parties must be made to address the relevant issues, and government must lead by example. As stated in its 14th Report, the Committee recommends:

> **That discussions continue among stakeholders, the Privacy Commissioner, *and* those federal and provincial government departments involved with the provision, management, evaluation and quality assurance of health services.**

Like other Canadians, the members of the Committee place a very high priority on the protection of personal health information. Though protection of personal health information is understandably of very high importance, we must recognize what else is at risk if access is summarily rejected because of perceived threats to the privacy and confidentiality. Rather than give absolute status to the right to privacy, the Committee believes that Canadians must engage in a careful and thoughtful consideration of the reasons why personal information is needed for health research and health care management purposes, the social benefits that accrue to Canadians individually and collectively as a result, and the conditions that must be met before access is allowed. Because of its long-standing responsibility in funding health care and financing health research, the federal government should play a major role in promoting greater public awareness and facilitating greater debate in regard to these issues.

The Committee believes that Canadians must engage in a careful and thoughtful consideration of the reasons why personal information is needed for health research and health care management purposes, the social benefits that accrue to Canadians individually and collectively as a result, and the conditions that must be met before access is allowed.

CIHR's *Draft Case Studies Involving Secondary Use of Personal Information in Health Research* (December 2001) constitutes an excellent model for encouraging discussion and broader understanding through very concrete examples of real health research projects involving

secondary use of personal information. Parallel efforts by others to develop similar case studies illustrating why and how personal information is used for health care management purposes would also be extremely valuable. In light of the above, the Committee recommends:

That the federal government, through the Canadian Institutes of Health Research and Health Canada, together with other relevant stakeholders, design and implement a program of public awareness to foster in Canadians a broad understanding of:

- **the nature of, and reasons for, the extensive databases containing personal health information that must be maintained to operate a publicly financed health care system, and**
- **the critical need to make secondary use of such databases for health research and health care management purposes.**

This being said, the Committee believes that if Canadians are to allow restricted access to personal health information for essential functions, such as health research and health care management, it is imperative that their personal health information be adequately protected. We wish to emphasize the importance of ensuring, all the while, that Canadians remain confident that the privacy of their personal health information is being respected. We see here, once again, a major federal role to promote a fulsome discussion of the relevant ethical issues and examination of the control and review mechanisms necessary for ensuring that the secondary use of personal information for health care management and health research purposes is conducted in an open, transparent and accountable manner. Therefore, the Committee recommends:

That the federal government, through the Canadian Institutes of Health Research and Health Canada, together with other relevant stakeholders, be responsible for promoting:

- **thoughtful discussion and consideration of the ethical issues, particularly informed consent issues, involved with the secondary use of personal health information for health care management and health research purposes;**
- **thorough examination of the control and review mechanisms needed for ensuring that databases containing personal health information are effectively created, maintained and safeguarded and**

that their use for health care management and health research purposes is conducted in an open, transparent and accountable manner.

5.7.5 Genetic Privacy

The discussion above has addressed issues of privacy of personal health information arising from databases from the existing health care system. The Committee recognizes that new technologies allowing analysis of genes is also introducing new considerations into the management of personal health information. The exploding abilities to link DNA sequences to disease offer the potential both to greatly increase the health care of the individual but also to intrude into the privacy of both the individual and his or her relatives. In addition, these technologies allow the prediction of diseases that have not yet become evident. However, a majority of these predictions represent increased probability of the incidence of the disease, the test being often statistical in nature (e.g., the likelihood is twice that of the general population) rather than absolute (as for Huntington's disease, for example).

The application of the new genetic technologies to human health is as yet in its infancy, but at least some of the potential benefits and harms are becoming evident. The concerns include the fear that access to genetic information on individuals might affect their employability or insurability.

The Committee is pleased that interdepartmental discussions are underway within the federal government on this wide range of issues, and encourages their pursuit to provide guidance and advice on means of addressing these complex issues in the best interests of Canadians.

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5.7.6 Potential Situations of Conflict of Interest

Advances in human health often involve participation of researchers in academia, in government and in industry. The boundaries between these are becoming increasingly blurred, and much mutual trust and collaboration is required between them. For example:

- The large majority of published health research in Canada is done by researchers in academic institutions, who obtain funding from government, philanthropic and industrial sources.
- Academic researchers are increasingly entrepreneurial, and are the source of many start-up companies which are providing fast economic growth in the biological revolution.
- Industries obtain many of their ideas for new commercial entities, including new interventions in health, from academic research, and are starting to establish research centres in academe in exchange for right of first refusal on intellectual property.

- Government regulates health interventions, as well as contributing to knowledge through its in-house research. Regulations depend on research carried out by industry, often in academic institutions, which is assessed by governmental scientists, who may call on academic scientists for advice and other assistance.

The potential for conflicts of interest are obvious, as are the concerns that, for example, industrial interests in protecting intellectual property and commercial interests might adversely affect the performance or publication of research carried out in public institutions or with public funds. Media attention has rightly focused on instances when these fears appear to have been realised.

The Committee acknowledges that industrial research is an essential component of health research and health care. In fact, our growing abilities to promote health and to prevent, diagnose or treat disease are very largely due to industry. In addition, despite a number of publicized cases with evidence of conflict of interest, the Committee is of the view that the majority of industry works to high standards of ethics, fully consistent with the expectations of Canadians. Indeed, companies cannot expect to survive in today's world if they flout society's expectations.

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However, the Committee understands that the growing role of industry in Canada's health research spectrum, particularly in clinical trials, is a cause for concern. This was highlighted in a recent editorial by the International Committee on Medical Journal Editors, which laid out the ground rules for avoiding conflict of interest in publications.[160] In particular, there is a need to find an appropriate balance between clinical research performed in the academic sector, the ability to compare different treatments for the same disease, the focus of research on diseases in which profits are most likely, (e.g., diseases of wealthy as opposed to poor nations), the publication of negative results (e.g., the need for a registry of all clinical trials), and related areas.

The Committee welcomes the work of CIHR in expanding the collaborative health research programs between academic and industrial research through the University-Industry Program and the CIHR/Rx&D[161] Program. We understand that CIHR partnerships with industry need to be encouraged. However, there is a need to consider whether explicit guidelines should be developed; these guidelines could assist in determining the impact of ethically problematic areas in CIHR's relations with industry. We have learned that CIHR has set up a working group to study this issue. Therefore, the Committee recommends:

That the Canadian Institutes of Health Research, in partnership with industry and other stakeholders, continue

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[160] *See Canadian Medical Association Journal*, 18 September 2001, Vol. 165, pp. 786-788.

[161] Partnership between CIHR and Canada's Research-Based Pharmaceutical Companies.

to explore the ethical aspects of the interface between the sectors with a view to ensuring that the collaborations and partnerships function in the best interests of all Canadians.

CHAPTER SIX

PLANNING FOR HUMAN RESOURCES IN HEALTH CARE

In its previous reports, the Committee documented the importance of coming to terms with the many complex human resource issues in the health care sector. It suggested in Volume Four that this is one area where it is legitimate to speak in terms of a crisis. All subsequent evidence, whether from witnesses representing the full range of health care professionals, from recent academic research or from new reports, has merely served to confirm this initial finding. In this chapter, we review this evidence and present the Committee's recommendations, grouped under two main headings: developing a national strategy to deal with the crisis in the area of health human resources, and the reform of the delivery of primary care and its relation to human resource issues.[162]

6.1 Towards a national strategy for attaining self-sufficiency in health human resources

A survey conducted by CIHI in early 2001 amongst policy-makers, managers and clinical organizations indicated that human resource issues were the dominant theme for the next two to five years.[163] The central manifestation of the difficulties in the area of human resources is the shortage of qualified professionals. Concern over human resource shortages has also spread to the public at large, judging by the results of a recent consultation exercise undertaken by the Government of Ontario. Increasing the number of doctors and nurses in the system was identified as the number one health care priority by thirty-five percent of the more than 400,000 respondents to its household survey, the highest percentage given to any issue.[164]

6.1.1 Shortages of health care professionals

Dr John Ruedy, of the Capital District Health Authority (CDHA) in Halifax, painted a general picture of shortages affecting all aspects of health care delivery. He told the Committee that,

> *CDHA has recently reduced inpatient and surgical services because of a shortage of skilled nursing staff. Within CDHA we currently have 175 vacant nursing positions, with little likelihood that we will be able to fill these positions, despite efforts to recruit new graduates, upgrade licensed practical nurses, and other strategies to increase the supply of nurses. We have recently discontinued our successful liver transplantation*

[162] For a more systematic treatment of the facts and figures in the area of health human resources, we refer readers to Volumes Two and Four of the Committee's ongoing study.
[163] Canadian Institute for Health Information (CIHI), *Canada's Health Care Providers*, 2001, p. 99.
[164] The Strategic Counsel, *Executive Summary: A Public Dialogue on Health Care*, January 2002, p. 19.

program for lack of transplant surgeons. We are also experiencing serious shortages in other disciplines, notably pharmacy, laboratory and radiation therapy.[165]

> ***The Committee notes that there does not appear to be a single region of the country or a single health care discipline that is exempt from this penury of health care personnel.***

The Committee notes that there does not appear to be a single region of the country or a single health care discipline that is exempt from this penury of health care personnel. For example, research conducted for the Mazankowski report, released in January 2002, indicated that Alberta had an immediate need for 333 physician full-time-equivalents and that by 2004-05 an additional 1329 physicians, representing a 29% increase, would be needed.[166] The Association of Registered Nurses of Newfoundland and Labrador informed the Committee that in their province the "number of graduates does not meet the *current* demand for RNs"[167] and that "the current number of new graduates is 40% less than in the early 1990s when the number of funded nursing education seats were higher (180 versus an average of 273)."[168]

The shortage of nursing personnel is not limited to registered nurses (RNs) but also extends to nursing assistants and practical nurses. Mr. Paul Moist, President of the Canadian Union of Public Employees in Manitoba, pointed out that "we are short 600 certified nursing assistants here in the city of Winnipeg, not to mention elsewhere in the province."[169] Allied health professionals are also experiencing the same phenomenon. Mr. Ron Elliott, President of the Canadian Pharmacists Association, indicated that:

Pharmacists, like physicians, nurses and other health care professionals, are facing a shortage. We estimate that we are short 1,500 full-time pharmacists in our country. The problem is particularly acute in hospital and rural settings.[170]

In her testimony before the Committee, Elisabeth Ballerman, President of The Health Sciences Association of Alberta, noted that there were over 20 disciplines that were experiencing important shortages, ranging from physical and occupational therapists to radiography and medical laboratory technologists to public health inspectors.[171]

Dr Ruedy pointed out that this situation is not confined to Canada, telling the Committee that in Ireland, for example,

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165 Brief to the Committee, Nov. 6, 2001, p. 1.
166 *A Framework for Reform. Context Papers: Do We Have a Shortage of Health Care Professionals*, Premier's Advisory Council on Health, Dec. 2001, p. 4.
167 Brief to the Committee, Nov. 5, 2001, p. 5.
168 *Ibid.*, p. 6.
169 30:87
170 38:62.
171 32:62 and brief to the Committee, Oct. 17, 2001, pp. 1-2.

In one of the hospitals, they were dependent upon 200 Indonesian nurses to provide adequate nursing services. The entire cleaning staff were Latvian who could not speak English. So this is a universal, world-wide problem and it is going to get worse…[172]

One factor that is expected to contribute to the worsening of the shortage is the aging of the health care workforce. CIHI recently reported that from 1994 to 2000, the average age of Canadians in health occupations rose almost two years from 39.1 to 40.8 years.[173] This trend is consistent for almost all health care providers. For example, the Committee noted in its previous report that the average age of physicians rose from 46.4 to 47.5 between 1996 and 2000, while CIHI has indicated that the average age of practicing nurses in 2000 was 43 years, up from 41 in 1994.[174] The aging of the workforce means that even more new graduates will be needed to replace health care professionals who will be retiring at an accelerating rate.

6.1.2 Towards self-sufficiency in health human resources

The Committee strongly believes that one of the major consequences of the world-wide nature of the health human resource shortage is that it becomes necessary for countries to assess how to become self-sufficient in human resources. In no other industrialized country is this more important than here in Canada. For example, as the Committee noted in its previous reports, there is less opportunity for young Canadians to attend medical school in Canada than in any other industrialized country. According to the Association of Medical Colleges of Canada (ACMC) Canada is now near last in the ratio of physicians to population among OECD countries. This situation owes much to the decrease in medical school enrolments that came about as a result of the implementation of a select number of recommendations from the Barer-Stoddart report published in 1991.

> ***The Committee strongly believes that one of the major consequences of the world-wide nature of the health human resource shortage is that it becomes necessary for countries to assess how to become self-sufficient in human resources.***

In the past, Canada has relied on International Medical Graduates (IMGs) to fill the gaps. Dr. John A. Cairns, Dean of Medicine, University of British Columbia, told the Committee that it was no longer possible for Canada to rely on past practice. He noted that the majority of IMGs

…used to come from the U.K., but comparative practice opportunities between the U.K. and Canada are not in favour of Canada any longer. We have people going back to the U.K. We have very great difficulty recruiting people from the U.K. at the present time. We go to South Africa. The morality of that is highly questionable.[175]

The ACMC has recently amplified this last point:

172 42:83.
173 CIHI, op. cit., p. 13.
174 Ibid., p. 40.
175 33:76

The morality of recruiting physicians from economically disadvantaged countries must be seriously questioned. Canada is a wealthy nation and it is inappropriate to require poorer countries to incur the heavy cost of medical education only to have their graduates aggressively recruited by a wealthy nation unwilling to make its own appropriate investments in medical education.[176]

The problem of industrialized countries recruiting physicians and other health care professionals from the developing world is of great concern in countries such as South Africa. It was brought to the Committee's attention that the problem is so serious that on at least two occasions in 2001, senior officials, including the South African High Commissioner of South Africa, met with representatives of the Royal College of Physicians and Surgeons to raise their deep concern over the disturbing level of emigration of physicians, surgeons and nurses to other countries, including Canada.

The Committee agrees that it is unacceptable for Canada to poach highly trained graduates from the developing world. It is therefore convinced that, in such a context, the only remaining alternative is to work towards self-sufficiency. This requires being able to define targets for the numbers of the various types of health care provider that are required, something that is far from being an easy task.

…it is clear to the Committee that recent efforts to increase the number of graduates from Canada's medical schools should be pursued.

Despite these difficulties, it is clear to the Committee that recent efforts to increase the number of graduates from Canada's medical schools should be pursued. This is all the more important given the many changes taking place in the medical workforce. Many newer graduates are seeking a better balance between home and work life, and are no longer prepared to work the inordinately long hours that were once the norm. This means that more graduates will be needed. Moreover, the Committee also feels that the number of postgraduate training positions should be raised from its current ratio of one place for every graduating student. As the Committee has noted in earlier reports, funding more postgraduate positions will allow the quicker integration of IMGs seeking Canadian credentials, and afford physicians greater flexibility in planning their careers.

It is thus clear to the Committee that the numbers of nursing graduates as well as of allied health professionals need to be sharply increased, and that the federal government must contribute to helping make this happen.

A decline in the number of graduates in other disciplines was also noted by various witnesses. The Saskatchewan Registered Nurses' Association pointed out that "in Canada in the early 1990's nursing programs were graduating 10,000 students, today it is closer to 4,000," with Saskatchewan having lost 300 funded seats over the same time period, resulting in waiting lists of qualified Saskatchewan

[176] Association of Canadian Medical Colleges, *Strategic Planning for a Sustainable System of Health Care in Canada*, Oct. 2001, p. 13.

applicants.[177]

The Health Sciences Association of Alberta (HSAA) told the Committee that:

> *Enrollment in many programs were cut back through a combination of cuts to health care and advanced education. An example is Medical Laboratory Technology in Alberta, where training schools cut enrollment from 40 students to 20 students.*[178]

And that:

> *To take an even longer-term perspective, enrolment in colleges and universities has not only not kept up with the expanding demands of health care, but many of them have actually decreased. Human Resources Development Canada (in its Job Futures 2000 Program) indicates that many allied health worker disciplines have seen a decrease in the number of graduating students. For example, HRDC indicates that in 1997, there were 530 graduates from medical laboratory technology programs across the country - a 42% decrease from 1987. Diagnostic Imaging had a 15% decrease in graduation over the same period. This is an astounding figure, considering the ever increasing demand for technical and professional employees due to both the new technologies and a growing population.*[179]

The decline in the number of graduates has also been compounded by what has been called 'credential creep.' This refers to the gradual increase in the educational levels required to gain employment in a particular field, often driven by the increasing complexity of the work involved. The HSAA gave the examples of the Michener Institute in Ontario that has recently moved from a two-year program in medical radiation technology and nuclear medicine, to a five-year program, and of the proposal in Alberta to require a masters level program for entry to clinical practice in physical therapy.[180]

Among the consequences of 'credential creep' are that it takes longer to train new graduates, who must make a correspondingly greater commitment of time and money to acquire the necessary training, and who will therefore expect salaries that are commensurate with their levels of training and education. In addition, the proliferation of new equipment means that provision must be made for ongoing training, a process that puts further pressure on limited financial and human resources. It is of no use to invest in expensive equipment if there is not sufficient qualified personnel available to ensure that it is properly used.

It is thus clear to the Committee that the numbers of nursing graduates as well as of allied health professionals need to be sharply increased, and that the federal government must contribute to helping make this happen. The Committee therefore recommends:

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177 Brief to the Committee, Oct. 16, 2001, p. 7.
178 Brief to the Committee, Oct. 17, 2001, p. 4.
179 *Ibid.*
180 Brief to the Committee, pp. 5-6

That the federal government:

- **Work with provincial governments to ensure that all medical schools and schools of nursing receive the funding increments required to permit necessary enrolment expansion.**

- **Review mechanisms by which direct federal funding could be provided to support expanded enrolment in medical and nursing education, and ensure the stability of funding for the training and education of allied health professionals.**

- **Review student loan programs available to health care professionals and make modifications to ensure that the impact of inevitable increases in tuition fees, especially as they affect medical students, does not lead to denial of opportunity to students in lower socio-economic circumstances.**

- **Provide particular tuition support for nursing students, up to and including waiving tuition fees entirely for a limited period of time.**

- **Work with provincial governments to ensure that the relative wage levels paid to different categories of health professionals reflect the real level of education and training required of them.**

6.1.3 Increasing the supply of health care providers from Canada's Aboriginal peoples

In its previous reports, the Committee noted that there was a serious shortage of health care providers from Aboriginal backgrounds. A number of witnesses addressed this problem, in particular with regard to the training of Aboriginal physicians. Dr. Henry Haddad, President of the CMA, noted that to the best of his knowledge there were only about 50 physicians from Aboriginal backgrounds in the entire country.[181] This represents less than one tenth of one percent of the total of more than 57,000 practising physicians in Canada in 2000.[182]

Dr. Joanna Bates, Associate Dean, Admission, University of British Columbia, told the Committee about initiatives taken at her University to encourage greater numbers of students from Aboriginal backgrounds to pursue careers in health-related fields. In the first place, she pointed out that it was necessary to identify barriers that come into play even before Aboriginal students graduate from high school.

[181] 42:102
[182] CIHI, op. cit. p. 10.

(…) we have identified a number of significant barriers to the acceptance and the involvement of Aboriginal people and students entering into faculties, not just medicine but other health careers as well. Specifically, issues around early education are major issues in having Aboriginal people achieve the level of education required to enter professional faculties. The issue of dropout rates and lack of completion at the high school level prevents many Aboriginal students from even getting to the point where they could consider a health professional career.[183]

Other obstacles rooted in cultural differences make themselves felt during the admission process. She noted that admission procedures designed for non-aboriginals

(…) do not accommodate the communication processes that occur with Aboriginal students who are raised on reserves. For example, we look for rapport development with eye contact, and that is not culturally appropriate.[184]

Dr. Bates insisted that it was not a matter of applying different standards to students from different backgrounds, but rather of being aware of the full impact of culturally conditioned behaviour and sensitivities. Thus, she affirmed that:

…we do not mean lower admission standards at all. We are often asked that question. We have similar admission standards for all applicants, but we feel that we have not been identifying appropriately excellence and performance in certain groups, including Aboriginal students.[185]

The Committee expresses its support for these kinds of initiatives. It also notes with approval the financial assistance being provided to aboriginal students by organizations such as the CMA. In this regard, witnesses noted that rises in tuition fees compounded the problem of recruiting Aboriginal and other minority students to careers in health care. For example, Dr. John Ruedy of the Capital District Health District in Halifax told the Committee,

We have had an unbelievably difficult problem in this province in attracting our Aboriginal, Mi'kmaq and Black sons and daughters into medical school. Part of that has been that high school, home and peer environments make it appear beyond expectation that these individuals could ever afford to go to medical school. It is not that they do not have the brains, it is just economically beyond them. This has been seriously augmented by the very large increases in tuition that have occurred over the last five years.[186]

The Committee therefore recommends:

[183] 33:58
[184] 33:59
[185] 33:59
[186] 42:93

That the federal government work with the provinces and medical and nursing faculties to finance places for students from aboriginal backgrounds over and above those available to the general population.

6.1.4 Dealing with 'The Brain Drain'

In its previous reports the Committee noted that for both doctors and nurses, the two groups of health care professionals whose emigration from the country has provoked the most concern, it was their perceived inability to practice in a way that allowed them to make full use of their training that was often central to their decision to move abroad. This was contrary to some people's impression that tax relief measures alone might be sufficient to lure health care professionals into returning to Canada.

A recent examination of the 'Brain Drain' by Ross Finnie of Queen's University pointed out in this regard that overall reinvestment in the health care system would create a kind of virtuous circle in policy terms. By reaffirming that better health care is its own worthwhile goal it would help create the conditions that would lead to a reduction in the brain drain. This, in turn, would mean a better supply of health care professionals and reinforce further the ability of the system to provide the kind of care that these professionals have been trained to deliver.[187]

It is worth noting that recruiters abroad are acutely aware of the desire of Canadian health care professionals to be able to practice in a way that allowed them to make full use of their training. This point was illustrated by an article in La Presse that cited a recruiter from Lausanne, Switzerland, who had been importing nurses from Quebec for over 25 years. He said that, "two-thirds of Quebeckers who come here say that their motivation is to be able to really put into practice the health care policy for which they have been trained."[188] His efforts have been so successful over the years that 249 nurses from Quebec now work in his hospital, and Quebeckers in general represent 15% of the total staff.

There are no shortcuts to making the working conditions in Canada's hospitals sufficiently attractive to recruit and retain health care graduates. For example, the Committee highlighted in its fourth report the range of factors that would have to be addressed in order to alleviate the crisis in nursing:

- the place where the work takes place must itself be healthy, safe and secure
- the tools required to do the job must be in place
- the work being done must be interesting and attractive enough to offer its own intrinsic rewards to those who carry it out - and at the same time must be adequately rewarded, recognized and respected externally

[187] Finnie, Ross, "The Brain Drain: Myth and Reality — What It Is and What Should be Done," in *Choices* Vol. 7, No. 6, Nov. 2001, p. 18.

[188] Gilles Toupin "La Suisse maraude les infirmières québécoises," La Presse, July 21, 2001. (Translation of: « les deux tiers des Québécois qui débarquent chez nous disent dans leurs lettres de motivation qu'ils veulent pouvoir répondre réellement à la politique en soins pour laquelle ils ont été formés ».)

- working hours and the interplay of home life and work life must be addressed, particularly in a workforce largely staffed by women

At the same time, the Committee believes that there are certain measures that should be envisaged to deal specifically with the problem of health care professionals who have moved abroad. Given that it will take years for a sufficient number of new graduates to be trained, it makes sense to work to repatriate Canadians who already have the necessary training, experience and skills.

…the Committee believes that there are certain measures that should be envisaged to deal specifically with the problem of health care professionals who have moved abroad.

The Committee believes that this effort should involve two main elements. On the one hand, the different levels of government and the various professional associations should work together in order to make sure that Canadians abroad are made aware of the changes being introduced into the health care system, and of the new possibilities for professional practice that are arising. The Committee notes that Nova Scotia recently undertook a 10-week campaign along these lines to woo back nurses who had left for the U.S.[189]

On the other hand, certain short-term incentives should be considered in order to make returning to the country as attractive as possible and to defray some of the costs associated with re-establishing oneself in professional practice. In a recent article, "Why do highly skilled Canadians stay in Canada?" the authors pointed out that,

> *In the late 1960s, after a decade of the brain drain to the United States, Canada induced Canadian academics to return with a combination of attractive career opportunities and three years of federal income tax forgiveness.*[190]

Dr. Peter Barrett, former president of the CMA, suggests that this historical precedent could be applied to the design of some sort of short-term income tax relief targeted at doctors. The Committee believes that these same measures should also be considered for nurses and other health care professionals in short supply, where there is evidence that they have moved abroad in significant numbers. The Committee therefore recommends:

That in order to facilitate the return to Canada of Canadian health care professionals who are working abroad, the federal government should work with the provinces and professional associations to inform expatriate Canadian health professionals of emerging job opportunities in Canada, and explore the possibility of adopting short-term tax incentives for those prepared to return to Canada.

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189 Steve Proctor, "N.S. works to rehire nurses who went south", Halifax Herald, Nov. 29, 2001.
190 Cited in Peter Barrett "Who Let the Docs Out?" in *Choices* Vol. 7, No. 6, Nov. 2001, p. 43. The original article by DeVoretz and Iturralde appeared in *Policy Options*, Vol. 22, no. 2, March 2001.

6.1.5 The need for a national health human resources strategy

> ***Thus, the Committee believes that it is difficult to see how it could be possible to attain the objective of self-sufficiency in health human resources unless there is long-term cooperation and coordination amongst all stakeholders, from government through the professional associations to educators in the health care field.***

Throughout the Committee's hearings witnesses have repeatedly stressed the need for a national health human resources strategy, a proposal which the Committee endorsed in Principle Fourteen in Chapter Two of this report. The question remains, however, as to who should be responsible for the development of such a strategy and how such a strategy should be implemented. The recommendations that have been advanced in this chapter already point to many of the reasons such a strategy is required. Thus, the Committee believes that it is difficult to see how it could be possible to attain the objective of self-sufficiency in health human resources unless there is long-term cooperation and coordination amongst all stakeholders, from government through the professional associations to educators in the health care field.

At the same time, however, it is clear that the need for such a national strategy has long been recognized. One therefore has to wonder why it has proven to be so difficult to formulate. The British Columbia Medical Association noted in its brief to the Committee that,

> *A national health human resource strategy is indeed what we need, although its development has proved virtually impossible over the course of the past three decades.*[191]

In the Committee's view, moving forward in this regard entails recognizing that such a strategy must not be a 'federal' one, with input only or primarily from the senior level of government, but must rather involve all stakeholders, while recognizing that the training and education of health care professionals is a provincial responsibility.

There are other factors that reinforce the need for a national strategy that are worth noting as well. Ms. June Blau, President, Saskatchewan Registered Nurses' Association, told the Committee that not only is her province not training enough nurses to meet its own needs but that other provinces have traditionally relied on nurses trained elsewhere to meet their own requirements:

> *We are limited in Saskatchewan right now to 260 seats; we need at least 400. The Province of British Columbia, for example, has only ever trained 50 per cent or less because they rely on recruitment from other provinces. So we train and they use. And that has been the philosophy ever since I became a nurse.*[192]

[191] Brief to the Committee, Oct. 10, 2001, p. 5.
[192] 31:7

In the Committee's opinion, problems relating to inter-provincial competition for graduates in health-related fields, further highlights the centrality of developing a national strategy with regard to health human resources. Competition between different jurisdictions for scarce human resources can lead to severe disparities in the ability of various regions to provide health care services.

At the same time, of course, it is true that different provinces and regions of the country offer different attractions that will appeal to health care professionals for a variety of reasons. The Honourable Jamie Ballem, Minister of Health and Social Services in Prince Edward Island, told the Committee,

In the Committee's opinion, problems relating to inter-provincial competition for graduates in health-related fields, further highlights the centrality of developing a national strategy with regard to health human resources.

> *We have a situation where the perception is that health care is measured by how much money you spend, how many doctors you have, how many nurses you have…However, when you try getting more doctors, they are just not available. Money is not the issue. More nurses are needed; we have 40-plus vacancies in our nursing structure right now. I budget for more than that every year, for all those vacancies, and we will pay more than that in overtime. It is not a question of creating more positions. We just cannot get the bodies.*
>
> *Thus we are looking at how to utilize the health professionals that we have: what the mix will look like, and who does what. We are trying to have attractive recruitment and retention packages. We are trying to make the workplace something that is attractive to keep people here. We cannot compete in dollars. If it was just a case of dollars and cents, everybody would be in Alberta. We are trying to create a situation in this province whereby it is an attractive opportunity for someone to come and practise their profession.*[193]

There is also evidence that there is fierce financial competition for many categories of health care professionals, not only between various regions of the country, but also between public and private providers. The Health Sciences Association of Alberta gave the following examples to the Committee:

> *The private sector in radiology in Alberta offers comparable wages, but usually better working hours and conditions (i.e. less shift work, weekends and call-backs). As a result, we have seen an exodus of diagnostic imaging technologists to the private sector. However, the expectations for services in the public sector has not diminished, which in turn creates an overburdened workforce of employees who remain in the public sector.*

[193] 43:55

Another example of private sector competition affecting the public sector is in pharmacy services. Because of the international shortage in Pharmacists, the private sector has been paying much higher wages than the public sector. Beyond wages, the profit sharing and other compensation schemes can result in many Pharmacists earning $20,000-$30,000 a year more in the private sector.[194]

Finally, there is the seemingly intractable problem of the geographical maldistribution of physicians. In its previous reports the Committee repeatedly highlighted the long-standing difficulties in ensuring an adequate supply of health care professionals to the rural and remote regions of the country. Amongst the strategies that were proposed to the Committee to increase the number of physicians who were interested in practising in rural Canada was the oft-repeated idea that by exposing medical students to the reality of rural practice, many would choose to locate there. The Committee heard evidence that this kind of strategy does indeed work. Mr. John Malcolm, Chief Executive Officer, Cape Breton Regional Health Care Complex, gave the following account to the Committee:

You must consider the needs of rural Canada. When Dr. Ruedy was Dean, his department approached us about the idea of establishing a rural family medicine program. We jumped at that – to the point that we found all of the costs to operate the program locally. The university found the cost for the residents…

We have no vacancies in any of the communities around the Cabot Trail and, in fact, we have one community where we appear to have one physician who wants to come more than what we need next year. If you expose people to the opportunity of rural practice, they will choose rural practice just as I choose to live in rural Canada and not return to urban Canada.[195]

The Association of Canadian Medical Colleges (ACMC) has recently argued that there are three major problems that must be confronted in trying to address regional maldistribution:

- The concentration in large urban centres—physicians tend to concentrate in areas of larger population with greater ranges of educational, religious, cultural and recreational opportunities for families and working opportunities for spouses.
- The fact that rural practice has specific demands, with professional practice considerations including heavy "on-call" and "burn-out" factors in rural communities.
- The emergence of an increasing number of opportunities for physicians in urban centres as the shortage of physicians in Canada increases in urban communities.

[194] Brief to the Committee, p. 5.
[195] 42:85-86

The ACMC also points out that the issues that need to be addressed include "recruitment of students with backgrounds that may be suited to a rural or remote practice, support of physicians in rural or remote locations (locums), improved use of telehealth, and increasing the exposure of trainees to rural and remote practices."[196] The Committee agrees with these goals. It also endorses the idea that any contractual arrangements entered into by physicians promising to practice in rural areas should be voluntary. Coercive measures to force physicians into rural or remote practices are to be discouraged, as was affirmed by the Ontario Government's January, 2001 Expert Panel on Health Professional Human Resources Report. It included as one of its core principles that "strategies to improve the distribution of health care professionals should be designed to attract and encourage them to practice in areas of need rather than penalizing them for not doing so."[197]

The Committee would also like to acknowledge the enormous contribution made by the tens of thousands of Canadians who volunteer literally millions of hours of their time in the health care sector. Without them the impact of the shortages of both human and material resources that plague the health care system would be magnified many times over. CIHI notes that a recent Statistics Canada survey found that health organizations benefited from about 9% of the 1.05 billion hours that Canadians volunteered in 2000.[198] In this regard, Ms Maude Peach, the former Director of Volunteer Resources with the Health Care Corporation of St. John's, told the Committee that in Newfoundland, "volunteers contribute millions of hours a year helping people who are ill, elderly, disabled, disadvantaged, and illiterate."[199] The Committee wishes to encourage Canadians to continue to contribute to the health care sector by volunteering.

There have been a number of initiatives already undertaken to move in the direction of better coordinating human resource planning. A recent study released at the Premier's conference in Victoria called for provinces and territories to consider solutions that aim to increase the number of health care workers in their own jurisdictions while not recruiting workers from other parts of the country.[200] Mr. William Tholl, CEO of the Canadian Medical Association (CMA), told the Committee that the CMA was working with other organizations of health care providers to develop a multi-disciplinary study that will assess human resource needs based on a disease-based or patients perspective.[201]

The Committee welcomes the announcement last fall by the Minister of Human Resources Development Canada (HRDC), The Honourable Jane Stewart, that her department is undertaking two important sectoral studies in order to gauge the precise human resources needs for physicians and nurses. The Committee believes that this marks an important step in the direction of developing a national approach with regard

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196 ACMC, *op. cit*., p. 10.
197 Cited in CAIR's brief to the Committee, p. 14
198 CIHI, op. cit., p. 13.
199 41:40
200 CIHI, *op. cit*., p. 75.
201 42:109

to health human resources. Each of these studies will systematically analyse the labour market and culminate in the elaboration of a strategy designed to ensure an adequate supply of appropriately trained professionals.

The physician study will comprise three phases, lasting around three years:

- *Phase* 1, 9-12 months - A situational analysis reviewing health care delivery models, factors influencing the physician workforce and profiling the physician workforce.
- *Phase* 2, 12-18 months - A comprehensive human resource analysis of physicians to gather and analyze information on issues impacting on the supply of, and demand for, physicians.
- *Phase* 3, 12 months - Develop a human resource strategy for physicians through a consultative mechanism involving all relevant stakeholders.

For its part, the nursing study has two phases, that will take two years to complete:

- *Phase* 1 (duration - 20 months) - A comprehensive analysis of the nursing labour market will be undertaken, including the development of nursing requirements under various delivery model options.
- *Phase* 2 (duration - 5 months) - A systematic strategy development process will be developed, based on the information developed under Phase 1 of the project, and using input from stakeholders in the nursing sector, including provincial and territorial governments.

The Committee notes with approval the involvement of all the key stakeholders, including provincial representatives, in the process of producing these studies. Despite their importance, however, these HRDC reports should not be seen as all that needs to be done. Given the length of the anticipated time frame for the completion of theses studies, the Committee feels that the measures and initiatives it has recommended in this chapter should not wait that long to be considered. The Committee wishes to stress the importance of acting quickly in this area, while at the same time making sure that the implementation of the strategies that will flow from these reports be seen as part of a longer term health human resources planning process.

The Committee firmly believes that the federal government must play an even stronger role than it has to date in coordinating efforts to deal with health human resources shortages.

The Committee firmly believes that the federal government must play an even stronger role than it has to date in coordinating efforts to deal with health human resources shortages. Given that it is clear that there can be no 'quick fix' and that a wide range of interests and concerns must be incorporated in the search for long-term solutions, it would seem appropriate to establish an ongoing framework for dealing with human resource issues. The Committee therefore recommends:

That the federal Government work with other concerned parties to create a permanent national coordinating body for health human resources, to be composed of representatives of key stakeholder groups and of the different levels of government. Its mandate would include:

- **disseminating up-to-date data on human resource needs;**
- **coordinating initiatives to ensure that adequate numbers of graduates are being trained to meet the goal of self-sufficiency in health human resources;**
- **sharing and promoting best practices with regard to strategies for retaining skilled health care professionals and coordinating efforts to repatriate Canadian health care professionals who have emigrated to other countries;**
- **recommending strategies for increasing the supply of health care professionals from under-represented groups, such as Canada's Aboriginal peoples, and in under-serviced regions, particularly the rural and remote areas of the country;**
- **examination of the possibilities for greater coordination of licensing and immigration requirements between the various levels of government.**

6.2 Health Human Resources and Primary Care Reform

As the Committee pointed out in its *Issues and Options* report (Volume Four), the way the delivery of primary care is organized will have a significant impact on our ability to make the best possible use of health human resources.

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Primary health care constitutes the first point of contact with the health care system. At present, primary care delivery in Canada is organized mainly around family physicians and general practitioners working in solo or small group practices. Approximately one-third of primary care physicians are solo practitioners and fewer than 10 percent of primary care physicians work in multidisciplinary practices. The vast majority of primary care practices are owned and managed by physicians. Fee-for-service (FFS) payment is the dominant form of physician remuneration. Almost 90% of family physicians surveyed by the Canadian College of

Family Physicians in 2001, said they received some proportion of their earnings in the form of fee-for-service payments,[202] and FFS payments accounted for an average of 88 percent of their total income.[203]

There is no legislative requirement that directly establishes the dominance of FFS payment of physicians. One can, however, identify two of the central features of Canada's health care system that have contributed to the structure of primary care delivery that prevails today. On the one hand, the original bargain that was struck between government and physicians to incorporate the principle of public payment for private medical practice had the effect of placing physicians at the centre of the health care system, and enshrining FFS as the dominant mode of remuneration.[204] At the same time, limiting the definition of "comprehensive" medically necessary coverage under the *Canada Health Act* to hospital and physician services has reinforced this same trend.

Thus, when the Committee spoke in Volume Four of the existence of a perceived 'hierarchy' amongst the health professions, with specialist physicians at the apex, it was highlighting this structural tendency within the Canadian health care system. The fact that this structure is given shape in part by the *Canada Health Act* is one reason that it is important for the Committee to examine the issues of health human resources and primary care reform, even though the main responsibility for policy in these areas lies with Provincial and Territorial governments.

6.2.1 Support for Primary Care Reform

Over the years there have been numerous initiatives aimed at encouraging different ways of delivering primary care that could take advantage of more cooperation amongst, and better coordination between, health care providers. But, as a recent study of primary care in Canada by Hutchison *et. al.*, notes:

> *Despite their wide variety and substantial numbers, innovations in the organization, funding, and delivery of primary care in Canada have been at the margins of primary care rather than at its core. Except in Quebec, where 20 percent of family physicians and GPs work in CLSCs,[205] either full or part time, physicians participating in primary care reform projects or working in unconventional practice settings are in a tiny minority. In Ontario, with its long-established Community Health Centre and Health Service Organization programs and Canada's largest provincial primary care reform scheme, only about 5 percent of physicians participate in alternative models of primary care funding and delivery.[206]*

[202] Canadian Institute for Health Information (CIHI), *Canada's Health Care Providers*, 2001, p. 73.
[203] Hutchison, Brian and Julia Abelson and John Lavis, "Primary Care in Canada: So Much Innovation, So Little Change," in *Health Affairs*, Vol. 20 No. 3, May-June 2001, p. 117.
[204] *Ibid.*, p. 118.
[205] Quebec's 'Centres locaux de services communitaires' (CLSCs) constitute a network of community clinics that offer a range of health-related services.
[206] Hutchison, *op. cit.*, p. 122.

During its hearings the Committee repeatedly heard that this lack of progress in reforming primary care delivery was, at present, not primarily the result of opposition from health care professionals each seeking to protect their particular bit of turf. From established physicians to residents and internes, through representatives of professional bodies and educational institutions, doctors across the country insisted that they were open to alternative forms of organizing primary care delivery and of remuneration.

In this vein, Dr. Henry Haddad, President of the Canadian Medical Association, told the Committee that "there is a prevailing myth that physicians are a barrier to change when in fact many of the progressive changes in the health care system have been more often than not physician lead." He indicated that "Canadian physicians are willing to work in teams and the CMA has developed a "Scopes of Practice" policy that clearly supports a collaborative and cooperative approach," adding that "contrary to popular belief, physicians are very open to alternate payment models."[207]

Witnesses noted that one of the factors that had contributed to fostering this growing collaborative spirit was the narrowing of the gap in educational levels between physicians and other health care professionals. As well, the changing demographics and career patterns of newly graduated physicians has also had an impact on attitudes towards change. The Canadian Association of Internes and Residents told the Committee:

> *Medical residents and new physicians often have a different set of personal and professional values, priorities, and workload expectations, flowing in part from a commitment to a more balanced approach to career, family, and well-being. These new values are increasingly playing a role in career and remuneration decisions. As a result, new physicians tend to be more open to alternative methods of compensation and health care delivery than traditional fee-for-service or solo physician practice.*[208]

However, some physician representatives, noting that a number of important questions remain unanswered, cautioned that primary care reform was unlikely to be a panacea for all the ills plaguing the health care system. In the words of Dr. Heidi Oetter, President of the British Columbia Medical Association:

> *While the models that have been piloted to date may, arguably, provide better overall quality care, there is no evidence to date to suggest that these models have reduced costs or are generally applicable to the entire health care system. Quality must be the primary goal, but it will likely come with a higher price tag. It has been said that care delivery can conform to any two of the three characteristics of good, fast and cheap, but not all three simultaneously. Primary care is no different.*[209]

[207] Testimony before the Committee, Halifax, Nov. 6, 2001, p. 3 of speaking notes.
[208] "The New Face of Medicine: Sustaining and Enhancing Medicare," brief to the Committee, Nov. 2001, p. 4.
[209] Brief to the Committee, Oct. 19, 2001, p. 8.

Witnesses representing organizations of registered nurses were unanimous in their assessment that primary care reform was essential to preserving and improving the state of health of Canadians and making better use of the full range of skills possessed by diverse health care providers. Thus, the Association of Registered Nurses of Newfoundland and Labrador suggested "that the best approach for achieving the intersectoral cooperation required to formulate and implement a national population health strategy is to embrace the primary health care and wellness model as the basis for the delivery of health services in the country."[210] The Saskatchewan Registered Nurses' Association affirmed their belief "that the Primary Care Teams are the fundamental building blocks to the sustainability of a publicly funded health system,"[211] while the Registered Nurses of Ontario urged "the Standing Committee to recommend the implementation of true primary health care reform, with 24/7 care being delivered by interdisciplinary teams of health care professionals."[212]

Representatives of other categories of nurses also endorsed the idea of primary care reform. Pat Fredrickson, President of the Canadian Practical Nurses Association, told the Committee that:

> *Licensed practical nurses (LPNs) are both a practical and cost effective way of alleviating the shortage of nurses and averting an even more critical nursing crisis. We would strongly support a move away from the hierarchical way of thinking to support your assumption that each profession has its particular strengths, and these all need to be properly valued and deployed.*[213]

She noted that across the nursing profession as a whole there has been an increase in the levels of education and training, telling the Committee that "just as the registered nurses' education and scope of practice has expanded in recent years so has that of the LPN."[214] But she argued that this has not yet led to the deployment of the full competencies of LPNs, noting that "the examples in this country where the knowledge and skills of an LPN are used to their full scope of practice are few and far between."[215]

And just as there have been historical tensions between nurses and doctors over scope of practice issues, so too have LPNs felt that RNs have been guilty of guarding their own prerogatives. Ms. Fredrickson told the Committee:

> *The greatest underutilization is also where there is the greatest shortage of registered nurses. The biggest barrier to the utilization of the LPN is in the facilities where the unions protect the turf of the registered nurse through restrictive collective agreements.*

At the same time, representatives of the Association of Registered Nurses of Newfoundland and Labrador told the Committee that they supported "the implementation of

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210 Brief to the Committee, Nov. 5, 2001, p.4.
211 Brief to the Committee, Oct. 16, 2001, p. 4.
212 Brief to the Committee, Oct. 30, 2001, p. 16.
213 32:56
214 *Ibid.*
215 32:57

practices that enable *both RNs and LPNs to work to the full potential* of their approved scope of practice and within their level of competence."[216]

Finally, representatives of some allied health care professionals also expressed support for the idea of primary care reform. The Ontario Association of Optometrists told the Committee that "as primary eye care providers, we are prepared to participate as part of the multi-disciplinary team vital to the primary care reform goals."[217] Mr Ron Elliott, President of the Canadian Pharmacists Association indicated that his organization "strongly supports the need for reform of the current hierarchy of health care professionals" and that it believes "that scopes of practice need to change in order to improve effectiveness and efficiency."[218]

Other witnesses also highlighted the importance of reviewing professional scope of practice rules in order to ensure that as few barriers as possible are put in the way of fruitful collaboration amongst health care providers. Mr. Gerry Fahey, Executive Director, Health Professions Council of British Columbia explained to the Committee the rationale behind the recommendations contained in a major review conducted in that province. He noted that in the old system, known as the 'exclusive scopes-of-practice system,' "each profession is granted a descriptive statement of its practice, which is, generally, very broad, and within that statement they have the exclusive right to perform."[219] The new system that the Council proposed, based on one in place in Ontario, is called the 'reserved-axe' or 'controlled-axe' model. Mr. Fahey explained that,

> *The theme of this system is to increase choice amongst health care professionals within safe parameters. In more basic terms, if people are trained and educated to perform certain tasks, they should be allowed to perform them.*[220]

He noted that this new system would help to promote interdisciplinary practice, and that, in particular, "the reserved-axe model will assist in promoting specialized practice for nursing and primary roles for nursing."[221]

Moreover, he pointed out that there were often barriers to expanding inter-disciplinary collaboration contained in legislation as well, telling the Committee that,

> *(…) buried amidst all this subordinate legislation, regulatory instruments and bylaws, there are, even for one profession, many rules that create barriers for other professions. For example, there are provisions in several statutes that prevent a member of a profession from practicing with another. There are provisions preventing prescription release. There are provisions about who controls laboratory facilities. We identified these*

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216 Brief to the Committee, p. 8. Emphasis in the original.
217 Brief to the Committee, Oct. 29, 2001, p. 5.
218 38:61
219 33:60
220 33:61
221 Ibid.

as not only barriers to access to the public, but also barriers to solutions coming from government in terms of how they want to use health care personnel.[222]

The Committee strongly believes that revisions to scope of practice rules and other regulations that promote greater flexibility and encourage collaboration amongst health care professionals are to be welcomed.

The Committee strongly believes that revisions to scope of practice rules and other regulations that promote greater flexibility and encourage collaboration amongst health care professionals are to be welcomed, and that, as noted in Principle Twelve in Chapter Two, these should be developed so as to enable all health care providers in the primary care sector to provide the full range of services for which they have been trained. It also expresses the hope that these can be made as uniform as possible across the country.

6.2.2 Inter-Disciplinary Education

In order for primary care reform to succeed, several witnesses stressed the importance of ensuring that the education of health care professionals exposed them to the benefits and exigencies of inter-disciplinary teamwork. Dr. John H.V. Gilbert, Coordinator of Health Sciences at the University of British Columbia, affirmed that "if we are serious about changing the extant hierarchical way of thinking, then I contend we should pay serious attention to the manner in which health care professionals are educated." He added that his sense "is that one of the reasons we are not using our health professional, again, to quote, 'to anything like the full extent of their capabilities', is because their educational programs are structured in such a fashion that they do not foster an understanding of the particular strengths and scopes of practice of each other."[223] His conclusion was that "we need a national health education program with resources to underwrite program development and evaluation at least on a par with some of the social science institutes in the CIHR."[224]

Dr. John Ruedy, Vice President Academic Affairs of the Capital District Health Authority in Halifax, expressed a similar view:

(…) experiential learning of health professionals is dependent on students' access to models of health care teams. Professional silos are perpetuated by educational programs that have little relationship to one another. We need to develop core professional education programs that have different exit points for different health professions.[225]

The Canadian Association of Interns and Residents (CAIR) noted that medical education had already begun to shift its focus somewhat, incorporating a greater emphasis on "multi-disciplinary education, so that physicians are learning and working with other members of the health care team including nurses and nurse practitioners, physiotherapists, occupational

[222] 33:61-62
[223] 33:111
[224] 33:112
[225] Brief to the Committee, Nov. 6, 2001, p. 3.

therapists, social workers and dentists."[226] Dr. Gilbert told the Committee that the University of British Columbia had just become the first University in the world to establish a college of health disciplines,[227] that involves the affiliation of seven faculties that have agreed to collaborate to promote inter-disciplinary education.

Nonetheless a note of caution in this regard was sounded by CIHI in a recent study entitled *Canada's Health Care Providers*:

> *Does inter-professional education make a difference? If yes, how much? An international systematic review in May 2000 looked at its effects on professional practice and health care outcomes. Given the current state of research, the authors concluded that the jury is still out on possible outcomes.*[228]

6.2.3 What model for primary care reform?

> ***The Committee is convinced that the reform of primary care delivery is essential to ensuring the sustainability of Canada's health care system.***

A concern of a number of the physicians who appeared before the Committee was that any move to reform primary care be done on a voluntary basis. The Canadian Association of Internes and Residents (CAIR) insisted that, "change will only be successful with the willing and constructive participation and input of the various providers involved in the delivery of health care; if they are alienated by the imposition of coercive measures, their needed goodwill, expertise, morale and cooperation will be seriously undermined."[229]

A second concern, expressed by the British Columbia Medical Association, had to do with the structure of the inter-disciplinary team that would be responsible for patient care in most reform scenarios. They indicated that in their view it was necessary for physicians to retain a leadership role within these group practices.

> *What is important to physicians and to patients, we believe, is that each team requires a leader who will accept ultimate responsibility for the patient.*
>
> *When patients arrive at the physician's office, they do not know their specific condition, they simply know their symptoms. This 'information asymmetry' requires the professional attention of the best-trained generalist, the GP, who can treat or triage for the entire spectrum of patient needs. The full spectrum GP at the point of entry to care is a fundamental strength of Canada's health system and highly valued by the public. The analogy that you don't need an electrician to change a light bulb is true, once you know*

[226] Brief to the Committee, p. 8.
[227] 33:123
[228] CIHI, *op. cit.*, p. 60.
[229] Brief to the Committee, pp. 5-6.

the light bulb is the problem. If, on the other hand, you come home and the lights won't go on, all you know is that it is dark. The problem could have multiple causes, only one of which is a faulty light bulb. If you call in a 'light bulb changer' and that doesn't solve the problem, then a fuse box technician and finally the electrician, you not only have misused resources, but may have caused harm while waiting. The point is, patients don't arrive at the physician's doorstep with a label; they arrive with a complex array of symptoms and complaints that require diagnosis.[230]

Other witnesses, suggested that the reluctance that was still evident on the part of doctors to abandon their central role in the system could inhibit the reform of primary care delivery. Thus, June Blau, of the Saskatchewan Registered Nurses Association, told the Committee:

Doctors are very powerful and do not want to abandon the fee-for-service system. They are afraid that we will short-change them. I do not think anybody realizes how many hours doctors put in per week. I have a daughter who is a family physician, so I am probably more aware than anybody. If and when we put physicians on salary, it will be a very good salary, as it ought to be.

We ought to be recognizing nurses in a similar way. We have to get rid of the hierarchy; doctors are not better than nurses, nurses are not better than LPNs or RPNs, and RPNs are not better than aides. This is not a hierarchy; this is a team. Each profession has some things that only it can do, each has areas of overlap, and we need to work in a team that takes advantage of all of those resources in the best way possible and achieve the efficiencies that come with that. What we have now is everybody working in silos, and with diseases in silos, instead of looking at health as a big picture.[231]

On the whole, witnesses from all the health care professions believed that new forms of remuneration were essential, and that exclusive reliance on FFS was incompatible with widespread reform of primary care delivery. However, it was also generally agreed that there was no single 'cookie-cutter' formula that could be applied in all circumstances.

Witnesses argued that each form of remuneration had both advantages and disadvantages. FFS was seen to penalize physicians for spending longer periods of time with patients presenting complex cases. While it was recognized that FFS also encouraged doctors to be strong advocates for their patients within the system, there was concern that this contributed to phenomena such as the ordering of unnecessary diagnostic tests.

Capitation and rostering, on the other hand, were seen to facilitate the integration of primary care services and to emphasize quality care, including preventative medicine, over quantity, but at the cost of potentially generating an incentive for primary care

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[230] "Setting Sail: Health Care in Transition," brief to the Committee, Oct. 19, 2001, pp. 9-10.
[231] 31:21

providers to not order all the tests that might be required (because they would be responsible for covering all or part of the costs of these tests out of a fixed per-patient budget).

Several witnesses referred to the study by Hutchison *et. al.* that indicated that "strong evidence is lacking to support the superiority of any one model of organizing, funding, and delivering primary care and of many suggested model components, including group practice, multidisciplinary practice, and remuneration methods."[232] It is worth citing the detailed conclusions reached by these same authors:

> *As we assess the state of evidence regarding primary care physician Payment methods based on the strongest, most relevant studies we have been able to identify, we see the following:*
>
> 1. *There is suggestive evidence that patients' assessments of overall satisfaction and access/availability are more positive in settings with FFS as opposed to salary or capitation payment.*
> 2. *There is minimal or conflicting evidence regarding patients' assessments of continuity, comprehensiveness, coordination, technical quality, and interpersonal aspects of care.*
> 3. *There is minimal evidence regarding practice patterns (for example, frequency of home visits and length of office visits).*
> 4. *There is suggestive evidence that capitation payment results in higher rates of referrals to specialists.*
> 5. *There is minimal or conflicting evidence regarding quality, utilization, and costs of care.*
> 6. *There is minimal evidence regarding differences in use of non-physician providers in FFS versus capitated practices.*
> 7. *There is suggestive evidence of better preventive care performance by salaried and capitated physicians than by FFS physicians.*
>
> *Effects of the range and mix of providers, working relationships and division of labor in multidisciplinary teams on health outcomes, patient and provider satisfaction, and cost-effectiveness with differing patient populations remain to be established.*[233]

But even though there is no current consensus on the exact form that primary care reform should take, the Committee nonetheless believes that it is possible to identify a number of key features that must be part of any reform agenda. As it indicated in Chapter Two (Principles Ten and Eleven), the Committee believes that primary care

But even though there is no current consensus on the exact form that primary care reform should take, the Committee nonetheless believes that it is possible to identify a number of key features that must be part of any reform agenda.

[232] Hutchison *et. al.*, *op. cit.*, p. 125.
[233] *Ibid.*, pp. 125-26.

reform should lead to primary care being provided by group practices, or clinics, which operate twenty-four hours a day seven days a week, and that the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining, capitation, fee-for-service and other incentives or rewards. Blended remuneration provides incentives for general practitioners both to work hard and to care for a large number of patients as they do now (through fee-for-service funding) and to emphasize preventive care and population health (through capitation funding).

The Committee is convinced that the reform of primary care delivery is essential to ensuring the sustainability of Canada's health care system. As it argued in Chapter Two (Principle Thirteen), the Committee also believes the reform of primary care is necessary in order to create the possibility for primary health care teams to eventually purchase health services provided by hospitals and other health care institutions on behalf of their patients.

Therefore, recognizing that:

- The delivery of primary care to the population at large is a provincial responsibility;
- There is widespread support for the significant reform of primary care;
- No single model for reorganizing primary care will be universally applicable;
- Discussion and cooperation amongst all stakeholders is essential to the successful design and implementation of primary care reform;
- Voluntary adhesion to new models of primary care delivery by both providers and consumers is to be preferred.

The Committee recommends:

That the federal government continue to work with the provinces and territories to reform primary care delivery, and that it provide ongoing financial support for reform initiatives that lead to the creation of multi-disciplinary primary health care teams that

- **are working to provide a broad range of services, 24 hours a day, 7 days a week;**
- **strive to ensure that services are delivered by the most appropriately qualified health care professional;**
- **utilise to the fullest the skills and competencies of a diversity of health care professionals;**
- **adopt alternative methods of funding to fee-for-service, such as capitation, either exclusively or as part of blended funding formulae;**

- **seek to integrate health promotion and illness prevention strategies in their day-to-day work;**
- **organize themselves so that they develop the capacity to purchase services from hospitals and other institutional providers on behalf of their patients;**
- **progressively assume a greater degree of responsibility for all the health and wellness needs of the population they serve.**

CHAPTER SEVEN

TOWARDS A POPULATION HEALTH STRATEGY

As the Committee has noted in its Phase One report, it is clear that the state of the health care system affects our health. Services such as childhood immunization, medications to reduce high blood pressure as well as heart surgery all contribute to health and well-being. In fact, estimates by the Canadian Institute for Advanced Research suggest that 25% of the health of the population is attributable to the health care system alone.[234] It is therefore important for governments to ensure that the health care sector continually strives to provide quality and timely services.

It has been estimated that the remaining 75% of the health of the Canadian population is attributable to a multiplicity of factors that include: biology and genetic endowment; income and social support; education; employment and working conditions; physical environment; personal health practices and skills; early childhood development; gender, and culture. The Committee heard repeatedly that, to maintain and improve health status, governments should, in addition to sustaining a good health care system, develop population health strategies. Population health strategies encompass a broad range of activities, ranging from health and wellness promotion, to illness and injury prevention through broader policies and programs that influence income distribution, access to education, housing, water quality, workplace safety, and so on.

There is increasing evidence that investing more human and financial resources in promotion, prevention and population health can improve the health outcomes for a given population. In the end, this can reduce the demand for health services and the pressures on the publicly funded health care system.

Indeed, injury and illness are very costly to the health care system. During Phase Two of its study, the Committee was informed that the total cost of illness and injury was estimated at $156.4 billion in 1998. Direct costs (such as hospital care, physician services and health research) amounted to $81.8 billion, while indirect costs (such as lost productivity and lower quality of life) accounted for $74.6 billion. The diagnostic categories with the highest total costs were cardiovascular diseases, musculoskeletal diseases, cancer, injuries, respiratory diseases, diseases of the nervous system, and mental disorders.[235] According to witnesses, many diseases, and most injuries, can be prevented. In their view, the only way to reverse disease trends and reduce the economic burden of illness is by investing more in health and wellness promotion, disease prevention and population health.

Overall, investment in health and wellness promotion, illness prevention and population health makes good financial sense. This fact was reflected in the 2001 report of the

[234] Volume One, p. 81.
[235] Volume Two, p. 49.

Auditor General of Canada which noted that "preventive health activities are estimated to be 6 to 45 times more effective than dealing with health problems after the fact."[236]

The Committee believes that there are potentially enormous benefits to be derived from health and wellness promotion, illness prevention and population health, primarily in terms of improving health outcomes for Canadians, but also in terms of their financial impact on the publicly funded health care system. We wholeheartedly agree with the Mazankowski report which stated: "It sounds like just good common sense, but perhaps the best way to sustain Alberta's health care system over the longer term is to take steps to enable people and communities to stay healthy."[237]

The Committee believes that there are potentially enormous benefits to be derived from health and wellness promotion, illness prevention and population health, primarily in terms of improving health outcomes for Canadians, but also in terms of their financial impact on the publicly funded health care system.

In this chapter, the Committee outlines a series of principles based on an approach to population health that we feel should guide policy decisions. These principles flow from the evidence and documentation presented to the Committee, and are designed to lay the groundwork for a future thematic report in which the Committee will make specific recommendations on implementing these principles.

In addition to outlining the rationale behind these principles, this chapter also discusses the importance of a population health approach with regard to improving the health status of Aboriginal Canadians. The Committee wishes to stress that it intends to issue a separate report on the federal role with regard to the health of Aboriginal Canadians, and that the inclusion of a principle in this chapter that affirms the need for a population health approach in this area should not be taken as the Committee's last word on this crucial subject.

Principle 7.1

Individuals should assume responsibility for their own health.

In 1974, the then federal Minister of Health, the Honourable Marc Lalonde, released a landmark working document entitled *A New Perspective on the Health of Canadians*. This report recognized the impact of individual behaviour on health outcomes, and stressed that individual Canadians should assume greater responsibility of their health, while also identifying broader determinants (such as the environment or socio-economic factors) that have an impact on health outcomes.

[236] Auditor General of Canada, *2001 Report*, Chapter 9.
[237] Mazankowski report, p. 14.

The Lalonde Report referred to the "behavioural threats to health" and the "self-imposed risks" that accompanied "city living, habits of indolence, the abuse of alcohol, tobacco and drugs, and eating patterns which put the pleasing of the senses above the needs of the human body."[238] It also stressed that:

> *While it is easy to convince a person in pain to see a physician, it is not easy to get someone not in pain to moderate insidious habits in the interest of future well-being. (…) The view that Canadians have the right "to choose their own poison" is one that is strongly held.*[239]

There is no doubt that individual lifestyle choices have a significant impact on one's health. A comprehensive report prepared for the Mazankowski Commission shows that lifestyle changes can markedly reduce the incidence and severity of a number of major diseases and leading causes of death and disability, especially heart disease, stroke, hypertension, diabetes and selected cancers. Moreover, the report suggests that many people already know the kinds of thing they should be doing – making healthier eating choices, getting more active, avoiding health risks and stopping smoking. It is not clear, however, why people do not always act on what they know.[240]

The Mazankowski report concluded that, in the context of health care system delivery, better incentives may be needed to encourage people to stay healthy:

> *A number of ideas have been suggested for encouraging people to take more responsibility for their own health. Some people have suggested tying health care premiums to actions to stay healthy, providing tax credits or other tax incentives, or using medical savings accounts or some other form of co-payment to give people more control over their own health care spending. Others have suggested there should be penalties for people who do not look after their own health.*[241]

The Committee agrees that individuals should assume responsibility for their own health and that incentives need to be developed to encourage them to do so. We also agree that investment must be made in policies and programs that empower Canadians to make better decisions about their own health. This is an important step if Canada is to sustain publicly funded health care in the long term.

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238 Marc Lalonde, *A New Perspective on the Health of Canadians*, Working Document, Health and Welfare Canada, April 1974, pp. 5-6.
239 *Ibid.*, p. 6.
240 Mazankowski report, pp. 14-15.
241 Mazankowski report, p. 17.

*P*rinciple 7.2

Government programs that enable individuals to assume greater responsibility for their own health, and particularly health promotion and illness prevention activities, must be given high priority.

Many witnesses stressed that, though individual Canadians are responsible for their own health, government can play an important role in providing information on how to stay healthy. This point was very well captured in the testimony of Dr. Serge Boucher, from the Hôtel-Dieu Hospital in Quebec City, when he said:

> *Health is up to the individual. It is the individual who decides to become obese. It is the individual who decides whether or not to smoke. It is also the individual who decides whether or not he or she should exercise. Should the State intervene? Should the State compel the individual to do something? It is very important that we pinpoint accurately what the State can or must do; namely, looking first of all after the illness. As for health, we can give information.*[242]

It is clear to the Committee that government programs that enable people to be responsible for their own health must be given high priority. This point was stressed as far back as 1974 in the Lalonde report. This view was reiterated again in 1986 when the then federal Minister of Health, the Honourable Jake Epp, released a report entitled *Achieving Health for All: A Framework for Health Promotion*, which focused on the broader social, economic and environmental determinants of health. Both the Lalonde report and the Epp report underlined health promotion and illness prevention as a complement to the health care system and a means to prevent the occurrence of injuries, illnesses and chronic conditions, and to enhance people's ability to manage and cope with diseases, disabilities and mental health problems.

The Committee believes that programs which enable individuals to be responsible for their own health must be given high priority. An expanded Canadian Health Network, such as the one we advocate in Chapter Four, is one important tool that could furnish Canadians with reliable, evidence-based information on health, injury and illness. Currently, the Canadian Health Network provides health promotion and disease prevention information to Canadians and is considered by many as among the best in the world. The Committee believes that we should build on this success and create a national portal for the Canadian public, which would give Canadians access to comprehensive and trusted health-related information that could support self-care decision making and be strategically linked to provincial and territorial website services to ensure consistency of health-related information across Canada.

Recognizing that Internet-based health information can only be available to those who have access to computers, the Committee believes that government must also pursue public awareness campaigns which can address a wide range of issues, such as the importance of eating healthy food, exercising regularly, not smoking and adopting safe sexual practices. These

[242] Dr. Serge Boucher (39:32).

are all important messages that must be reiterated on an ongoing basis. We concur with witnesses that the role of government should not be to prescribe "good behaviour" but rather to help create an environment that allows people themselves to make the right choices.

Providing the "right information" with respect to health and illness and sustaining an ongoing public awareness campaign can significantly contribute to preventing many illnesses and most injuries, thereby improving the overall health status of the Canadian population. For example, with respect to cancer, Dr. Barbara Whylie, Director, Cancer Control Policy, Canadian Cancer Society, pointed out that:

> *(…) we know from research, or it has been estimated from research studies, that up to 70 per cent of cancer cases can be avoided by people avoiding exposure to known risk factors, which include tobacco use, diet, physical activity, exposure to the sun and occupational and environmental carcinogens.*[243]

With respect to injury, Dr. Robert Conn, President and Chief Executive Officer, SMARTRISK, told the Committee:

> *What is most compelling about injury prevention is that over 90 per cent of all of the injuries that come to the hospital are preventable. They are predictable and preventable.*[244]

Witnesses stressed that health promotion and disease prevention should not be seen as a substitute for the activities of the health care system, or as existing in a world cut off from the treatment of illness and the provision of care. Rather, promotion and prevention activities should be integrated with health services delivery.

Witnesses pointed to the Canadian Heart Health Initiative as an example of a program that exhibits the requisite integration features. The Canadian Heart Health Initiative is a multilevel strategy, linking national, provincial and local health departments. The Initiative is based on a multi-factor approach – one that addresses the major risk factors that are preventable or controllable. It combines research with the implementation of community-based heart health programs, directed primarily at achieving environmental changes supportive of "heart-healthy" habits and lifestyles among the general population.

Finally, the Committee was told that health promotion and disease prevention efforts should not be undertaken only by government. Employers can benefit in investing in prevention in their workplace settings. Edward Buffett, President and Chief Executive Officer, Buffett Taylor & Associates Ltd, Employee Benefits and Workplace Wellness Consultants, gave an example of how programs initiated at the workplace have a positive impact on health and wellness:

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[243] Dr. Barbara Whylie (37:135).
[244] Dr. Robert Conn (37:138).

We have a lot of American data right now that makes it very clear that not only are there savings, but they are very significant. We are looking at organizations like IBM and others claiming that for every $1 they spend on disease prevention at the worksite they get a $6 return on their investment.

The best example I can give you here in Canada is Husky Injection Molding Systems Ltd. The average rate of absenteeism for their industry is 9.7 per cent. That particular organization, which is a worldwide entity based here in Canada, now has in excess of 2,000 Canadian employees, primarily at their Bolton operation, and has a rate of absenteeism of 1.2 per cent. The savings are phenomenal. Husky Injection Systems provides on-site naturopathic services. They have two physicians who visit the plant on a regular basis. They have a child care centre. Their enlightened initiatives, frankly, have made them a world-class competitive organization. That is the pay-off.[245]

The Committee is convinced that investment, both by government and the private sector, in health promotion and disease prevention is essential in order to maintain and enhance the health and wellness of Canadians, and that this investment will also make a significant contribution to the sustainability of our publicly funded health care system.

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Similarly, with regard to injuries, Dr. Robert Conn of Smartrisk told the Committee that it costs the system $8.7 billion to treat people who are seriously injured.[246] The Committee believes that more can be done with regard to injury prevention, and agrees with Dr. Conn that a national strategy, encompassing research and appropriate evidence-based programs to help prevent injury, should be seriously considered.[247]

245 Edward Buffett (37:34-35).
246 Dr. Robert Conn (37:138).
247 SMARTRISK Foundation, Brief to the Committee, Oct. 29, 2001, pp. 10-11.

Principle 7.3

It is necessary to develop broad population health strategies that are long term, national in scope and based on multi-departmental efforts across all jurisdictions.

As the Committee has noted in its previous reports, the concept of population health is not a new one and has been widely endorsed by policy-makers at all levels, inside and outside of government.

As the Committee has noted in its previous reports,[248] the concept of population health is not a new one and has been widely endorsed by policy-makers at all levels, inside and outside of government. Central to the formulation of policy based on a population health approach is the recognition that a wide range of factors contribute to health outcomes and to the overall health status of communities and individuals. During the Committee's most recent hearings, witnesses gave many vivid examples of the importance of the broad determinants of health. For example, Gary O'Connor, Executive Director, Association of Ontario Health Centres, told the Committee that:

> *Over the past century, the most dramatic increases in health and wellness have come from sources other than the curative arts. They have come from safe drinking water, housing, income support and the use of seat belts, to name a few.*[249]

Similarly, Dr. Robyn Tamblyn, Associate Professor, Faculty of Medicine, McGill University, stated:

> *We are just beginning to understand the determinants of health. (…) In my mind, what you are trying to tackle is the fact that there are many things that influence people's health. (…) If you really want to start much earlier in the process to determine people's health, then you will have to effectively deal with all these other sectors that will impact on health.*[250]

Throughout its hearings, the Committee heard repeatedly about the numerous long-term benefits that can be derived from population health strategies. However, we also learned that there are a number of difficulties associated with the design and implementation of programs and policies of a population health approach. One of them is the fact that the benefits of population health strategies can often take a long time to become apparent. This has significant consequences in a politicized system that is often not able to focus on the longer term because of the relentless short-term pressures of political life.

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[248] See Volume One (Chapter 5), Volume Two (Chapter 4) and Volume Four (Chapter 12).
[249] Gary O'Connor (37:115-116).
[250] Dr. Robyn Tamblyn (40:82).

Another major challenge associated with devising a population health strategy is the difficulty to coordinate government activity in a context where decisions made by different ministries have an impact on health outcomes. Therefore, the responsibility for population health cannot reside exclusively with the minister of health. This difficulty is compounded several times over when the various levels of government are taken into account.

Despite the many difficulties that will have to be overcome, witnesses recognized the need for a multi-departmental and multi-jurisdictional approach to fostering the health and well-being of the Canadian population. For example, Mr. Gary O'Connor, Executive Director, Association of Ontario Health Centres, argued that:

> *True health comes from an integrated approach, which would be achieved by partnerships with other ministries within the government and with other governments.*[251]

Multi-departmental efforts would ensure that the policies enacted by various government departments converge towards the same goals. This contrasts with the current situation in which policies may have diverging impacts on health outcomes. Dr. Tamblyn gave the following example:

> *In any event, we know that exercise influences glucose metabolism. Hence, the epidemics of diabetes and obesity in younger kids are related to exercise programs. At the same time, the Ministry of Education is cutting education budgets and teachers are refusing to get involved in extracurricular activities. What are we doing? We are ignoring an opportunity to encourage and teach physical fitness. This will have downstream negative effects on health. We are choosing to ignoring this and instead to make immediate cuts to education, in order to not achieve the final goal of influencing the determinants of health.*[252]

The Committee heard that in at least one province a serious attempt is being made to find ways to implement a multi-disciplinary, multi-departmental approach to population health. Robert C. Thompson, Deputy Minister, Department of Health and Community Services, Government of Newfoundland and Labrador, told the Committee about the Strategic Social Plan (SSP) that has been developed in his province:

> *In Newfoundland and Labrador, the institutional infrastructure to mount this type of approach already exists through the Strategic Social Plan, the SSP. The SSP was started in 1998. It involves economic and social departments and agencies in a comprehensive approach to promoting health, education, self-reliance, and prosperity for people in the context of vibrant communities and sustainable regions.*

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[251] Mr. Gary O'Connor (37:116).
[252] Dr. Robyn Tamblyn (40:83).

The SSP has resulted in multi-disciplinary committees in seven regions, identifying social priorities that can be achieved through the complimentary activities of many departments and agencies. The SSP also promotes and provides institutional support for cross-departmental planning and policy development.[253]

Drawing on the experience of his own province, Dr. Roy West (St. John's), President of the Board of Directors of the National Cancer Institute of Canada, stated:

There must be a national strategic social plan – which we have; Newfoundland is the first province to develop a provincial strategic social plan. Newfoundland is having some difficulty implementing the plan, because of lack of resources, but it is heading in the right direction, in trying to empower communities to make them healthier and to make them economically more viable.[254]

The Committee believes that there are potentially enormous benefits to be derived from the development of strategies based on a population health approach. We therefore feel that it is important to attempt to overcome any difficulties that confront their elaboration and implementation. The Committee believes that, as a fist step in this direction, it is important to look carefully at the experience of provinces in their attempt to implement population health strategies, and in particular at how the federal government can contribute to ensuring that sufficient resources are available.

Principle 7.4

The federal government should continue to provide leadership in the field of population health and devote more resources to population health strategies.

Witnesses who appeared before the Committee stressed that the federal government has been recognized as a leader worldwide in elaborating the concept of population health, and many felt that it was imperative for the federal government to once again show leadership in implementing a population health strategy for all Canadians. Dr. Catherine Donovan, Medical Officer of Health, Health and Community Services, Eastern Newfoundland, indicated that, unless the federal government deploys sufficient effort and resources, many of the good ideas that have been pioneered in Canada with regard to population health strategies will lie fallow:

Witnesses who appeared before the Committee stressed that the federal government has been recognized as a leader worldwide in elaborating the concept of population health, and many felt that it was imperative for the federal government to once again show leadership in implementing a population health strategy for all Canadians.

[253] Robert C. Thompson (41:7-8).
[254] Dr. Roy West (41:48-49).

[Canada] needs adequate resources to support the kind of innovative health promotion and protection programming that is going to have a long term impact on health (…). Canada has always been very good at developing theory and approaches to the promotion of population health, but we have done relatively little to follow the path that earns us international recognition.[255]

The federal government should lead the way in population health by breaking down the ministerial silos that compartmentalize responsibility for health and by coordinating the activities of the different departments whose policies and programs impact on health (health, environment, finance, etc.).

The Committee believes that, because of their importance, serious consideration should be given by the federal government to devoting more attention, effort and resources to the development and implementation of population health strategies. The federal government should lead the way in population health by breaking down the ministerial silos that compartmentalize responsibility for health and by coordinating the activities of the different departments whose policies and programs impact on health (health, environment, finance, etc.).

Principle 7.5

Government policies should be examined in terms of their impact on health status and health outcomes.

The broad policy implication that flows from the recognition of the multiplicity of the determinants of health is that it is necessary to devise some sort of mechanism that would allow Canadians to monitor the impact of all government policy on health outcomes.

The broad policy implication that flows from the recognition of the multiplicity of the determinants of health is that it is necessary to devise some sort of mechanism that would allow Canadians to monitor the impact of all government policy on health outcomes. One possible way to do this, which the Committee raised as an option in its previous report,[256] would be to charge a Health Commissioner with the responsibility of reporting to Parliament on the health impact of all federal government policy.

A number of witnesses responded favorably to this suggestion by the Committee. For example, Jeff Wilbee, Executive Director, Alcohol and Drug Recovery Association of Ontario and Addiction Intervention Association, said that "Canada should show world leadership, through a health commissioner, in measuring and improving our population

[255] Dr. Catherine Donovan (41:66).
[256] Volume Four, p. 127.

health status."[257] Similarly, Madeline Boscoe, Advocacy Coordinator, Women's Health Clinic in Winnipeg, stated:

> *We very much appreciated your comments about health promotion and population health. We think this is critical, and are delighted with the idea of a commissioner in health impact assessments. We hope these concepts will be enshrined in an act of Parliament. As a matter of fact, the joke around our place is: since we do health impact assessments for the environment, how come we do not do them for people?*[258]

The Committee strongly believes that the monitoring of health outcomes should be at the forefront of government policy. Principle Sixteen in Chapter Two lays out how we believe such monitoring should be performed with respect to health care delivery. Based on this principle, we advocate, in Chapter Four, the creation of a national mechanism, independent from government, responsible for monitoring and assessing the impact of health care policy on the health status of Canadians. The Committee is convinced that a similar mechanism, complementary to the first one, should be established to review and assess the impact of all government policies on health outcomes.

The Committee is convinced that the federal government could set a valuable example by financing a permanent mechanism for reporting to the Canadian public on the impact of its policies affecting health… the important point is to devise a mechanism that enables all government policy to be screened through a population health lens.

The Committee is convinced that the federal government could set a valuable example by financing a permanent mechanism for reporting to the Canadian public on the impact of its policies affecting health. Regardless of the exact nature of the office that would assume this responsibility, the important point is to devise a mechanism that enables all government policy to be screened through a population health lens. This would permit an ongoing analysis of health outcomes and provide some measure of overall public accountability. An annual report from such an office that focused on the broad determinants of health could also include prescriptions for how to ensure that all government policies have as positive an effect as possible on the health of Canadians.

[257] Jeff Wilbee (37:131).
[258] Madeline Boscoe (30:59).

Principle 7.6

Population health strategies must be adapted to local conditions, and their design and implementation must involve local communities.

The evidence suggests that population health strategies in general must be carefully thought through so that they take into account the realities facing specific communities. For example, people may be less inclined to bike or jog if the streets are unsafe. This implies that rigidly designed programs applied in a uniform and highly centralized fashion are unlikely to succeed. Successful community-based programs combine an understanding of the community, with the participation of the public, and the cooperation of community organizations. Some combination of coordination and decentralized implementation is therefore required.

Successful community-based programs combine an understanding of the community, with the participation of the public, and the cooperation of community organizations. Some combination of coordination and decentralized implementation is therefore required.

Witnesses illustrated the importance of tailoring efforts to local conditions with examples from their own experience. Ms. Ingrid Larson, Member Relations Director, Community Health Services Association (Saskatoon), told the Committee:

> *In terms of our experience at the west side clinic where we primarily see an urban Aboriginal clientele, the issues we deal with are social determinants of health. There, our nurses do community outreach and community development work. They are very well aware that the issues facing that community are far more than physical health issues. We then work on issues related to housing, nutrition, and all the related issues that have a substantial impact on people's well-being. It is not just about health when it comes to serving that population group. It involves some very complex issues, all of which have to be addressed.*[259]

The Committee acknowledges that the wide range of determinants of health can affect different communities in many different ways. We believe that in order to be able to respond to the particular configuration of health determinants that occur in each community, it is therefore essential

The Committee acknowledges that the wide range of determinants of health can affect different communities in many different ways. We believe that in order to be able to respond to the particular configuration of health determinants that occur in each community, it is therefore essential to adapt population health strategies as best as possible to local circumstances.

[259] Ms. Ingrid Larson (31:37).

to adapt population health strategies as best as possible to local circumstances.

*P**rinciple** 7.7*

Given its fiduciary and constitutional responsibilities, the federal government should develop a population health strategy for Aboriginal Canadians.

In Volume Four of its study, the Committee stated unequivocally that in its view, the health of our Aboriginal peoples is a national disgrace and that the federal government must take a leadership role in working to immediately redress this situation.[260]

In Volume Two of its study, the Committee gave an overview of the some of the factors that contribute to poorer health outcomes amongst Aboriginal Canadians. We noted in this regard that there are significant socio-economic disparities between Aboriginal peoples and the general Canadian population. Aboriginal peoples are less likely to be in the labour force, and unemployment rates are higher than those of the general population. In 1995, the average employment income of the Aboriginal population was $17,382 compared to the national average of $26,474. The Committee also noted that Aboriginal Canadians appear to be the largest population sub-group that is the most at risk of becoming homeless in Canada, and that significant numbers of Aboriginal peoples (43%) live in inadequate housing.[261]

Although it did not hear extensively from Aboriginal representatives during its most recent hearings, the evidence that the Committee did gather pointed again to the many ways in which a population health approach might be suited to developing strategies to address the multi-faceted health problems confronted by Aboriginal communities. For example, the Hon. Edward Picco, Minister of Health and Social Services (Nunavut) reiterated the extent to which problems relating to socio-economic disadvantage afflicted Aboriginal communities, telling the Committee:

> *The unemployment rate in Nunavut is over 20 per cent, which compares with the annual Canadian rate of 8 per cent. The average annual income among 85 per cent of our population is well below the Canadian average. Again, it goes back to (…) the socio-economic factors and health determinants.*[262]

He further explained how these kinds of problems have a negative impact on the health status of the Inuit in Nunavut, telling the Committee:

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[260] Volume Four, p. 132.
[261] Volume Two, pp. 59-60.
[262] 32:23

Mr. Chairman, I think it is also important to highlight overcrowding in Nunavut because of our housing situation. I am also the minister responsible for homelessness. In Nunavut, if you understand homelessness, you use two terms: one is "relative homelessness," and the other one is "absolute homelessness."

Absolute homelessness refers to the people you see on the streets in your larger cities. Relative homelessness is what we have in Nunavut, where 22 people live in a two-bedroom house, and people have to sleep in closets, on the floor, and in shifts on foam mattresses.

When you are in an environment like that, Mr. Chairman, when you have colds, the flu, pneumonia, and you are not getting enough to eat, of course your health status goes down. This is happening right now in Canada.[263]

Evidence such as this confirms the Committee's belief that it is essential to work towards the development of "a comprehensive plan that could meet the health care needs of all Aboriginal peoples in Canada."[264]

The Committee believes that it is essential to work towards the development of "a comprehensive plan that could meet the health care needs of all Aboriginal peoples in Canada."

The Committee also previously indicated that the involvement of different jurisdictions in the delivery of health services to Aboriginal communities constituted another obstacle to the coordination of efforts aimed at improving health outcomes for Aboriginal peoples. We pointed out in Volume Two that jurisdictional barriers to the provision of health services to Aboriginal people exist on two levels.[265] One barrier arises from the division of powers between the federal and provincial governments and can lead to some services not being available to all communities equally. This problem was highlighted for the Committee by Minister Picco who stated with regard to Inuit Canadians:

Mr. Chairman, I have also previously stated that Inuit expect levels of health care that are comparable with other Canadians. To achieve this, we need resources from the Government of Canada. We would strongly recommend that the Government of Canada accept and discharge its responsibility for the 85 per cent of the population of Nunavut who are Inuit.[266]

Other consequences of having two jurisdictions involved in delivering health services include program fragmentation; problems with reporting mechanisms; inconsistencies,

[263] 32:23
[264] Volume Four, p. 132.
[265] Volume Two, pp. 68-70.
[266] 32:27

gaps, or possible overlaps in programs; and impediments to developing a holistic approach to health and wellness.

Witnesses also insisted on the importance of adapting health care delivery and preventive health measures to the concrete realities of Aboriginal communities. Ms Ruth Morin, Chief Executive Officer, Nechi Institute illustrated this point:

> *For instance, it became apparent to the Alberta Cancer Board that Aboriginal women had increased rates of breast cancer and were dying at a much higher rate than other Canadian women. It was discovered that Aboriginal women were not coming to get mammograms. Why? Part of the reason was due to travel, but there was also a high rate of sexual abuse associated with the whole residential school thing. Going through the whole process of getting a mammogram was seen as a huge mountain that a lot of people were not willing to climb. However, when a mobile mammogram was brought to the communities and they had lunch and they picked up the ladies and they had child care and things like that, Aboriginal women were more willing to be involved. They liked the safety of their own community, with their own people helping them. The women came, the mammograms were done, and everyone was happier.*

How to achieve an integration of all health related activities in a way that meets the needs of Aboriginal peoples, and involves them in all aspects of the design and implementation of these programs, remains unresolved. This issue was recently raised in the Interim Report of the Commission on the Future of Health Care in Canada, where it was noted that integration of health services might be fostered by allowing the provinces and territories to take charge to a greater extent:

> *Traditionally, Aboriginal peoples have emphasized a more integrated and comprehensive view of health than the current health care system has provided, with its narrower focus on hospital and doctor-delivered health services. In recent decades however, provincial and territorial governments have moved toward a more integrated approach that is perhaps more consistent with traditional Aboriginal perspectives on health. As a result, there has been some movement toward the integration of Aboriginal health services within provincial and territorial health care systems and the creation of Aboriginal-specific health programs.*[267]

[267] Interim Report of the Commission on the Future of Health Care in Canada, p. 41.

This raises the question of whether it would be possible for the provinces and territories to take advantage of the fact that they already are responsible for the delivery of health services to the general population in order to provide services in a more coordinated fashion to Aboriginal peoples as well. The Committee recognizes that there are many of possible ways to reorganize governmental responsibility for the delivery of health care to Aboriginal peoples in order to achieve a more integrated result, and that further consultation and reflection will be needed before it can issue any recommendations in this regard. Moreover, it is clear to the Committee that whatever arrangements are deemed most suitable, the federal government retains its constitutional and fiduciary responsibilities towards the Aboriginal peoples of Canada. The Committee therefore reaffirms its commitment to "the development of a National Action Plan on Aboriginal Health to improve inter-jurisdictional co-ordination of health care delivery."[268] One option that should be considered in this context is for the federal government to fund health care programs that would be delivered by the provinces, on reserve as well as off reserve.

The Committee therefore reaffirms its commitment to "the development of a National Action Plan on Aboriginal Health to improve inter-jurisdictional co-ordination of health care delivery." One option that should be considered in this context is for the federal government to fund health care programs that would be delivered by the provinces, on reserve as well as off reserve.

Because of the importance of the issue of the health status of Canada's Aboriginal peoples, the Committee proposes to issue a separate report that will contain its recommendations to the federal government.

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[268] Volume Four, p. 132.

APPENDIX A

LIST OF PRINCIPLES AND RECOMMENDATIONS BY CHAPTER

CHAPTER TWO:

PRINCIPLES TO GUIDE THE RESTRUCTURING AND FINANCING OF CANADA'S HEALTH CARE SYSTEM

Principle One
There should be a single funder (insurer) – the government directly or through an arm's length agency – for hospital and doctor services covered under the *Canada Health Act*.

Principle Two
There should be stability of, and predictability in, government funding for public health care insurance.

Principle Three
The federal government should play a major role in sustaining a national health care insurance system.

Principle Four
The determination of what should be covered under public health care insurance should be done through an open and transparent process. Health services covered under the *Canada Health Act* should remain publicly insured. Other health services should continue to be funded using a mix of public and private sources, as they are now.

Principle Five
The federal government should contribute on an ongoing basis to fund health care technology.

Principle Six
The federal government should increase its investment in those areas of health and health care for which it already has a major responsibility.

Principle Seven
The consequences arising from changes in the level or amount of government funding for hospital and medical care should be clearly understood by government and explained to the public, in as much detail as possible, at the time such changes are made and announced.

Principle Eight
In the first stage of health care reform, the method for remunerating hospitals should be changed from the current annual global budget to service-based funding.

Principle Nine
Regional health authorities should have the responsibility for purchasing hospital services provided by institutions within their region.

Principle Ten
Primary care renewal should lead to the provision of primary care by group practices, or clinics, which operate twenty-four hours a day seven days a week.

Principle Eleven
To facilitate primary care reform, the method of compensating general practitioners should be changed from fee-for-service to some form of blended remuneration combining capitation, fee-for-service and other incentives or rewards.

Principle Twelve
New scope of practice rules and other measures need to be developed in order to enable all health care providers in the primary care sector to provide the full range of services for which they have been trained.

Principle Thirteen
In the second stage of health care reform, an "internal market" should probably be created in which primary health care teams would purchase health services provided by hospitals and other health care institutions on behalf of their patients.

Principle Fourteen
A national (not exclusively federal) strategy must be developed to achieve both an adequate supply and optimal use of health care providers.

Principle Fifteen
Accountability and transparency in health care financing and delivery require the deployment of a system of electronic health records (EHR) that can capture and translate information on system performance and outcomes.

Principle Sixteen
Measuring treatment outcomes and system performance must become an essential part of the health information system. Such monitoring and evaluation of the health care delivery system should be performed independently at the national (not federal) level and be funded by government.

Principle Seventeen
Canada's publicly funded health care system should be patient-oriented.

Principle Eighteen
Incentives should be developed to encourage patients to use the hospital and doctor system as efficiently as possible. Such incentives should not include user fees for services that are deemed to be medically necessary.

Principle Nineteen
Programs that enable people to be responsible for their own health and to stay healthy must be given high priority. The federal government can play a leadership role in this regard.

Principle Twenty
For each type of major procedure or treatment, a maximum waiting time should be established, and made public. When this maximum time is reached, the insurer (government) shall pay for the patient to receive immediately the procedure or treatment in another jurisdiction including, if necessary, another country.

CHAPTER THREE:

FINANCING AND ASSESSING HEALTH CARE TECHNOLOGY

That the federal government initiate a long-term program to assist provinces and territories in financing both the acquisition and ongoing operation of health care technology. Such a program should incorporate clear accountability mechanisms on the part of the provinces and territories on their use of these targeted federal funds.

That the federal government increase the funding it provides to CCOHTA and other HTA agencies.

That this additional funding be used to strengthen HTA capacity in Canada as well as to improve the dissemination and promotion of HTA findings to health care providers and managers.

That the federal government provide additional funding to the Canadian Institutes for Health Research and the Canadian Health Services Research Foundation to support research into the potential impact of health care technology on health care costs.

CHAPTER FOUR

DEPLOYING A NATIONAL HEALTH INFOSTRUCTURE

That, once the three- to five-year period is over, the federal government provide additional financial support to Canada Infoway Inc. so that *Infoway* develop, in collaboration with the provinces and territories, a national system of electronic health records.

That the federal government, in collaboration with all stakeholders involved in the computerization of health records, define standards and rules for the collection, storage and use of such information.

That the federal government, in collaboration with the provinces and territories, undertake the establishment of a national system of evaluation on health care system performance and outcomes. Such a national system of evaluation should: 1) be built on existing expertise and institutions; 2) remain independent from governments; and 3) receive appropriate funding from the public purse. The federal government should devote substantial funding to this very important undertaking.

That the federal government maintain its support to rural health and invest in telehealth applications that will enhance access to care and improve the quality of health services in rural and remote communities.

That the federal government, in collaboration with the provinces/territories and stakeholders, develop a national health information portal, building on the success of the Canadian Health Network and the integration of provincial/regional portals.

- As a matter of priority, investments into this national portal should be made in locations where the basic systems infrastructure is inadequate, especially in rural, remote and Aboriginal communities. This would greatly enhance the capacity of all Canadians to access timely and objective electronic health information.

CHAPTER FIVE

NURTURING EXCELLENCE IN CANADIAN HEALTH RESEARCH

That the federal government set, on a regular basis, national goals and priorities for health research in collaboration with all stakeholders.

That the federal government foster multi-stakeholder collaborations when performing, funding and using health research. This should contribute to capitalizing on the best available resources while minimizing overlap and duplication.

That the federal government take a leadership role, through the Canadian Institutes for Health Research and Health Canada, in developing a strategy to encourage interchange of research scientists between government, academia and the private sector, including national voluntary organizations.

That the federal government, through both Health Canada and the Canadian Institutes of Health Research, coordinate and provide resources to ensure that Canada contributes to and benefits from the scientific revolution to maximize the economic, health and social gains for Canadians.

That the federal government:

- Increase, within a reasonable timeframe, its financial contribution to extra-mural health research to achieve the level of 1% of total Canadian health care spending.

- Set and adhere to clear long-term plans for funding health research, particularly through the Canadian Institutes of Health Research. More precisely, the federal government should commit to a five-year planning horizon for the CIHR budget.
- Provide predictable and appropriate investment for in-house health research.

That Health Canada:

- Be provided with the financial and human resources in health research that are required to fulfill its mandate and obligations.
- Engage actively in the establishment of linkages and partnerships with other health research stakeholders.

That the federal government, through the Canadian Institutes of Health Research, Health Canada and the Canadian Health Services Research Foundation, devote additional funding to health services research and clinical research and that it collaborate with the provinces and territories to ensure that the outcomes of such research are broadly diffused to health care providers, managers and policy-makers.

That the federal government, through the Canadian Institutes of Health Research and Health Canada, provide additional funding to health research aimed at the health of particularly vulnerable segments of Canadian society.

That the federal government provide additional funding to CIHR in order to increase participation of Canadian health researchers, including Aboriginal peoples themselves, in research that will improve the health of Aboriginal Canadians.

That Health Canada be provided with additional resources to expand its research capacity and to strengthen its research translation capacity in the field of Aboriginal health.

That the federal government provide increased resources to the Global Health Research Initiative.

That the federal government require an explicit commitment from all recipients of federally funded health research that they will obtain the greatest possible benefit to Canada, whenever the results of their federally funded research are used for commercial gain.

That the Canadian Institutes of Health Research, while not ignoring the social value of health research that does not result in commercial gain, seek to facilitate appropriate economic returns within Canada from the investments it makes in Canadian health research, whenever the results of investments in Canadian health research are used for commercial gain. In doing so, CIHR should develop an innovation strategy aimed at accelerating and facilitating the commercialization of health research outcomes.

That the federal government invest additional resources to enhance the output of Canadian health researchers and strengthen the commercialization capacity of performers of federally funded health research through CIHR's innovation strategy. This new funding would be additional to the current health research investment. In particular, the funding of the indirect

costs of research by the Canadian granting agencies should be made permanent. Health research performers should be made accountable for the use of these commercialization funds.

That Health Canada initiate, in collaboration with stakeholders, the development of a joint governance system for health research involving human subjects for all research that the federal government performs, that it funds, and that it uses in its regulatory activities.

That Health Canada, in the development of this ethics governance system, regard the following components as essential to progress:

- Work initially on all (health) research that the federal government performs, funds, or uses in its regulatory activities, to develop an effective and efficient system of governance that will become accepted as the standard of care a cross Canada;

- Give prime importance in the governance system to effective education and training mechanisms for all who are involved in research and research ethics, with certification as appropriate to their different res ponsibilities;

- Develop standards, based on the *Tri-Council Policy Statement*, the International Conference on Harmonization guidelines applying to clinical trials involving human subjects, and other relevant Canadian and foreign standards, against which research ethics functions or Research Ethics Boards can be accredited or certified as meeting the levels of function that are consistent with the expectations of Canadians and with those in other countries;

- Ensure that the *Tri-Council Policy Statement* is updated and is maintained at the forefront of international policies for the ethics or research involving humans;

- Remove inconsistencies between the various policies under which research involving humans is now governed, and make Canadian standards consistent with those of other countries that affect Canadian research;

- Establish an accreditation or certification process for research ethics functions that is at arm's length from government, but clearly accountable to government;

- Develop the governance system through open, transparent and meaningful consultation with stakeholders.

That all federal departments and agencies require compliance with the standards of the Canadian Council on Animal Care for:

- All research that is carried out in federal facilities, and

- All research that is funded by federal departments or agencies but performed outside federal facilities, and

- All research that is carried out without federal funding or facilities, but that is submitted to or used by the federal government for purposes of exercising its legislated functions.

That regulations such as those proposed by the Canadian Institutes of Health Research receive their fullest and fairest consideration in discussion about providing greater clarity and certainty of the law with the view to ensure that its objectives will be met without preventing important research to continue to better the health of Canadians and improve their health services.

That discussions continue among stakeholders, the Privacy Commissioner, *and* those federal and provincial government departments involved with the provision, management, evaluation and quality assurance of health services.

That the federal government, through the Canadian Institutes of Health Research and Health Canada, together with other relevant stakeholders, design and implement a program of public awareness to foster in Canadians a broad understanding of:

- the nature of, and reasons for, the extensive databases containing personal health information that must be maintained to operate a publicly financed health care system, and
- the critical need to make secondary use of such databases for health research and health care management purposes.

That the federal government, through the Canadian Institutes of Health Research and Health Canada, together with other relevant stakeholders, be responsible for promoting:

- thoughtful discussion and consideration of the ethical issues, particularly informed consent issues, involved with the secondary use of personal health information for health care management and health research purposes;
- thorough examination of the control and review mechanisms needed for ensuring that databases containing personal health information are effectively created, maintained and safeguarded and that their use for health care management and health research purposes is conducted in an open, transparent and accountable manner.

That the Canadian Institutes of Health Research, in partnership with industry and other stakeholders, continue to explore the ethical aspects of the interface between the sectors with a view to ensuring that the collaborations and partnerships function in the best interests of all Canadians.

CHAPTER SIX

PLANNING FOR HUMAN RESOURCES IN HEALTH CARE

That the federal government:

- Work with provincial governments to ensure that all medical schools and schools of nursing receive the funding increments required to permit necessary enrolment expansion.

- Review mechanisms by which direct federal funding could be provided to support expanded enrolment in medical and nursing education, and ensure the stability of funding for the training and education of allied health professionals.

- Review student loan programs available to health care professionals and make modifications to ensure that the impact of inevitable increases in tuition fees, especially as they affect medical students, does not lead to denial of opportunity to students in lower socio-economic circumstances.

- Provide particular tuition support for nursing students, up to and including waiving tuition fees entirely for a limited period of time.

- Work with provincial governments to ensure that the relative wage levels paid to different categories of health professionals reflect the real level of education and training required of them.

That the federal government work with the provinces and medical and nursing faculties to finance places for students from aboriginal backgrounds over and above those available to the general population.

That in order to facilitate the return to Canada of Canadian health care professionals who are working abroad, the federal government should work with the provinces and professional associations to inform expatriate Canadian health professionals of emerging job opportunities in Canada, and explore the possibility of adopting short-term tax incentives for those prepared to return to Canada.

That the federal Government work with other concerned parties to create a permanent national coordinating body for health human resources, to be composed of representatives of key stakeholder groups and of the different levels of government. Its mandate would include:

- disseminating up-to-date data on human resource needs;

- coordinating initiatives to ensure that adequate numbers of graduates are being trained to meet the goal of self-sufficiency in health human resources;

- sharing and promoting best practices with regard to strategies for retaining skilled health care professionals and coordinating efforts to repatriate Canadian health care professionals who have emigrated to other countries;

- recommending strategies for increasing the supply of health care professionals from under-represented groups, such as Canada's Aboriginal peoples, and in under-serviced regions, particularly the rural and remote areas of the country;

- examination of the possibilities for greater coordination of licensing and immigration requirements between the various levels of government.

That the federal government continue to work with the provinces and territories to reform primary care delivery, and that it provide ongoing financial support for reform initiatives that lead to the creation of multi-disciplinary primary health care teams that

- are working to provide a broad range of services, 24 hours a day, 7 days a week;
- strive to ensure that services are delivered by the most appropriately qualified health care professional;
- utilise to the fullest the skills and competencies of a diversity of health care professionals;
- adopt alternative methods of funding to fee-for-service, such as capitation, either exclusively or as part of blended funding formulae;
- seek to integrate health promotion and illness prevention strategies in their day-to-day work;
- organize themselves so that they develop the capacity to purchase services from hospitals and other institutional providers on behalf of their patients;
- progressively assume a greater degree of responsibility for all the health and wellness needs of the population they serve.

CHAPTER 7

TOWARDS A POPULATION HEALTH STRATEGY

Principle 7.1
Individuals should assume responsibility for their own health.

Principle 7.2
Government programs that enable individuals to assume greater responsibility for their own health, and particularly health promotion and illness prevention activities, must be given high priority.

Principle 7.3
It is necessary to develop broad population health strategies that are long term, national in scope and based on multi-departmental efforts across all jurisdictions.

Principle 7.4
The federal government should continue to provide leadership in the field of population health and devote more resources to population health strategies.

Principle 7.5
Government policies should be examined in terms of their impact on health status and health outcomes.

Principle 7.6
Population health strategies must be adapted to local conditions, and their design and implementation must involve local communities.

Principle 7.7
Given its fiduciary and constitutional responsibilities, the federal government should develop a population health strategy for Aboriginal Canadians.

APPENDIX B

LIST OF WITNESSES

Monday, October 15, 2001

University of Manitoba:
Linda West, Professor, Asper School of Business

Frontier Centre for Public Policy:
Peter Holle, President

Western Canadian Task Force on Health Research and Economic Development:
Dr. Henry Friesen, Team Leader
Dr. John Foerster
Dr. Audrey Tingle
Chuck Laflèche

Regional Health Authorities of Manitoba
Bill Bryant, Chair, Council of Chairs
Kevin Beresford, Chair, Council of CEOs
Randy Lock, Executive Director

Manitoba Centre for Health Policy and Evaluation:
Dr. Nora Lou Roos

Women's Health Clinic:
Madeline Boscoe, Advocacy Coordinator

Hospice and Palliative Care Manitoba:
Dr. Paul Henteleff, Chair, Advocacy Committee
John Bond, Member of Advocacy Committee
Margaret Clarke, Executive Director

Canadian Union of Public Employees in Manitoba (CUPE):
Paul Moist, President
Lorraine Sigurdson, Health Care Coordinator

Société franco-manitobaine:
Daniel Boucher, Chief Executive Officer

As a walk-on:
Barry Shtatleman

Tuesday, October 16, 2001

Saskatchewan Registered Nurses' Association:
June Blau, President

Victorian Order of Nurses:
Bob Layne, Vice-President, Planning and Government Relations (Western Region)
Lois Clark, Executive Director, VON North Central Saskatchewan
Brenda Smith, National Board Member (Saskatchewan)

Community Health Services (Saskatoon) Association:
Kathleen Storrie, Vice-President
Ingrid Larson, Director, Member Relations

As an individual:
Dr. John Bury

Canadian Union of Public Employees (CUPE) Saskatchewan:
Tom Graham, President, CUPE Saskatchewan
Stephen Foley, President, Health Care Council
John Welden, Health Care Coordinator, Health Care Council

Saskatoon Chamber of Commerce:
Dave Ductchak, President
Kent Smith-Windsor, Executive Director
Jodi Blackwell, Research and Operations Director

Arthritis Society of Saskatchewan:
Sherry McKinnon, Executive Director
Joy Tappin, Board Member

Canadian Parks and Recreation:
Randy Goulden, Executive Director, Tourism Yorkton

Métis National Council:
Gerald Morin, President
Don Fidler, Director, Health Care

Wednesday, October 17, 2001

Premier's Advisory Council on Health (Alberta):
The Right Honourable Don Mazankowski, P.C., Chair
Peggy Garritty

Department of Health and Social Services (Nunavut):
The Hon. Edward Picco, Minister

Calgary Health Region:
Jack Davis, CEO

Capital Health Authority:
Sheila Weatherill, President and CEO

Canadian Practical Nurses Association:
Pat Fredrickson, President

University of Alberta - Faculty of Nursing:
Dr. Donna Wilson

Health Sciences Association of Alberta:
Elisabeth Ballermann, President

Alberta Association of Registered Nurses:
Sharon Richardson, President

United Nurses of Alberta:
Heather Smith, President

Friends of Medicare:
Christine Burdett, Provincial Chair
Tammy Horne, Member

As an individual:
Kevin Taft, MLA

Western Canada Waiting List Project:
John McGurran, Project Director

Primary Care Initiative:
Dr. June Bergman

Alberta Consumers Association:
Wendy Armstrong

Fédération des communautés francophones et acadiennes du Canada :
George Arès, President

National Advisory Council on Aging:
Pat Raymaker, Chairwoman

Alberta Council on Aging:
Neil Reimer, Secretary/Treasurer

Nechi Institute:
Ruth Morin, Chief Executive Officer
Richard Jenkins, Director of Marketing and Health Promotion

Executive of the Alberta and Northwest Conference of the United Church of Canada - Health Advisory Committee:
Louise Rogers
Kent Harold
Don Junk

As a walk-on:
Noel Somerville

Thursday, October 18,2001

Commission on Medicare, Saskatchewan:
Ken Fyke, Former Chair

Tommy Douglas Research Institute:
Dave Barrett, Chair
Marc Eliesen, Co-Chair

Market-Media International Corporation:
Joan Gadsby, President

University of British Columbia, Family Practice Residency Program:
Dr. J. Galt Wilson, Program Director - Prince George Site

University of British Columbia:
Dr. John A. Cairns, Dean of Medicine
Dr. Joanna Bates, Associate Dean, Admissions

Health Professions Council:
Dianne Tingey, Member
Gerry Fahey, Research Director

Cambie Surgery Centre:
Dr. Brian Day, Founder

As an individual:
Cynthia Ramsay, Health Economist

Health Association of British Columbia:
Lorraine Grant, Chair of the Board of Directors
Lisa Kallstrom, Executive Director

University of British Columbia:
Dr. John H. V. Gilbert, Coordinator of Health Sciences

University of British Columbia - Vancouver Hospital and Health Sciences Centre:
Professor Charles Wright, Director, Centre for Clinical Epidemiology and Evaluation

University of British Columbia – Centre for Health Services and Policy Research:
Professor Barbara Mintzes

Professional Association of Residents of British Columbia:
Dr. Kristina Sharma

Friday, October 19, 2001

Canadian Medical Association:
Dr. Peter Barrett, Past President
Dr. Arun Garg, Chair, Council on Health Policy and Economics

British Columbia Medical Association:
Dr. Heidi Oetter, President
Darrell Thomson, Director, Economics and Policy Analysis

University of British Columbia, Anxiety Disorders Unit, Department of Psychiatry:
Dr. Peter D. McLean, Professor and Director

Maples Surgical Centre (Manitoba)
Dr. Mark Godley

Monday, October 29, 2001

Canadian Radiation Oncology Services:
Dr. Thomas McGowan, President and Medical Director

Canadian Taxpayers Federation:
Walter Robinson, Federal Director

Canadian Council of Churches:
Stephen Allen, Member of Commission for Justice and Peace and Co-Chair of the Commission's Ecumenical Health Care

Buffett Taylor Employee Benefits and Workplace Wellness Consultants:
Edward Buffett, President and CEO

As an individual:
Michael Rachlis

Medical Reform Group:
Dr. Joel Lexchin

At Work Health Solutions Inc.:
Dr. Arif Bhimji, Founder and President; Medical Director of Liberty Health
Gery Barry, President and CEO of Liberty Health

Consumers' Association of Canada:
Jean Jones, Chair of the Health
Mel Fruitman, President

Ontario Association of Optometrists:
Dr. Joseph Chan

Medical Devices Canada (MEDEC):
Peter Goodhand, President

AstraZeneca:
Gerry McDole, President and CEO

Comcare Health Services:
Mary Jo Dunlop, President St. Michael Hospital

Saint Michael's Hospital:
Jeffrey Lozon, President and CEO

Association of Ontario Health Centres:
Gary O'Connor, Executive Director

Ontario Medical Association:
Kenneth Sky, President

The Arthritis Society:
Denis Morrice, President and CEO

SMARTRISK:
Dr. Robert Conn, President and CEO

Canadian Cancer Society:
Dr. Barbara Whylie, Director, Cancer Control Policy
Cheryl Mayer, Director, Cancer Control Programs Alcohol and Drug Recovery Association of Ontario and Addiction Intervention Association
Jeff Wilbee, Executive Director

Tuesday, October 30, 2001

Canadian Institute for Health Information:
Michael Decter, Chairman, Board of Directors

Ontario Hospital Association:
David MacKinnon, President and CEO

Registered Nurses Association of Ontario:
Doris Grinspun, Executive Director

McMaster University - Department of Economics:
Jeremiah Hurley, Professor

University of Toronto - Public Health Science Department:
Dr. Cameron Mustard, Professor

University of Toronto:
Colleen Flood, Professor

Drug Trading Company Limited:
Larry Latowsky, President and CEO
Jane Farnharm, Vice President Pharmacy

Canadian Pharmacists Association:
Ron Elliott, President

GlaxoSmithKline:
Geoffrey Mitchinson, Vice -president, Public Affairs

Medtronic:
Donald A. Hurley, President

Canadian Association for the Fifty Plus:
Dr. Bill Gleberzon, Associate Executive Director
Lilian Morgenthal, President

Canadian Association for Community:
Cheryl Gulliver, President
Connie Laurin-Bowie
Margot Easton

Roeher Institute:
Cameron Crawford, President

As individuals:
Clement Edwin Babb
Robert S.W. Campbell

Wednesday, October 31, 2001

As Individuals:
The Honourable Claude Forget
The Honourable Claude Castonguay
André-Pierre Contandriopoulos, Professor, Faculty of Medicine, University of Montreal

Hôtel Dieu Hospital:
Dr. Serge Boucher

Conseil du patronat du Québec:
Gilles Taillon, President

Canadian Chamber of Commerce:
Nancy Hughes-Anthony, President and Chief Executive Officer
Michael N. Murphy, Senior Vice-President, Policy

As Individuals:
Jean-Luc Migué
Lee Soderstrom, Professor, Department of Economics, McGill University

Montreal Economic Institute:
Michel Kelly-Gagnon, Executive Director
Dr. Edwin Coffey, Retired Associate Professor, Faculty of Medicine, McGill University, and Former President of the Quebec Medical Association

Frosst Health Care Foundation:
Dr. Monique Camerlain, President of the Board of Directors
Janet Dunbrack, Executive Director.

Thursday, November 1, 2001

Association des optométrists du Québec:
Dr. Langis Michaud, President
Marie-Josée Crête, Deputy Director General
Clairmont Girard, Advisor

Collège des médécins du Québec:
Dr. Yves Lamontagne, President
Dr. André Garon, Deputy Secretary General

As an Individual:
Robert Dorion

Canadian Life and Health Insurance Association:
Mark Daniels, President
Greg Traversy, Executive Vice-President
Yves Millette, Senior Vice-President, Quebec Affairs
Frank Fotia, Vice-President, Group Insurance.

As Individuals:
Dr. Margaret Somerville, Acting Director, McGill Centre for Medicine, Ethics and Law, McGill University
Dr. Robyn Tamblyn, Associate Professor, Department of Economics, McGill University

Merck Frosst Canada Ltd.:
Kevin Skilton, Director, Policy Planning
Dr. Terrance Montague, Executive Director, Patient Health

Association québécoise des droits des retraités (AQDR):
Ann Gagnon, Advisor on Health
Yollande Richer, Vice-President, Communications
Myroslaw Smereka, Director General

Monday, November 5, 2001

Department of Health and Community Services, Newfoundland:
Robert C. Thompson, Deputy Minister

Department of Health and Community Services, Newfoundland:
Beverly Clarke, Assistant Deputy Minister

Victoria Order of Nurses (VON Canada):
Patricia Pilgrim, President, St. John's Branch
Bernice Blake Dibblee, Executive Director, St. John's Branch

Association of Registered Nurses of Newfoundland and Labrador:
Sharon Smith, President

Canadian Union of Public Employees, Newfoundland:
Wayne Lucas, President

As an individual:
Maud Peach

National Cancer Institute of Canada:
Dr. Roy West, President

Health and Community Services, Newfoundland:
Dr. Catherine Donovan

Weight Watchers:
Marlene Bayers, Regional Manager

Newfoundland Cancer Treatment and Research Foundation:
Bertha H. Paulse, Chief Executive Officer

As an individual:
Karen McGrath, Executive Director of Health and Community Services St-John's Region

Tuesday, November 6, 2001

Canadian Auto Workers (CAW):
Cecil Snow, President, Nova Scotia Health Care Council

Nova Scotia Association of Health Organizations:
Robert Cook, President and CEO

Insurance Bureau of Canada:
George Anderson, President and CEO
Paul Kovacs, Senior Vice-President Policy and Chief Economist

Canadian Coalition Against Insurance Fraud:
Mary Lou O'Reilly, Executive Director

Atlantic Institute for Market Studies:
Dr. David Zitner, Fellow on Health Policy

Dalhousie University:
Nuala Kenny, Professor of Pediatrics and Chair, Department of Bioethics
Dr. Vivek Kusumakar, Head, Mood Disorders Research Group, Department of Psychiatry
Lawrence Nestman, Professor, School of Health Services Administration

Nova Scotia Valley Caregivers Support Group:
Maxine Barrett

Elizabeth May Chair in Women's Health and the Environment, Dalhousie University:
Sharon Batt, Chair

Feminists for Just and Equitable Public Policy:
Ms. Georgia MacNeil, Chair Person

Cape Breton Regional Health Care Complex:
John Malcom, CEO
Dr. Mahmood Naqvi, Medical Director, Cape Breton Regional Facility

Capital District Health Authority:
Dr. John Ruedy, Vice-President, Academic Affairs

Dalhousie University:
Thomas Rathwell, Professor and Director, School of Health Services Administration

Canadian Medical Association:
Dr. Henry Haddad, MD, President
Bill Tholl, Secretary General
Dr. Bruce Wright, President of the Medical Society of Nova Scotia
Dr. Dana W. Hanson, President-Elect

Dalhousie University:
Dr. Desmond Leddin, Head, Division of Gastroenterology
Dr. George Kephart, Director, Population Health Research Unit, Department of Community and Epidemiology
Dr. Kenneth Rockwood, Faculty of Medicine, Division of Geriatric Medicine

Cobequid Community Health Board:
Ryan Sommers

Health Canada:
Anne-Marie Leger, Policy Analyst

Wednesday, November 7, 2001

Department of Health and Social Services, Prince Edward Island:
The Honourable Jamie Ballem, Minister

PEI Seniors Advisory Council:
Heather Henry-MacDonald, Chair

Canadian Union of Public Employees, PEI Division:
Bill A. McKinnon, National Representative
Ms. Donalda MacDonald, President
Raymond Léger, Research Representative

Department of Health and Social Services:
Mary Hughes-Power, Director of Acute and Continuing Care
Deborah Bradley, Manager of Public Health Policy

College of Family Physicians of Canada:
Dr. Peter MacKean, Chairman of the Board

Queen Elizabeth Hospital:
Iain Smith, Drug Utilization Coordinator

PEI Pharmacy Board:
Neila Auld, Executive Director, PEI

Queen's Regional Health Authority:
Sylvia Poirier, Chair

West Prince Regional Health Authority:
Ken Ezeard, Chief Executive Officer

Department of Health and Social Services:
Dr. Don Ling, Director of Medical Services

Department of Health and Social Services, Prince Edward island:
Rory Francis, Deputy Minister
Bill Harper, Assistant Deputy Minister
Jean Doherty, Communications Coordinator

Southern Kings Health Authority:
Betty Fraser, Chief Executive Officer

Department of Health and Social Services:
Susan Maynard, Senior Health Planner
Kathleen Flanagan-Rochon, Community Services Coordinator

Evangeline Health Centre:
Elise Arsenault, Coordinator

East Prince Regional Health Authority:
David Riley, Chief Executive Officer

Dalhousie University:
Dr. Stan Kutcher, Department Head of the Community Health and Epidemiology/ Psychiatry

Thursday Nov. 8, 2001

Faculty of Nursing, University of New Brunswick:
Dr. Margaret Dykeman

New Brunswick Health Care Association:
Robert Simpson, Chief Executive Officer

Canadian Association of Chain Drug Stores:
Sherry Porter, Atlantic Canada Representative
Sandra Aylward, Vice President, Pharmacy Services

As Individuals:
Dr. Russell King, Former Minister of Health, Province of New Brunswick
William Morrissey, Former Deputy Minister of Health, Province of New Brunswick

Applied Management:
Bryan Ferguson, Partner

Société des Acadiens et Acadiennes du Nouveau-Brunswick:
Daniel Thériault, Director General

Canadian Snowbird Association:
Bob Jackson, President

New Brunswick Senior Citizens Federation Inc.:
Helen Ladouceur, Member
Eilleen Malone, Member

Catholic Health Association of Canada:
Sandra Keon, Secretary Treasurer; and Vice-President of Clinical Programs, Pembroke Hospital

Miramichi Police Force:
Michael Gallagher, Corporal, Drug Section

Canadian Union of Public Employees, New Brunswick:
Raymond Léger, Research Representative

Federal Superannuates National Association:
Rex G. Guy, National President
Roger Heath, Research and Communications Officer

Union of New Brunswick Indians:
Nelson Solomon, Director of Health
Wanda Paul Rose, Coordinator
Norville Getty, Consultant

Nurses Association of New Brunswick:
Roxanne Tarjan, Director General

Thursday, February 21, 2002

Canadian Federation of Nurses Unions:
Kathleen Connors, President

Canadian Health Coalition:
Dr. Arnold Relman, Former editor of New England Journal of Medicine
Michael McBane, National Coordinator

Federal Superannuates National Co-ordinator:
Rex G. Guy, National President
Roger Heath, Research and Communications Officer

Thursday, March 7, 2002

Canadian Healthcare Association:
Sharon Sholzberg-Gray, President and CEO
Kathryn Tregunna, Director, Policy Development

Canadian Labour Congress:
Kenneth V. Georgetti, President
Cindy Wiggins, Senior Researcher, Social and Economic Policy Department

OTHER WRITTEN SUBMISSIONS RECEIVED:

Abell Medical Clinic
Alberta Centre for Injury Control and Research
Amgen Canada Inc.
Ancaster-Dundas-Flamborough-Aldershot New Democratic Party Riding Association Executive Committee
B.C. Better Care Pharmacare Coalition
Bruce Bigham
Brain Injury Association of Nova Scotia
Canada West Foundation
Canadian Association of Emergency Physicians (CAEP)
Canadian Association of Internes and Residents
Canadian Caregiver Coalition
Canadian Cochrane Network and Centre
Canadian Drug Manufacturers Association (CDMA)
Canadian Strategy for Cancer Control
Chemical Sensitivities Information Exchange Network Manitoba (CSIENM)
Conestoga College (Pat Bower, Course instructor)
Faith Partners (Ottawa)
Federation of Medical Women in Canada
Dr. Michael Gordon, Baycrest Centre for Geriatric Care
Serena Grant
Home-based Spiritual Care
Kidney Foundation of Canada
Kids First Parent Association of Canada
Dr. Lee Kurisko
Caterine Lindman
Jim Ludwig
Dr. Keith Martin
Dr. Ross McElroy
Dr. Malcom S. McPhee
Verna Milligan
Moose Jaw-Thunder Creek District Health Board
Dr. Earl B. Morris
Fran Morrison
John Neilson
Ontario Psychological Association
Roy L. Piepenburg (Liberation Consulting)
Red Deer Network in Support of Medicare
Dr. Robert S. Russell
Society of Obstetricians and Gynaecologists of Canada
Christa Streicher
Elaine Tostevin