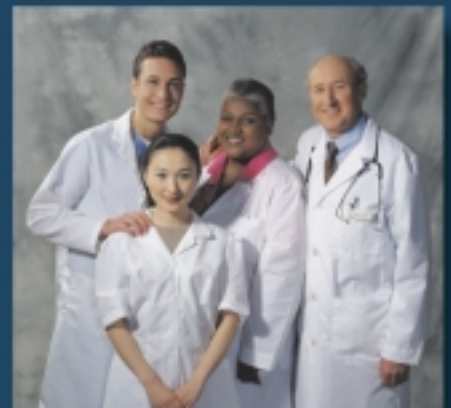




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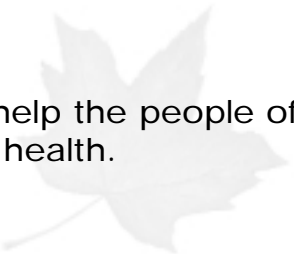
The Health Transition Fund



SYNTHESIS SERIES

Supporting an Evidence-Based
Future in Canadian Health Care

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SHARING THE LEARNING

**The Health
Transition Fund**



SYNTHESIS SERIES

**Supporting an Evidence-Based
Future in Canadian Health Care**

Steven Lewis

Access Consulting Ltd.



This report is one in a series of 10 syntheses of HTF project results covering the following topics: home care, pharmaceutical issues, primary health care, integrated service delivery, Aboriginal health, seniors' health, rural health/telehealth, mental health, and children's health. The tenth document is an overall analysis. All are available electronically on the HTF website (www.hc-sc.gc.ca/htf-fass), which also contains information on individual HTF projects.

Preface

In recent years, Canada's health care system has been closely scrutinized with a view to quality improvement and cost-effectiveness.

Fiscal pressures and changing demographics are resulting in initiatives to explore how the efficiency of the health care system can be increased while ensuring that high-quality services are affordable and accessible. Within this context, there has been a need for more research-based evidence about which approaches and models of health care have been working and which have not. In response to this requirement for evidence, and on the recommendation of the National Forum on Health, the Health Transition Fund (HTF) was created out of the 1997 federal budget to encourage and support evidence-based decision making in health care reform.

A joint effort between federal, provincial and territorial governments, the HTF funded 141 pilot projects and/or evaluation studies across Canada between 1997 and 2001, for a total cost of \$150 million. Of that, \$120 million supported provincial and territorial projects and the remaining \$30 million funded national-level initiatives. The HTF targeted initiatives in four priority areas: home care, pharmaceutical issues, primary health care, and integrated service delivery. Various other focus areas emerged under the umbrella of the original four themes, including Aboriginal health, rural health/telehealth, seniors' health, mental health, and children's health.

The HTF projects were completed by the spring of 2001. In order to communicate the evidence generated by the projects to decision-makers, experts were employed to synthesize the key process and outcome learnings in each theme area. This document summarizes the overall key learnings of the HTF projects. It has been prepared by Steven Lewis of Access Consulting Ltd.

Unique Nature of the HTF Projects

The HTF was quite different from other organizations that fund health-related research in this country, such as the Canadian Institutes for Health Research and its predecessor the Medical Research Council.

- It was a time-limited fund, which meant that projects had to be conceived, funded, implemented, and evaluated all in four years – a very short time in the context of system reform.
- It was policy-driven; policy-makers were involved in the project selection process, and wanted to focus on some of the outstanding issues in the four theme areas in the hope that results would provide evidence or guidance about future policy and program directions.

In order to encourage projects to address issues and produce results that would be relevant to decision-makers, the HTF developed an evaluation framework consisting of six elements (access, quality, integration, health outcomes, cost-effectiveness, and transferability). Each project was required to have an evaluation plan addressing as many of these elements as were relevant. In addition, all HTF projects were required to include a dissemination plan (for which funding was provided) in order to ensure that results were effectively communicated to those best able to make use of them. In addition to these individual dissemination plans, the HTF Secretariat is implementing a national dissemination strategy, of which these synthesis documents are one element. This emphasis on evaluation (systematic learning from the experience of the pilot initiatives) and dissemination (active sharing of results) was unique on this scale.

Most national projects were selected by an inter-governmental committee following an open call for proposals, while provincial/territorial initiatives were brought forward by each individual jurisdiction for bilateral approval with the federal government. At both levels, applications came not just from academics

in universities, or researchers in hospital settings, but also from non-traditional groups such as Aboriginal organizations, community groups, and isolated health regions. Groups that had rarely, if ever, thought in terms of research, evidence, evaluation, and dissemination began doing so, and these developments bode well for improved understanding and collaboration among governments, provider organizations, and researchers. The role of federal, provincial, and territorial governments in the selection process ensured that the projects delved into the issues that were of high concern in each jurisdiction. By the same token, there was considerable scope in the range of project topics, and the body of projects was not (and was never intended to be) a definitive examination of each theme.

This unique focus and selection process imparts specific features to the HTF body of projects. The projects that were funded represent good ideas that were put forward; they do not represent a comprehensive picture of all the issues and potential solutions in each of the theme areas. The relatively short time frame meant that many researchers struggled to complete their work on time and the results are preliminary or incomplete; some pilot projects might take a number of years to truly show whether they made a difference. This must be left to others to carry forward and further investigate. Perhaps the greatest value in the large body of HTF projects comes from the lessons we can learn about change management from the researchers' struggles and challenges as they undertook to implement and evaluate new approaches to longstanding health care issues.

Acknowledgments

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1. Introduction

Canada's health system has been described as its crowning social program and even as one of the defining elements of what it means to be Canadian. Its principles, as expressed in the Canada Health Act, are widely admired, while its performance is closely scrutinized and – particularly in the last decade – often found wanting. It is huge and expensive – \$95 billion a year, 9.5 per cent of the GDP, spanning health promotion and preventive health services through to the most sophisticated and technology-intensive hospital care. Somewhere in the country at any given time, at the federal level or in a province, territory, or region, health care is certain to be under review. (Eight provincial exercises were underway as of November 2001.) There is change and experimentation of all types, from structural reform to innovation at the bedside or in the community.

In 1997 the report of the National Forum on Health (NFOH) recommended, among other things, the creation of a \$150 million fund to support innovative projects in areas deemed crucial to the improvement of the health system. A joint effort of federal, provincial, and territorial governments, the Health Transition Fund (HTF) supported approximately 140 different pilot projects and/or evaluation studies across Canada between 1997 and 2001: \$120 million for provincially and territorially sponsored projects, and \$30 million for national-level initiatives. The initial mandate of the HTF was to support evidence-based change and transition in four key theme areas: home care, pharmaceutical issues, primary care/primary health care, and integrated service delivery. As the program developed and submissions came forward, other focus areas emerged under the umbrella of the original four themes, including children's health, Aboriginal health, seniors' health, rural/telehealth, and mental health.

2. Context

The world did not stand still during the approximately four years of HTF operation. The NFOH reported at the end of a period of unprecedented restraint in the public financing of health care in Canada. Annual inflation-adjusted per capita expenditures had risen an average of 2.5 per cent annually from 1975 to 1993 (Canadian Institute for Health Information, 2001). During the next four years, real public sector spending declined by about 0.6 per cent per capita each year. At precisely this time, the great wave of regionalization swept the country, encompassing all provinces except Ontario. The health system sustained two significant shocks: major reorganization and unaccustomed fiscal restraint. One of the results was a sharp decline in public confidence in the system as a whole (Blendon et al., 1995; Donelan, Blendon, Schoen, Davis, & Binns, 1999), although satisfaction with services actually received has remained high (Ontario Hospital Association, 1999). The HTF was in a sense born under a bad sign.

How things had changed by the time the projects concluded in early 2001. Beginning in 1997-98, governments began to reinvest significantly in health care services. Increases on the order of 5 to 8 per cent, and in some cases 10 per cent annually were commonplace. By the end of the 1990s, real per capita health care expenditures were at an all-time high despite the trough in mid-decade. In September 2000 the country's First Ministers reached an agreement that promised \$23.5 billion new federal dollars over four years to the system, adding about 7 per cent to the base. Suddenly a severely constrained system was awash in new cash.

When the HTF was established, the consensus was that the system needed more money to restore public trust and improve performance. By the time it formally concluded, governments had vigorously tested this strategy and were beginning to sift through the results. Workplace morale was no higher (Blythe, Baumann, & Giovannetti, 2001; Martin, 1999; Sullivan & Buske, 1998). Complaints about access to services and waiting lists had not diminished. Many emergency rooms that were crowded in the mid-1990s continued to be inundated in the new millennium. The presence of large amounts of new money fuelled demands in the workforce for expensive new contract settlements, many of which have been met. There was widespread perception that the technology gap had not been closed. In the summer of 2000 the provincial and territorial health ministers prepared a document that painted a grisly picture of projected cost escalations (Ministers of Health, 2000). It was, in short, becoming clear that even massive reinvestment did not solve the major problems, leading many to ponder whether a publicly financed system was ultimately affordable.

The publication in early 2001 of the Fyke Report in Saskatchewan (Government of Saskatchewan, 2001) and the Clair Commission Report in Quebec (Clair, 2001) marked the first two comprehensive provincial examinations of health care systems since the NFOH report of 1997. Their subject matter and recommendations span the major concerns, analyses, and possible responses to both long-standing and emerging issues. Both focused on the need to accelerate the transition to a new approach to primary care (also a major HTF preoccupation), albeit with dissimilar models in mind. Both highlighted the impossibility of continuing to increase health care budgets at the rate observed in recent years. Clair concluded that the system needed more money, and to obtain it he recommended new non-governmental sources of revenue, such as a mandatory social insurance capitalization fund for long-term care, private surgical

clinics affiliated with hospitals, and partnerships with the private sector. His report further noted the need to control drug costs, evaluate technologies, and improve management and accountability. Fyke focused on the need to inject a major dose of realism into the organization of a health care system serving a million people over a huge land mass; the quality gap and how to overcome it; major reductions in the number of regions and hospitals; and a provincial approach to health human resource planning, recruitment, and deployment.

Health care financing has always been cyclical, but rarely have the cycles been so short. The events of September 11, 2001, coupled with a slowing of economic growth in the previous year, have yet again drastically altered the health expenditures terrain. The new government in British Columbia has vowed to keep health expenditures flat for up to three years. The government of Alberta has asked its Regional Health Authorities for contingency plans that envision significant expenditure reductions in response to declining oil revenues and the anticipated disappearance of huge budgetary surpluses. Most other provinces have highlighted similar fiscal problems and have pointed to health care as a major contributor. These expressed concerns, and in some cases plans, have followed rapidly on the signing of lucrative multi-year wage settlements that will make it impossible to restrain total spending without reducing services and/or layoffs. November 2001 looked much more like November 1995 than March 2001.

Two external reports have informed the deliberations about health care in Canada and worldwide. In late 1999 the Institute of Medicine in the United States published its groundbreaking report, *To Err Is Human* (Kohn, Corrigan, & Donaldson (Eds.), 2000), estimating that as many as 100,000 people a year die in hospital due to avoidable error. Australia (Australian Council for Safety and Quality in Health Care, 2001)

and the United Kingdom (Vincent & Woloshynowych, 2001) reached similar conclusions in reviews of their systems. The American report and its recently published successor (Institute of Medicine, 2001) have begun to shift the focus away from purely financial aspects of health care to the way the system goes about its business. The “quality first” message long promoted by leaders such as Dr. Donald Berwick (Berwick, 1998; Findlay, 2000) and Dr. Ken Kizer (Kizer, 1999) has taken root in leading-edge organizations and, perhaps even more importantly, in the media. Many of the HTF projects explicitly or implicitly pursued quality improvement and error reduction. The Canadian Institute for Health Information plans to produce reports on error. National and provincial organizations have turned their attention to quality issues.

The health care systems of many industrialized countries, including Canada, were given a jolt by the *World Health Report 2000* (World Health Organization [WHO], 2000). Using a multi-faceted and controversial methodology, the WHO ranked Canada’s health care system 30th in the world, mainly on the grounds that despite its resources, it achieves far less than it should in terms of population health status and health equity. We ranked well behind countries as diverse as France (#1), Greece (#14), Malta (#5), and Oman (#8). The method used to rank countries is designed to be independent of wealth, i.e., systems are rated on the basis of what they achieve with what they have; hence poor countries can receive a high ranking and rich countries a low one (the U.S. is not far behind Canada at #37). Some of the indicators refute the conventional wisdom that medicare has overcome all inequalities of access; Canada ranks 18th for both the distribution of health, and the fairness of the way people contribute financially to the system. While the overall findings are counterintuitive to some extent, and there have been major critiques of the WHO methodology (Blendon, Kim, & Benson, 2001; Murray, Kawabata,

& Valentine, 2001), the report does squarely raise the issue of the system’s effectiveness. The report’s appearance is opportune as it creates an interesting international perspective on the findings of the HTF projects, many of which shed light on our shortcomings and possibilities.

One of the hardly original insights of the NFOH was its recognition of the difficulty of the transition to an evidence-based culture in the health system. Many of the recommendations from provincial task forces and commissions in the 1980s, such as the reform of primary care and a more needs-based allocation of resources, met with inertia or outright resistance. Canadian researchers had been world leaders in promoting “evidence-based medicine” and “evidence-based decision-making” since the movement gathered steam in the 1980s. There was growing recognition that while medicare had for the most part magnificently achieved its goals of universality and formal accessibility, there remained many examples of wide and unexplained variation in practice, waste, and an inability to meet the needs of a number of populations. The system was heavily oriented toward providing service and keeping administrative and other costs down. The “R & D” side of health care, and particularly demonstration projects and program evaluation, needed a boost. The idea behind the HTF was to stimulate creative thinking about how to change the culture and practice of the system to make it more responsive, effective, and efficient. The premise was that building up an inventory of evidence-based innovation and evaluation would smooth that transition.

While \$150 million is a substantial sum, it barely registers in comparison to the system the HTF was designed to influence. At a total cost of \$95 billion a year, the system consumes nearly \$11 million an hour. The HTF was spent over a three-year period, meaning that its annual budget was about what the system consumes between noon and 5 p.m. every day.

Put another way, \$50 million a year amounts to one-twentieth of 1 per cent of annual health spending. Most knowledge-intensive industries spend at least 10 per cent of revenues on research and development. The combined spending of private industry, government granting agencies, the voluntary sector, health care programs and institutions, and government in Canada on health R & D has been low, as has investment in information technology. Happily there are now major commitments to redress this history of underinvestment, but the upgrading of capacity will take time. And whether these commitments will be fulfilled if general economic circumstances continue to be unstable remains to be seen.

The significance of these environmental factors can hardly be overstated. As the following sections show, the HTF stimulated a great deal of innovative thinking about how to improve health and health care, and many projects added to the storehouse of rigorously acquired and practical information on which evidence-based change can be grounded. Yet the HTF was a very tiny tugboat to expect to alter the course of an enormous ocean liner of a system. There was very little time to develop and begin the projects. Many of the pilot projects designed to show how a new approach might be effective also had to create an interest in change in their environments. The impact of successful demonstration projects varies with the receptivity of practitioners, interest groups, and policy-makers to evidence and innovation. Many of the HTF projects sought to demonstrate the value of approaches previously validated by sound research, confirming yet again the importance of the underlying culture, traditions, and authority structures as factors affecting the prospects for change.

3. An Overview of Transitions Sought by HTF Projects

The calls for change in health systems are as frequent as the failures to achieve it. What kinds of transition did the Health Transition Fund hope to stimulate? Perhaps even more to the point, given the diffuse and grassroots nature of the program, what transitions did the project sponsors have in mind?

Predictably, the projects envisioned several types of transition, among which are:

- a more cost-effective way to provide service;
- a more integrated approach to delivering services;
- an improvement in the quality of services;
- fulfilling unmet needs in disadvantaged or hard-to-reach populations;
- improving access to care;
- improving the cultural appropriateness of services;
- maximizing the use of the skills and knowledge of the health care workforce; and
- introducing new communications and information technologies.

These are not abstract or theoretical changes. They require changes in any or all of policy, structure, funding, and incentives. These in turn require changes in human and organizational behaviour – invariably the hardest changes to bring about. In a fundamental sense, the HTF was an experiment in the determinants of change, i.e., what leads people to consider change, what facilitates change, what are the barriers to change? In particular, how does research-based evidence influence people to contemplate or advocate for change, and to what extent does it break down resistance to change?

4. Overview of Themes and Significant Findings

4.1 Highly Significant Projects: Some Examples

Comprehensive overviews of the nine theme areas are available in synthesis reports. This report is therefore less a statement of record than an attempt to distill the key lessons from each area and their significance for policy and practice. It is of course a highly selective and truncated account of a rich variety of projects. Readers will profit immensely by consulting the synthesis reports in their areas of interest. The appendix of this report contains brief summaries of the content of the nine synthesis reports.

The enormous range, intent, size, and scope of HTF projects make any ranking of their importance or significance as subject to challenge and disagreement as the WHO ranking of national health care systems. The individual project reports and to some extent the nine thematic syntheses constitute the official record of the projects. Here the main intent is to highlight those projects whose findings are highly relevant to the world of policy-making, resource allocation, and practice; some are included to illustrate the range of projects and their potential implications. Some projects were modest in scope but rigorously conducted, generating robust findings. Others were larger, messier, at times incomplete, with huge and unfulfilled ambitions, and potential effects that might not be apparent for many years. Some of these are worth highlighting, with appropriate caution in interpreting their ultimate significance. Still others attempted to address, with varying degrees of success, topics nearly always at the top of the policy-makers' agendas. Finally, some that began with great expectations foundered for a number of reasons. We can learn as much from some of these "heroic failures"

as from small successes that merely confirm or adapt experiences or lessons previously learned.

4.2 Waiting for Care: Breakthroughs from the West

Waiting too long for service has become the national complaint and the symbol of a once-peerless system's decline in the eyes of its critics. The debate is to a major extent driven by stories of very long waits as the norm rather than the exception. In 1997 Health Canada commissioned a review of what we know, and don't know, about wait times in Canada. The report, published in 1998 (McDonald et al., 1998), painted a disturbing picture. Providers, the public, and administrators believed wait times were getting longer. By contrast, the published (though relatively sparse) systematic evidence revealed that they were typically stable during the turbulent 1990s (Nova Scotia Health, 1996; DeCoster, Carriere, Peterson, Walld, & MacWilliam, 1998; DeCoster, MacWilliam, & Walld, 2000). Worldwide attempts to shorten wait times by adding money alone almost invariably failed in the long run.

Even worse, other than for a few selected procedures in the cardiovascular and cancer areas, there was no attempt to manage or standardize wait-lists in the interests of fairness and transparency. Most lists were, and are, "owned" and kept in physicians' offices. There are no standard criteria for determining whether a procedure is warranted, and no process for prioritizing patients in order of need. Most jurisdictions reported a "first on, first off" approach, meaning that a patient presenting early with, say, a cataract would often be served ahead of a patient with far more serious visual impairment who waited longer before seeking help. Often operating room (OR) time was allocated on the basis of the length of waiting lists, creating incentives to place people on the lists early and refuse to share patients with physicians with shorter lists so that the typical wait times could be reduced.

The system was revealed as a non-system, with unfairness, inequity of access, needless suffering, and potentially adverse events virtual certainties. The *Western Canada Waiting List Project* (NA489) assembled a consortium of 19 partners – medical associations, regional health authorities, research organizations, and ministries of health – to develop protocols for managing waiting lists for hip and knee surgery; cataract surgery; MRI investigation; access to children's mental health services; and general surgery. These procedures account for literally billions of dollars of health care expenditures annually, and the potential to cause or prevent a great deal of suffering lies in the way the queues are ordered.

The project was notable for its methodological rigour, unprecedented and sustained collaboration among the partners, and scope. Clinical panels developed criteria to assess need and rank patients. The criteria were pilot-tested, leading to refinements in the method. These activities were not without their controversies, and in some areas, particularly MRI, it proved difficult to reach consensus on the criteria. It was perhaps surprising that in an area as difficult and complex as children's mental health, the panel made great progress toward consensus. Focus groups of citizens strongly affirmed the principles behind the project and the overall approach.

The implications for the system are profound. First, the project demonstrated that it is feasible to develop practical tools for managing wait-lists across a range of diagnostic and therapeutic procedures. Second, ultimate implementation of the tools will almost certainly make the wait-list system fairer for both patients and providers, eliminating incentives to “game” the queues (i.e., play games with the rules to get patients in faster) and suspicions of preferential treatment. Third, the tools are a great step forward for evidence-based practice in that the assessment of need is comprehensive and transparent, and once implemented, the criteria can constantly be evaluated

and updated as the relationship of need, wait times, and interventions to health status outcomes is confirmed. Fourth, generalizing this approach to a wide variety of health care procedures creates information useful for resource allocation at the program, regional, and provincial levels. Such information would replace the vagaries of health human resource supply, anecdote, and tradition as the bases for setting priorities.

A second study, *Regional Evaluation of Surgical Indications and Outcomes* (BC401), examined the effectiveness of six common elective surgical operations from the patients' perspective: cataract extraction, cholecystectomy (gall bladder removal), hysterectomy, lumbar disc surgery, prostatectomy, and total hip replacement. The Vancouver-Richmond study defined effectiveness in terms of health-related quality of life (HRQOL) and patients' perceptions of the difference the surgery made to their lives. The 118 surgeons involved in the project used a standardized form to indicate why their patients (a total of 5,313) needed the surgery (6,274 procedures). Patients completed an HRQOL form before and at two intervals after the surgery. Rates of return for the questionnaires varied from a low of 52 per cent for cholecystectomy to a high of 77 per cent for lumbar disc surgery.

Where surgeons' clinical assessments were more in line with the surgical guidelines – as for hip replacement and lumbar disc surgery – patients overwhelmingly reported positive outcomes. Conversely, where the clinical assessments and the guidelines diverged, outcomes were worse. For example, 26 per cent of cataract patients reported that their quality of life was worse after the surgery. Many patients with good visual acuity underwent surgery, not only placing them at risk for an adverse outcome, but also displacing other patients in the queue. For cholecystectomy, 21 per cent found no change and 9 per cent had worsened. The authors noted further exploration of these findings could

help surgeons and patients determine who best can benefit from the operation and reduce the chance of poor outcomes.

The implications of these studies are no less than transformative. Previous work had revealed the organizational chaos surrounding waiting lists and times in Canada and its unhappy effects. These studies have demonstrated that it is possible to bring order to a system that has operated haphazardly. The assumption that all surgery is needed and beneficial has been revealed as hollow. Valid tools can be developed to ensure that patients are reliably and thoroughly assessed and that access to service is based on need. The two essential next steps are to refine and implement the needs assessment tools – already envisioned by the leaders of NA489 – and to establish as clearly as possible the guidelines for determining when an intervention is warranted. That these achievements are possible, now makes them imperative. Building on this work will make health care more just and more effective. Unconscionably long waits and inequities in access to service are not inevitable; they are the by-products of a failure to insist that health care be organized like a true system and that the needs of the public come first.

4.3 Not ‘N Sync: Canada’s Pharmaceutical Policies

International Experience with Pharmacare: Lessons for Canada (NA236) provides a valuable overview of various approaches to drug financing, insurance, use, and price control in other countries. Canada’s policies are atypical in that they are highly decentralized and public financing accounts for 31 per cent of total expenditures – less than half the Organization for Economic Co-operation and Development (OECD) norm outside the United States. The United Kingdom, Sweden, and New Zealand finance prescription drugs by taxes; Germany, France, Australia, and the Netherlands largely by public social insurance funds. Private insurance has almost no role in the United

Kingdom and in Sweden; it covers about 9 per cent of the population in Germany and one-third of the Dutch population; and it covers co-payments for the public insurance fund for about 80 per cent of the French populace. France, Australia, and New Zealand all contract with industry in a way that “renders the manufacturer vulnerable to financial risk should higher-than-anticipated expenditures be incurred” (NA236, p. 25). This involves some sort of payback or decrease in reimbursement if the price-volume agreements are exceeded.

Within our borders there are some disturbing data on access and coverage. *Canadians’ Access to Insurance Coverage for Prescription Medicines* (NA202) found that two per cent of Canadians are essentially uninsured (defined as having to pay more than 4.5 per cent of their gross income to meet a \$1000 drug bill), while a further 10 per cent are underinsured (defined as having to pay 2.5 per cent or more of gross income for a \$1000 drug bill). Coverage varies from province to province.

Two related projects (under the title *An Assessment of the Health System Impacts of Direct-to-Consumer Advertising of Prescription Medicines*, NA250) examined the penetration of direct-to-consumer-advertising (DTCA) into Canada from U.S. media (DTCA is not allowed in Canada), and the perceived quality of pharmaceutical company advertising. A Vancouver survey of 780 patients in physician offices found that 90 per cent had seen a direct-to-consumer ad for a prescription drug within the previous year; 30 per cent had seen 10 or more products advertised (NA250, part 1). Pharmaceutical companies and advertising industry/media representatives assessed the quality of DTCA information on drug benefits and risks as good to excellent (73 per cent and 91 per cent, respectively), in contrast to private payers, patient/disease groups, non-profit/consumer groups, health professionals, and government officials, 75 to 100 per cent of whom judged the quality as poor to very poor.

Together these projects reveal the challenges in developing effective pharmaceutical policies and the consequences of inaction. Coverage is uneven, cost control has proved difficult in the patchwork of public and private financing, and the border cannot stop DTCA. Perhaps most significantly, most other advanced OECD countries have national pharmaceutical policies and high rates of public financing. The projects collectively do not define a solution, but they do reveal that, increasingly, the status quo cannot meet the goals of equity, efficiency, and cost containment.

4.4 Coordinating Care of the Frail Elderly: The SIPA Project

Modern medicine hardly lacks for glamour: organ transplants, the isolation of genes responsible for certain disorders, various wars (on cancer, AIDS, diabetes). The less glamorous side of health care often involves the long, slow, and usually gradual decline associated with aging. Science cannot stop time. Many conditions are irreversible. Old age is often a time of frailty, and it takes a combination of astute needs assessment, coordinated services, compassion, and tailored services to allow people to retain their independence and a reasonable quality of life. One of the hardest things to achieve in our large and complex system is a coordinated approach to community care. When such networks fail, the results can range from burnt-out caregivers to individuals who decline rapidly and end up using very expensive services to address preventable problems.

The Quebec-based SIPA project (*Services intégrés pour les personnes âgées*, QC404) established a network to provide services to elderly people living in the community who were at risk for health and functional breakdown. Among the innovations were clinical protocols, case management and teamwork, coordination among institutions, a 24-hour-a-day, seven-day-a-week on-call system, increased budget for community services, and payment for combined

medical and social services on a capitation basis (a fixed amount per person). The project was spearheaded by gerontologists and researchers who recognized both the common neglect of this population group and the potential to achieve health and financial benefits.

After the first year of operation, the program reduced the waiting list for admission to hospital, shortened length of stay in emergency departments, and increased access to home care. Clients reported improved quality of care. Community service costs actually rose slightly (the program intended to make these services more easily accessible as needed) while hospital costs were unchanged. The project continues and constantly readjusts to solve problems, e.g., simplifying the on-call system and reducing the workload of case managers.

It is too early to tell what the long-range health and cost effects of the SIPA program will be. However, even if it turns out to be cost-neutral, there is evidence already that the frail elderly are getting services they may not have previously received, and the processes of care are better. The funding of medical and social services from a single envelope on a capitation basis is an innovation worth watching because of its potential to implement care plans unimpeded by budget silos and artificial distinctions between service sectors. Finally, the project demonstrates the magnitude of the challenge in trying to put in place a new approach to service inside a still-fragmented and sometimes rigid system.

4.5 Canada's Intelligence Deficit: The Discouraging Case of NA369

There is a growing body of research suggesting that removing financial obstacles to obtaining care leaves other barriers intact. From a public policy and social justice perspective, it is important to identify the seriousness and extent of the problem. A national project, *Socio-Economic Differences in the Use of*

Health Care: Why Are There Non-Financial Barriers to Medically Necessary Services? (NA369), proposed to examine data from five provinces to document the problem and infer its origins. The project budget was a relatively modest \$213,000.

The investigators spent two years discovering why the project could not be done. Problems included incomplete or incompatible datasets; long delays in obtaining provincial approval to access the data (Ontario still had not assented as of October 2001); and governments' (not the HTF's) proposals of intrusive contractual terms, e.g., that the research team be "deemed employees" of Statistics Canada and forego their right to interpret the data freely or express opinions. Rather than discovering the non-financial barriers to access to services, the research team discovered a formidable array of non-financial barriers to access to the data essential to answering the primary question.

This is but an extreme example of a problem that has crippled Canada's intelligence about its health and health care systems. Access to data stripped of all personal identifiers ranges from difficult to all but impossible, particularly where datasets must be linked. The culture of widespread use of public data (paid for by taxpayers and gathered by public institutions) has not developed. There are long delays in obtaining data, frequently under severe restrictions. Often the data are old, and because they are not routinely used for high-quality research purposes, they are flawed and require months to clean. Researchers waste enormous amounts of time and money simply getting the data in usable format and are then criticized for the untimeliness of their findings.

NA369 should be a rallying point for redressing this appalling failure to use health and health care data to maximum effect. Comparative information is the foundation of a good deal of progress, yet our

provincial/territorial systems are rarely fully compatible. Important project ideas lie dormant because of the unavailability of suitable datasets. The country has invested heavily in sophisticated hardware and software, but regularly bars the door to research that could convert the mountains of data into useful information. We are consequently late in achieving some insights, while others are forever deferred. This painstaking, frustrating, and elegant exposé of the poverty of Canada's research data protocols at once reveals the potential for landmark studies and the anatomy of the failure to realize it.

4.6 Complexity + Autonomy = Slow Progress in Congestive Heart Failure Management

Again following the dictum that we often learn more from failure than from success, a half-million-dollar project (BC402) to improve care for congestive heart failure (CHF) patients in Vancouver met with mixed results. CHF is a widespread and serious problem. Observing that it is not consistently managed, the study principals suggested that following what are known as "clinical pathways" based on evidence of best practices would help patients both in hospitals and in the community. The study included an educational component, enrollment of patients, and a follow-up evaluation. Researchers encountered difficulties each step of the way.

Essentially, the study made little headway in the institutional setting and more progress in the community setting, where home care nurses not only adopted the clinical pathways but have also incorporated them into their practices as the new standard. Hospital physicians resisted the pathways as a threat to their autonomy and an example of "cookbook medicine" that underestimates the importance of clinical judgment. These reservations mirror the attitudes responsible for the widespread indifference to clinical practice guidelines.

The results of the study point to a crucial and difficult organizational policy dilemma: to what extent should clinical autonomy that results in large variations in practice outweigh the potential for quality improvement inherent in a standardized approach using clinical pathways? The public rarely has the accurate, timely, and comprehensive information and knowledge that would discipline practice from the “demand” side. Fortunately, there is a burgeoning industry developing performance indicators in the country, and it promises to overcome the information gap. Yet these efforts are fragmented, and it will take years before managers, let alone the public, have up-to-date, comprehensive information on the processes and outcomes of care in all major programs and services. Health care may be the only industry where it is optional to adhere to guidelines and pathways based on scientific evidence and produced by professionals. That there is no obvious response to the differences between the institutional and community-based results from the British Columbia study demonstrates that the health system has not widely adopted a culture of evidence-based decision-making, nor has it developed powerful incentives to promote it.

4.7 Low Tech, High Impact: Improving Services for Aboriginal Canadians

Not all innovation involves new technology or dramatic reorganization. For Aboriginal home care, change is being built on a foundation of hard work, careful planning, and matching services and programs to identified needs. The Aboriginal population is much younger than the general Canadian population, but an emerging priority is to expand the availability of home care for the growing numbers of elderly people. The project *First Nations and Inuit Home Care*

(NA108), working with five communities, developed a framework and processes for implementing home care programs based on assessed needs and core services. Health Canada has used this experience as a template for implementing home care programs in over 600 Aboriginal communities across Canada.

This is a notable achievement in several respects. First, it has begun to address a long-recognized deficiency in Aboriginal health services. Second, it has brought an element of rigour and accountability to the expansion of Aboriginal health services; the focus on needs-based programming is a stark contrast to the provision of some services, such as non-insured health benefits, where use is open-ended and costs have frequently been out of control. Third, the project and its aftermath demonstrated that where the timing is right, the needs are apparent, and the authority to move forward is in place, rapid diffusion is possible.

“Getting primary care right” is a Canada-wide theme. A potentially very significant project was *A Tri-Partite Approach to Developing a New Model of Primary Care for Eskasoni First Nation* (NA305). This project applied a primary care model, integrating physicians into multidisciplinary primary care teams, coordinated with community-based programs. The use rates are encouraging: a projected 40 per cent decline in emergency department visits; a drop in physician visits from 11 to five per person annually; and a 7 per cent reduction in prescription drug costs. Almost all pregnancies (96 per cent) are now monitored by a physician or community health nurse. Because the precise nature of the evaluation is unclear, these data should be interpreted with caution. But there is reason for optimism that attending to the “upstream” care for Aboriginals may actually lead to the long-promised savings “downstream.”

4.8 Home Care: Solidifying the Evidence

Internationally and in Canada, debates flourish on the subject of whether home care enhances or compromises independence (Health Services Utilization and Research Commission, 2000); increases or decreases health care costs (Weissert, 1985); and is an add-on to or substitute for acute care (Health Services Utilization and Research Commission, 1998). A massive, multi-pronged HTF series of 15 studies entitled *The National Evaluation of the Cost-Effectiveness of Home Care (NA101)* has added significantly to the growing body of made-in-Canada evidence that refines our understanding of home care and its impact.

Notable was Substudy 1, *Final Report of the Study on the Comparative Cost Analysis of Home Care and Residential Care Services*, using a linked British Columbia database that was able to track patients over four years. The study was the first systematic attempt to determine the relative costs to government of home-/community-based services versus residential, long-term care services, by level of care. The key results: home care is generally cheaper, at all levels of care, than care in residential facilities; proportionally, savings are greater at lower levels of care. On average, the overall costs to the province for home care clients are about one-half to three-quarters the costs of facility care. Costs differ by type of client – the lowest home care costs are for individuals whose type and level of care was stable over time. For people who die, home care costs are higher than residential care costs. Overall, home care costs less than residential care and provides at least an equivalent quality of care. However, residential care may be better at keeping clients stable and out of hospital.

The growing Canadian evidence that home care is cost-effective in at least some circumstances raises the question of why it has been so difficult to achieve the “win-win” scenarios of good care efficiently delivered.

Despite hospital downsizing in the 1990s, chart audits using tools such as InterQual-ISDA™ continue to reveal that significant numbers of hospital days are consumed by patients who need an alternate level of care (DeCoster, Peterson, Carriere, & Kasian, 1999; Flintoff et al., 1998; Mayo, Wood-Dauphinee, Gayton, & Scott, 1997). Age-specific rates of long-term care institutionalization in Canada, while declining, remain higher than in the United States and in most northern European countries (Lazurko & Hearn, 2000). A clear understanding of why Canada has not achieved optimal use of social housing, post-acute home care, and long-term community care is essential both to improving the quality and responsiveness of services, and to using resources wisely. As evidence accumulates, it will be important for system managers to develop incentives to invest in those services and practices that are proven to be sound alternatives to historical modes of delivery.

4.9 Using Health Human Resources Wisely

Canada’s health human resource (HHR) woes are now part of public discourse. Without a major shift in how the system delivers services, the current shortages of personnel are destined to get worse before they get better. Morale is poor, unimproved by sometimes large increases in rates of pay. Are we using our personnel to best effect? Are professionals able to apply their knowledge and skills? Is there idle intellectual capital alongside the perceived shortages?

There is plenty of research-based evidence that the division of labour in health care is far from ideal. Canadian studies demonstrated a quarter of a century ago that nurse practitioners could be effective front-line providers of primary care (Spitzer et al., 1974), but the findings never translated into widespread practice. The call for fundamental primary care reform, including HHR deployment, remains largely unheeded (Hutchison, Abelson, & Lavis, 2001). More recently,

an international study found that hospital nurses performed many non-nursing duties at the expense of providing the required nursing care (Aiken et al., 2001). Hospital pharmacists are active members of the decision-making team and have considerable authority to recommend therapeutic regimens. Community pharmacists are rarely integrated into the health care team, and a great deal of their knowledge lies fallow.

HHR issues and challenges clearly affect the prospects for widespread change in the health care system. In such an environment it is particularly important to glean lessons from demonstration projects, although history reminds us that “proof of concept” is a necessary, but hardly sufficient, step towards change. Studies that demonstrate significant effects on service quality or health outcomes are presumably the most compelling. Some HTF projects produced very positive results with potentially major implications for policy and practice.

An important study examined the impact of incorporating community pharmacists into decision-making on drug prescribing practices. *Randomized Trial Evaluating Expanded Role of Pharmacists in Seniors Covered by a Provincial Drug Plan in Ontario - Seniors Medication Assessment Research Trial (SMART)* (ON221) paired physicians and pharmacists in teams. The findings revealed that among seniors with five or more prescriptions, pharmacists identified medication problems in 88 per cent of the cases; family doctors agreed to implement 84 per cent of the recommended changes; and 57 per cent of the recommendations were acted on within five months. The project was expensive – about \$750 per enrolled senior in a five-month period – but the potential benefits are great given the prevalence of newly detected problems. An Alberta project, *Primary Health Care Collectives: Improving the Quality of Medication Use in the Community* (AB301-27), found that a team consisting of a family physician, pharmacist, and home care professional significantly improved adherence to

medication regimens among high-risk (five or more medications) people.

These findings strongly suggest that the system and public are ill-served where pharmacists play a passive role in decision-making. Physicians remain skeptical: when asked in surveys whether they would partner with pharmacists in decision-making, most said no. Yet those who did participate gave the partnerships high marks; familiarity breeds respect. Similarly, primary care innovation models with expanded roles for nurses invariably demonstrate the feasibility of this approach, but adoption remains voluntary and painfully slow. It takes more than demonstration to create change in the face of opposition.

5. Balancing Innovation, Risk, and Timeliness

Acting on the lessons of literally dozens of HTF projects would enhance prevention, improve health care, and achieve better value for money. What have we learned from the HTF experiment itself? Should it be reincarnated, and if so, what changes should be made to improve it? The federal government’s commitment to targeted innovation has not abated. While not a replica of the HTF, the four-year, \$800 million fund to support the transitional costs of implementing large-scale primary health care initiatives created by the September 2000 First Ministers Memorandum builds on the momentum of the earlier program. Should a direct successor of the HTF be established, it will be important to preserve the strengths and transcend the limitations of the initial experience.

Like most experiments, the HTF ran into unexpected problems and did not realize some of its grander ambitions. One of its successes was also the cause of some avoidable failures. The program compressed the usual length of time between the conception of a project and its funding. Some projects experienced delays of several months before receiving final approval to begin. But overall, the decision-making process was swift, particularly in comparison to granting agencies, whose requirements for detailed applications and peer review result in a long gestation period. In some cases, million-dollar grant proposals were assembled and funded within a few months. Some of these proved to be great successes; others hardly got off the ground. While there are no definitive “forensics” on the determinants of success or failure of various projects, a number of plausible explanations emerge, among them:

- Large and complex projects led by research centres with solid track records tended to succeed, while those without experienced research partners tended to have difficulties either carrying out the project or completing a sound evaluation.
- The quality and thoroughness of the applications varied greatly. In retrospect, several large projects were very sketchily described and should not have been funded without elaboration.
- The review process within provinces and at the federal level was uneven, and in some cases the decision to fund was more an expression of support for the idea and hope for a positive outcome than an evidence-based assessment of competency and likelihood of success.
- The limited lifespan of the program meant that many projects shut down soon after they started up, resulting in inadequate numbers of participants and a huge investment in the formative stage that never realized maximum returns in the main event. Others were unable to complete a decent evaluation for both methodological and time reasons.

- If traditional granting agencies’ processes appear glacially slow to some, and unresponsive to policy-oriented research needs, the HTF process was in some cases perhaps too accelerated. Sometimes large and multi-faceted project teams were cobbled together to launch pilot projects with little knowledge of the environment and, in some cases, lack of support from the relevant communities. Again this points to a need to balance thorough assessment and due diligence against the desire to get a wide range of activities underway in a very short time.
- Canada’s ability to mount rigorously planned demonstration projects and evaluative and health services research is limited, in part owing to the increasingly straitened funding in the 1990s. The HTF was a sudden infusion of cash with very short-term availability. This created a temporary excess of supply over capacity, resulting in some hastily conceived and overly ambitious projects supported by limited numbers of experienced researchers with a limited amount of time.

But we should not lose sight of the strengths and accomplishments of the HTF, including:

- Successful projects produced findings relevant to billions of dollars of health expenditures and the lives and health of millions of Canadians. Their implications for both policy and practice are clear and important.
- Many projects actually altered policy and practice. If it were possible to estimate the projects’ impact on quality of care, health status, and cost-effectiveness, no doubt the return on investment would be very high. Often the innovations succeeded in difficult environments. Those that fell into the “noble failures” category provided valuable information about the barriers to change.

- It generated a tremendous amount of creativity and interest in evidence-based innovation and evaluation in a very short time. Given the brief window for applying and the non-academic world's lack of experience with the process, the number of ideas coming forward from community groups and institutions was remarkable. Many of these were thoughtfully prepared, and the groups had enlisted appropriate academic partners and developed sound partnerships that sustained the projects through to a successful conclusion.
- It was an excellent example of federal-provincial cooperation. The division of the fund into 80 per cent provincially dedicated and 20 per cent for projects of national significance proved inspired. Provinces pursued quite distinct approaches to generating and prioritizing proposals. Some, like Saskatchewan, issued calls for proposals in all priorities, while Alberta focused on a linked series of primary health care demonstration and evaluation projects. Several of the national proposals involved unprecedented collaborations. The two-stage review process (provincial and final federal level) unfolded smoothly and collegially by all accounts. The federal presence lent a coherence to the program and provided administrative leadership and advice, while permitting a good deal of provincial variation.
- It did not make arbitrary budget decisions, but rather funded on an as-needed basis and negotiated rather than imposed budget reductions. This approach eliminated the temptation to pad budgets in anticipation of across-the-board cuts. Funding commensurate with the size of the task was available – there were no hard and fast limits.
- Although launched in an environment of limited capacity, the research and health care communities responded enthusiastically to the opportunity despite the disruption of ongoing activities. The health sector recognized that innovation is vital and seized the opportunity to pursue it. Many researchers made time to collaborate and committed heavily to producing reports and evaluations that have not always been valued by the academic reward system.

Some features of the initial HTF experience should be retained, others should be jettisoned, and some new ground rules and processes should be established. The biggest mistake would be to become so risk-averse that all hope of genuine innovation and creativity was wrung out of the program. The following are more suggestions for consideration than firm recommendations on how to structure future Health Transition Funds.

- Retain priority subject areas and use networks and agencies, such as the collaborative “Listening for Direction” initiative led by Canadian Health Services Research Foundation (CHSRF, 2001), and federal/provincial/territorial structures to identify them. The thematic approach proved very successful. Often the significance of the clusters of projects exceeded the sum of their parts.
- Stagger the proposal submission schedule so that the review process can be more rigorous and thorough, and the workload can be more manageable. Options include doing one theme area at a time; having different deadlines for provincial and national projects; or having multiple intake dates.
- Develop a general policy on the balance between genuinely innovative projects, replications of projects that were successful elsewhere, and evaluation projects. The HTF should not become a slush fund for garden-variety program implementations; the premium should be on innovation. All projects should have a formal evaluation component, adequately funded.

- Fund feasibility projects so that applicants can do some of the up-front work to develop community receptivity, examine the prospects for obtaining data, etc., without committing large sums to doomed initiatives. Alternatively, projects whose feasibility is not self-evident could be funded in two stages, with the bulk of the funding contingent on successful completion of the first phase.
- Extend the permissible project duration to three to five years. Many projects had barely begun when they had to terminate. Others could not obtain adequate numbers of participants to yield robust results in the time available.
- Allow the fund to carry over money from fiscal year to fiscal year. Granting agencies forced to push money out the door or lose it by year-end have to make short-term decisions that may be incompatible with longer range directions. Successful innovation cannot be held to a fiscal year timetable.
- Revisit the design of the application form and criteria to ensure that all projects present sufficient information on which to base a decision. Alternatively, allow enough time and resources for applicants to respond to requests for clarification or elaboration on a case-by-case basis.

Finally, and most importantly, before moving on to a new round, it is important to track and assess the impact of projects on policy and practice. To that end it is encouraging that the Program Evaluation Division of Health Canada is planning an impact evaluation of the HTF program in 2003-04. If the flagship projects with robust findings fail to influence a broader agenda, a forensic analysis will be essential to improving prospects in the future. Likewise, it is crucial to identify the factors that lead to more rapid and widespread uptake. Too often the next step after a successful demonstration project is another demonstration rather than full-scale implementation. The aftermath of the HTF experience will be a test

of the resolve to act on solid and made-in-Canada innovations. If the best of the projects do not become the templates for the system at large, it will be important to determine why they did not. It would be a travesty if programs like the HTF, through no fault of their own, end up as unwitting accomplices of those who wish to prevent or delay change by providing an excuse to defer decisions in order to await the results of projects that seek to reaffirm persuasive findings previously generated.

In that light, perhaps one of the signal achievements of the HTF program has been to create an even higher profile for the issues of research uptake and implementation. The projects created dozens of unprecedented partnerships among program personnel, researchers, and evaluators. Consistent with developing theories of research application, the demonstration and evaluative projects were for the most part jointly conceived and owned by the producers, users, and beneficiaries of new knowledge. The point of the program, as its name declares, is to effect transitions based on the compilation and trial application of sound evidence. In the case of the most thoroughly conducted and compelling projects, there is now a body of work that is part of the intellectual landscape of the Canadian health system. There is of course no guarantee that these experiences and achievements will become standard practice, or that their findings will not one day be superseded. But the HTF has created work that must be reckoned with, and partnerships and approaches that are sure to make further contributions in the future. That alone is a pretty good return on the relatively modest investment of \$150 million.

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Appendix A: Summaries of HTF Synthesis REPORTS

This appendix provides summary information on the nine individual HTF syntheses. These documents are available on the HTF website, as is information on individual HTF projects (www.hc-sc.gc.ca/htf-fass).

Home Care Synthesis Report

Context: The role of home care is growing in importance in the Canadian health care system, with as many as one million Canadians now using home care each year. The growth in both costs and services has raised concerns about standards and consistency in this sector of care. At the same time, the trend of downsizing the hospital system in Canada is placing an increasing burden on home care programs, raising concerns that home care's role is shifting as it is increasingly pressured to take on the priorities of the acute care sector. The 45 Health Transition Fund (HTF) studies that fall under the home care rubric demonstrate the program's interest in improving services and addressing the pressure points on the system. The HTF projects studied how to make home care services more consistent across Canada, explored how home care might reach non-traditional populations such as Aboriginals and the mentally ill, and examined the effectiveness of providing services outside the hospital setting.

Synthesis Report: In a 25-page report, Evelyn Shapiro, professor/senior scholar in the Department of Community Health Sciences, Faculty of Medicine, University of Manitoba, examines the 45 HTF studies and explores inconsistencies across Canada in the delivery and accessibility of home care programs, noting that where Canadians live, rather than what they need, currently determines access to services, payment of user fees, and quality of service. HTF

projects included a national study that showed home care for the elderly was a cost-effective alternative to various levels of care in long-term care facilities. The report notes this has implications for the organization, management, legislation, and resource allocation of home care services. Evidence also indicates that the health issues of seniors and other groups such as Aboriginals, dementia patients, and the mentally ill can be effectively handled through community services supporting independent living. Several HTF projects noted that increasingly complex and diverse needs of clients in the home care sector are posing challenges in the areas of human resource training, management, and service delivery.

Conclusions: This report recommends a federal-provincial agreement to implement a national home care program that treats all Canadians equally and equitably. It notes that the HTF studies which tried to reduce the use of hospital emergency rooms and inpatient beds through home care often failed to reach that goal, and it advises against using home care as a substitute for public health programs. The report urges improvement in the vital links between home care, hospitals, and long-term care facilities as well as the development and monitoring of home care standards. The report concludes that the HTF projects together make the case that home care's role in the health system must be acknowledged and strengthened.

Pharmaceutical Issues Synthesis Report

Context: Drug costs are the Canadian health care system's second-highest expenditure, and the fact that they have increased by about 20 per cent annually since the early 1980s is threatening the viability of existing public pharmacare and private prescription drug insurance programs. Prescription drug expenditures are rising faster than any other component of health care. Numerous factors are driving up the cost of delivering drug therapies, including the emergence of new drugs, increasing use of existing treatments, and non-optimal use of therapies.

Of the 140 national pilot projects and/or evaluation studies across Canada supported by the Health Transition Fund (HTF), 25 projects examined issues related to pharmaceuticals. The focus ranged from improving patient adherence to drug regimens to the effects of direct-to-consumer advertising and how differences in drug costs affect drug use. Most projects examined ways to improve the use of pharmaceuticals. Some also looked at the composition and population coverage of prescription drug insurance programs.

Synthesis Report: Drs. Robert Goyer and Wendy Kennedy of the Faculty of Pharmacy, Université de Montréal, summarized the key process and learning outcomes of the 25 HTF projects. The 23-page report sets the issues of pharmacotherapy (health care involving pharmaceuticals) in a Canadian and international context and recommends policy actions governments can take to control rising costs. The authors find that patients and health professionals want credible, current, and understandable drug information and that physicians and pharmacists can benefit from the development of clinical practice guidelines – standardized principles of disease therapy and management. The report notes that 10 per cent of Canadians do not have adequate insurance for their prescription drug costs, and that another 10 per cent are underinsured.

Conclusions: Based on the HTF research, the report concludes that provincial governments are burdened with conflicting roles in ensuring optimal pharmacotherapy for their populations while controlling budgets and encouraging pharmaceutical industry research and development.

The report does not recommend deregulation of the pharmaceutical market to solve this dilemma, suggesting that such a move would take Canada farther from a model of public financing of pharmaceuticals – a less expensive and more equitable form found in most developed countries – and closer to the more expensive and less equitable U.S. model.

Instead, the report says Canada should look to international examples for alternative cost control measures such as drug budgets for physicians and negotiation with industry to share the risk of insurance program cost increases.

Primary Health Care Synthesis Report

Context: Primary health care is the first point of entry into the Canadian health system. Historically it has tended to focus on the traditional medical model, with a single physician in solo practice assessing the patient and initiating diagnostic testing, therapy, or specialist referral. In recent years a new approach to primary health care has emerged that spans the continuum from changing doctors' mode of practice and payment to creating community-based health services featuring a wide range of providers. One end of the continuum, often called primary care reform, focuses on altering how doctors work (e.g., moving them into multidisciplinary group practices) and/or how they are paid (e.g., away from fee-for-service to salaried or capitated funding.) At the other end of the continuum, primary *health* care focuses on larger systemic issues of health care, such as population health and prevention programs, encouraging broad-based community health programs that feature the best use of all health care providers to maximize the health of the patient population and the best use of health resources in the system.

Synthesis Report: Ann L. Mable and John Marriott, of Marriott Mable Consulting, reviewed the 65 Health Transition Fund (HTF) projects focusing on primary health care issues, including the provincial primary care reform projects and projects that focused on health promotion, sickness prevention, chronic care management, population health, and public education and wellness. In the 36-page report, the authors examine significant and relevant findings from the projects under three themes: models and elements; capacity building; and the HTF framework of access, quality, health outcomes, cost-effectiveness, and transferability.

Conclusions: Some of the findings from the primary care reform projects are that changing professional roles requires strong communication and education strategies and that there must be incentives for interdisciplinary collaboration (i.e., a key incentive is computer systems and software for clinical and organization management). Experience in other countries and in Canada has shown that voluntary collaboration has limited success. In British Columbia, physicians noted that the transition time for bringing physicians who work in isolation to work in groups can take up to six months. Stumbling blocks include the fact that the current roles of professionals are embedded in provincial legislation, making them difficult to change. However, moving from solo to group practices provides doctors with safer, more supportive and collegial environments. Group practice for physicians has resulted in improved on-call services, and multidisciplinary settings are improving access to more providers. Physicians can spend more time with patients. And patients have access to a fuller range of primary health care services.

Many of the HTF projects demonstrated how to integrate population health strategies into the core of primary health care – for example, by developing guidelines and programs for defined populations, such as those with diabetes or other chronic health issues. A number of initiatives were collaborative efforts spanning a wide range of health care providers and, in some cases, including sectors outside health, such as the school system. The findings of the HTF projects show that health care providers, governments, and patients can all benefit from a strengthening and a reform of primary health care.

Integrated Service Delivery Synthesis Report

Context: The challenge of creating a seamless health care system that overcomes fragmentation, duplication, and gaps in service is one of the most active fields of health care inquiry in Canada. Integrating services to ensure closer working relationships between hospitals, long-term care facilities, primary health care, home care, public health, community services, and other agencies is increasingly viewed as a promising means of creating a modernized, cost-effective system. This is particularly critical as the hospital's role as central coordinator of health services is reduced and as responsibilities and accountability for service delivery are transferred to other community agencies. Reorganizing services, improving information access, standardizing processes, or improving consistency in patient management are key themes to obtain better integration of services and were the main areas explored by the Health Transition Fund Projects.

Synthesis Report: Dr. Peggy Leatt, Liberty Health Chair in Health Management Strategies, and a professor in the Department of Health Policy, Management and Evaluation at the University of Toronto, analyzed the 41 HTF projects concerned with improving integrated service delivery. She examines reorganization and restructuring initiatives in the Canadian and American context, and recommends government actions that would put patients at the centre of the health care system. A shift in health service delivery that was explored in several HTF studies used the concept of cross-institutional care, which focuses on patients with specific diseases, those with chronic or long-term illnesses, or those who may be at risk of these illnesses. This is seen as a significant way to address redundancies and gaps in service. However, such cross-sectoral care poses challenges regarding the collection and sharing of information across traditional organizational and professional boundaries without undermining consumers' sense of privacy and confidentiality.

The HTF projects examined the use of standardized tools and processes to help ensure care was consistent when patients were transferred between services. As well, HTF projects looked at joint ventures – between, for instance, a hospital and home care program, or between family medicine centres and community health centres – to strengthen links between institutions at the community level. Finally, the author notes that the HTF projects which involved patients in their own health care showed positive effects by, for example, educating them about cardiovascular disease, asthma, and stroke. This 24-page report points out the importance of the concept of a single point of entry into the health care system, from which patient care is coordinated.

Conclusions: The report finds that efficiencies can be achieved and effectiveness improved in the health system by integrating services. It notes that information management and the use of technology to create integrated information is essential in any restructuring of the health system. The author urgently recommends that attention be given to providing Canadians with more information about their own health, health care, and the health care system. The report also recommends that governments and health professions accelerate their pace in developing and implementing integrated service agendas.

Rural Health/Telehealth Synthesis Report

Context: As many as 10 million Canadians live in predominantly rural areas and communities, where they tend to suffer from poorer health status than urban residents. The major issues faced by rural Canadians include difficulty in accessing health services, a lack of health care resources, and an acute and persistent shortage of health care practitioners in isolated and sparsely populated areas. Of the 140 Health Transition Fund (HTF) studies, 33 examined issues in the rural health/telehealth area. Most explored ways to deal with the particular needs of rural Canadians by integrating services, promoting community development, introducing mobile services, adopting telehealth, and/or developing innovative health workforce strategies.

Synthesis Report: Dr. Raymond W. Pong, research director of the Centre for Rural and Northern Health Research at Laurentian University, summarized the key process and learning outcomes of the HTF projects in this 24-page report. He notes several HTF projects sought to address critical health human resources issues by expanding the knowledge base of rural practitioners and through a team-based approach that aimed to share knowledge and increase productivity. Several HTF projects took a close look at the collaboration between physicians and nurse practitioners.

The HTF telehealth-related projects explored how new technology (i.e., computer links, teleconferencing) could improve health service delivery. Telehealth helped in patient and practitioner education and reduced the need for patients to travel long distances to seek medical care. However, the author notes these results were achieved at substantial cost and presented technical and human resource difficulties that could jeopardize successful implementation in remote communities.

Several studies pointed out that rural health problems are often the result of more deep-rooted factors: the social, cultural, behavioural, economic, and environmental determinants of health.

Conclusions: One major challenge in rural health is the need to move beyond offering incentives as a means of recruiting and retaining health workers, and to explore more comprehensive and multi-pronged strategies. Telehealth was an important subtheme of the HTF reports, and this technology may help rural health care providers overcome disadvantages of isolation and small populations. However, it poses challenges regarding the role of practitioners, patient referral patterns, and the long-term implications on health service delivery in a rural context.

The report concludes that many rural health problems cannot be effectively solved by piecemeal measures, and that not all solutions to rural health problems are to be found in the health care domain. It recommends that an overall strategy be developed, possibly through the newly established Ministerial Advisory Committee on Rural Health and similar bodies.

Aboriginal Health Synthesis Report

Context: Aboriginal health status in Canada tends to lag behind that of the general population in several key areas, including life expectancy. High rates of disability, diabetes, and infectious illnesses such as tuberculosis, as well as high risk of sexually transmitted diseases, are of new and re-emerging concern. The 21 Health Transition Fund (HTF) studies that deal with Aboriginal health took place in all regions of the country and aimed to improve Aboriginal people's health status and outcomes, remove barriers to their access to the health system, and develop capacity in Aboriginal communities to plan, execute, and evaluate their own health programming.

Synthesis Report: Aboriginal health consultants Madeleine Dion Stout and Gregory D. Kipling summarized the HTF projects in their 26-page report and highlighted several urgent issues, including the misuse of prescription drugs in some Aboriginal communities and the overuse of physician services in others due, to a large extent, to the current administrative structure of health benefits. The HTF projects addressed access barriers to health services and suggested these may be mitigated by using more culturally sensitive and holistic service delivery and by using liaison workers who would strengthen links between Aboriginal communities and the health system. The authors suggest health challenges facing Aboriginal people are multi-faceted and encompass individual, social, economic, and political dimensions. This recognition is important, for instance, in the area of HIV/AIDS, where it is crucial to make explicit the links between the high-risk behaviours rooted in Aboriginal people's socio-economic marginalization and their greater risk of contracting HIV.

Conclusions: Based on the HTF research, the authors suggest a number of specific recommendations to reduce prescription drug misuse, including restructuring the First Nations Inuit Health Branch drug benefit plan. This could entail shifting approval for non-prescription drugs from physicians to nursing or administrative personnel and introducing a non-prescription drug rationing system based on consumption levels. They also suggest implementing a national public education program to raise awareness among Aboriginal youth of the dangers of prescription drug misuse.

Although the HTF projects examining telehealth initiatives showed this technology improved clients' access to certain services, the authors note that evidence regarding the impact on health outcomes, as well as cost-effectiveness, remains inconclusive.

The report emphasizes the important role that community-based, grassroots projects can play in meeting Aboriginal people's basic health needs. It recommends that governments and health organizations support Aboriginal involvement in their health service delivery and management.

Seniors' Health Synthesis Report

Context: In Canada, 3.7 million people, or about 12 per cent of the population, are over the age of 65. This figure is projected to rise to 5 million (14 per cent of the population) by 2011. The fastest-growing sector of the population is people over the age of 75. One of the reasons for the interest in seniors' health is the concern that the aging population will put pressures on health resources because older individuals use more health services. However, there is a wide range of individual differences in the incidence of acute and chronic illness, and the corresponding use of services, on the part of the elderly. Illness in old age is more often chronic than acute, and since the health system typically focuses on short-term hospital care, there is little emphasis on helping seniors deal with the chronic conditions of aging.

Synthesis Report: Anne Martin-Matthews, professor of family studies at the School of Social Work and Family Studies at the University of British Columbia, reviewed and analyzed in her 27-page report, the findings of the 25 Health Transition Fund (HTF) studies that featured issues of seniors' health. The projects reflected the prevailing academic and advocacy belief that issues of physical decline associated with aging are best dealt with by community services that support independent living, self-help, health promotion, and integrated service delivery. More than half the studies addressed issues of home care, while other projects focused on the elimination or reduction of fragmentation and duplication of services. The remaining projects dealt with seniors' use of pharmaceuticals (prescribing practices, compliance, adverse reactions, and costs), rural health, and palliative care.

Conclusions: The HTF projects underscored the fact that as the population ages, the health care system must shift its focus away from acute care treatment to supporting family care and community care. Some of the policy recommendations evolving from the HTF seniors' home care projects include the need to recognize two functions of home care for seniors – sub-acute, short-term, post-hospital care, and long-term management of chronic care needs – as well as the need to develop flexible case management systems and find alternatives to case-based funding. To improve integrated service delivery for seniors, physicians must be included as active players and be given training to shift their focus from the acute care sector to a better use of and understanding of community care services. More resources are needed to enhance community services and the integration of service delivery. To improve seniors' use of pharmaceuticals, collaboration between physicians and pharmacists should be expanded and the administration of pharmaceuticals standardized by, for example, promoting common drug classification and assessment tools.

Children's Health Synthesis Report

Context: The federal government launched the National Children's Agenda in 1997 with the goal of developing a comprehensive strategy to improve the lives of children. While Canada has made substantial gains in improving their health, this report suggests renewed energies and strategies are needed to address children's needs "where they are" – in families, schools, and communities. Of the 140 national pilot projects and/or evaluation studies across Canada, 27 reports address issues relating to children's health in four key areas: pregnancy, birthing and neonatology; child development; mental health; and integrated health services.

Synthesis Report: Dr. Claude Roy, professor emeritus at the University of Montreal and staff member of the Department of Pediatrics at l'Hopital Sainte-Justine, and Karen Kidder, Director of Research at the Canadian Institute of Child Health, analyzed the learnings and outcomes of the HTF projects that addressed issues of children's health. In their 19-page report they highlight the need for family- and community-based approaches to health care, and the importance of delivering services in non-clinical settings such as day cares and schools. This is key to dealing with many health issues, but is particularly important in addressing mental health issues. Indeed, the authors note that epidemiological literature indicates about 20 per cent of Canadian children and adolescents present neuropsychiatric and/or

behavioural symptoms. While children living in poverty are at greater risk, mental health issues are found in all socio-economic groups and have been termed the "new morbidity" for children and youth. As well, the Health Transition Fund reports highlighted the importance of enriching services for mothers and infants and ensuring targeted programs reach at-risk populations. The reports established the importance of quality human resources and indicated that integrating services rather than multiplying them was the more efficient and effective approach to reaching the needs of this population.

Conclusions: The children's health synthesis report emphasizes the need for government support to the community sector, improved collaboration across sectors, high-quality training and professional development, and the overall integration of health and social services. The authors make 21 recommendations to address these issues, but emphasize that strategies for involving families should be established at all stages, from planning to implementation. The authors support developing an evidence base through research to produce a national vision for child and youth health.

Mental Health Synthesis Report

Context: Unique historical features and complex demographic and societal factors influenced the current landscape of mental health and mental illness across Canada and helped to shape Canada's mental health policies. Although mental health services in Canada have been highly regarded, there are still prominent challenges in need of attention and creative solutions. For example, the average hospital stay for mental illness is three times longer than for other diseases. In an effort to address some of these challenges, 24 Health Transition Fund (HTF) projects explored various facets of mental health services and investigated innovations applied in the "real world" of Canada's system of health services and supports.

Synthesis Report: Dr. Elliot Goldner, Director of the Mental Health Evaluation and Community Consultation Unit in the Department of Psychiatry at the University of British Columbia, reviewed the 24 HTF projects, setting them in the context of deinstitutionalization and the subsequent requirement for adequate community services for people with mental illness, which in turn has fed the need for community-based mental health reform. The 28-page report outlines the goals and findings of the HTF mental health projects, which investigated solutions geared for people living in urban, rural, and remote communities. The projects pursued novel approaches to the delivery of mental health services while attending to the perspectives of a wide range of stakeholders: people directly affected by mental illness, family members, health providers, administrators, policy-makers, and researchers.

Conclusions: The report outlines the evidence provided by the HTF projects to support new approaches to the delivery of mental health care, whether through primary care settings, home-based treatment, or treatment in remote settings, or via interdisciplinary groups, educational initiatives, and cultural brokers to reach people of various ethnocultural backgrounds. The report also outlines critical success factors for innovative mental health practices, including setting measurable goals for all projects; ensuring commitment is in place if the project is a success and termination plans have been developed should it prove unsuccessful; promoting meaningful participation by a wide network of stakeholders; putting effective leadership in charge; and developing a well-planned and well-executed communications plan.