



The Yukon
Health Care Review

Final Report
September 2008

This page left blank intentionally.

Table of Content

<i>Table of Content</i>	3
<i>Acknowledgements</i>	7
Committee Members	7
Research and Support Personnel	7
Presenters to Committee	7
<i>Executive Summary</i>	9
Introduction	9
Report Content	10
<i>Summary of Recommendations</i>	15
<i>Introduction</i>	27
Preamble	27
Logic of the Report	29
A. Environment of Change.....	29
B. Markers of Change	29
C. Pathways for Change.....	30
D. Actions for Change.....	30
Overall Format	30
A. Environment of Change	33
(I) Components of the system	33
1. Legislative and Regulatory	34
2. Fiscal and Financial	37
3. Administration and Operations.....	66
4. Consumption and Access.....	71
5. Behavioral and Lifestyle.....	73
(II) Dynamics of the system	76
Cost Drivers	76
Cost Escalators	84
B. Markers of Change	101
(I) Components of the system	101
1. Legislative and Regulatory	101
2. Fiscal and Financial	101
3. Administration and Operations.....	106
4. Consumption and Access.....	108
5. Behavioral and Lifestyle.....	108
(II) Dynamics of the system	109
Cost Drivers	109
Cost Escalators	111

<i>C. Pathways for Change in the Yukon Health Care System</i>	115
Overview	115
The Ten Pathways for Changes in the Yukon Health Care System	116
<i>D. Actions for Change in the Yukon Health Care System</i>	119
Overview	119
Pathways with Recommended Actions for Change	120
1. Personal and Collective Responsibility	120
2. Funding Arrangements	124
3. Health Programs and Services	127
4. Health Care Delivery Models	142
5. Federal Funding to the North.....	148
6. Institutional Governance Structures	152
7. Health Human Resources	158
8. Cost Drivers	163
9. New or Enhanced Services, Procedures, and Technologies	170
10. Accountability	172

<i>Additional Materials</i>	175
<i>References</i>	177
Web References.....	177
Publication References.....	177
<i>Appendix 1</i>	183
1.1 Legislative/Legal History of Health	183
1.2 Canada Health Act	184
1.3 Federal Provincial Territorial Transfers.....	185
1.4 Factors That Determine Health.....	187
1.5 Federal Territorial Health Transfers.....	188
1.6 Federal Territorial Health Funding Lost	189
<i>Appendix 2</i>	191
2.1 Seniors Public Drug Plans	191
2.2 Long Term Care Programs	194
2.3 Potential Additional Long Term Bed Revenue	195
2.4(a) Reimbursement Costs for Prescription Drugs (2008).....	196
2.4(b) Professional Dispensing Fees (2008).....	197
2.4(c) Additional Notes from Eligibility and Cost Sharing Section (2008)	198
<i>Appendix 3 – Potential Health Revenues</i>	201
Potential Additional Health Care Revenues by Source over 10 Years	201
<i>Appendix 4 – External Presenters Response to Yukon Health Care Review Report</i>	203
<i>Supplementary Tables and Graphs</i>	205
Revenues.....	205
Expenditures	206
Sustainability.....	229
Health Professionals	244
Access and Consumption	249
Lifestyles and Behaviors	254
Population	259

This page left blank intentionally.



Acknowledgements

This report and its recommendations would not have been possible without the support and time, energy and knowledge of the following individuals who are listed below. The chair extends his appreciation for their time and contributions. The Chair would also like to acknowledge the support provided by the Department of Health and Social Services by way of the provision of additional information and responding to queries in a timely manner.

Bruce McLennan

Chair

Health Review Steering Committee

Committee Members

Bruce McLennan	Chairman
Stuart Whitley	Deputy Minister Health and Social Services
David Hrycan	Deputy Minister Finance
Craig Tuton	Chair -Yukon Hospital Corp. Board of Directors
Donna Hogan	Former Director of the Whitehorse General Hospital First Nations Health Program

Research and Support Personnel

Dr. Glenn Grant	Lead Researcher
Violet van Hees	Policy Researcher and Committee Support

Presenters to Committee

Bruce McLennan	Chairman
Patricia McGarr, Colleen Wirth & Peggy Heynan	Yukon Registered Nursing Association
Dr. Rao Tadepalli, Dr. Wayne McNichol, & Dr. P.J Anderson	Yukon Medical Association
Joe MacGillivray	CEO Whitehorse General Hospital
Joanne Fairlie	ADM Health - Health and Social Services
Cathy Morton-Bielz	ADM Continuing Care Health and Social Services

This page left blank intentionally.

Executive Summary

Introduction

In April 2008, the Premier and Minister of Health commissioned a health care review to examine the sustainability of the Yukon's health care system over the next decade. In mandating the work of the Yukon Health Care Review Committee (YHCRC), the Premier asked that the Committee explore ways to transform the Yukon health care system that would focus on its long-term sustainability. Included, as part of the review is the expectation that the Committee also identify options to enhance the Yukon Government's fiscal capacity as a way to address the burgeoning health care costs. The mandate stipulated that the Committee's recommendations must be framed in a manner that ensures that Yukoners continue to have access to quality health care and that any recommendation made by the YHCRC must respect the five principles outlined in the *Canada Health Act*, which provides the legal framework for the Canadian health care system.

The Committee in accepting the assignment recognized that sustainability goes beyond the fiscal concerns. As noted in a recent Health Council of Canada report a "*focus on spending alone will not resolve the full range of concerns being expressed regarding sustainability*"¹. The YHCRC agrees with this statement and believes that the concept of sustainability also needs to speak to the issues of quality of service, equity, consumer choice, compassionate care, and confidence in the health care system.

The findings of the 2002 Commission on the Future of Healthcare in Canada, better known as the Romanow report, acknowledge that the Canadian Health Care system is not sustainable unless attention is paid to its transformation through decisive actions.² Numerous provincial and federal commissioned reports produced in the recent past document that these health care pressures exist in all Canadian provinces and territories.

¹ Health Council of Canada, Sustainability in Public Health Care – A panel discussion report, July 2008.

² Romanow Report pg xvi "*For years now, Canadians have been exposed to an increasingly fractious debate about medicare's "sustainability." They have been told that costs are escalating and that quality of services is declining. They have heard that insatiable public expectations, an aging population and the costs of new medical technologies and prescription drugs will inevitably overwhelm the system. They have been warned that health spending is crowding out other areas of public investment. Thus one of the fundamental questions my report must address is whether medicare is sustainable? My answer is that it is if we are prepared to act decisively.*"

These jurisdictions have already implemented, or are considering making, transformational changes in their individual province or territory. While some of the issues and the solutions identified in their reports are unique to the specific province or territory, most contain common themes and approaches that can be drawn upon for the Yukon situation.

The YHCRC conducted extensive background research and fact-finding to better understand what other jurisdictions were doing to address the issue. They also interviewed the major providers of health care services within the Yukon publicly funded health care system. These participants were asked for their suggestions for changes to the system that they believed would lead to enhancing its sustainability. The Committee based its final report and findings on its own analysis as well as the participation of all those they heard as part of their deliberations.

Report Content

The report is divided into four major sections

- The Environment of Change
- The Markers for Change
- The Pathways to Change
- Actions for Change

The *Environment of Change* section provides the reader with an understanding of the nature of the change that is currently impacting the Canadian and Yukon health care systems. The first part of the analysis contained in this section reviews five major components of the health care system and provides a framework to discuss the relevant issues that are causing and driving change at both the national and local health care system levels. The second part of this section examines in detail the dynamics affecting the health care system as *cost drivers* and *cost escalators*.

The analysis and findings contained in the *Environment of Change* section lead seamlessly into the second part of the report called the *Markers for Change*. This section synthesizes the information contained in the first part of the document and highlights the relevant directions and/or insights that emerged at both the national and local level. These findings are used to develop the principles or “Pathways” for decision-making and ultimately help fully explicate the recommendations made by the YHCRC.

The third component of the report entitled *Pathway to Change* lays out an organizational context or framework that provides the principles for subsequent recommendations or future decision-making. The identified “Pathways” are grounded in the findings and analysis of the first two sections of the report and are the top ten themes or covering statements

that serve to rationalize the Committee's recommendation and subsequent decision-making. One or more of these ten *Pathways for Change* can be linked to any of the final actions or recommendations offered.

The ten *Pathways to Change* identified are summarized by the following overarching abstract of the themes:

1. Personal and Collective Responsibility
2. Funding arrangements
3. Non-Insured Health Programs and Services
4. Health Care Delivery Models
5. Federal Funding to the North
6. Institutional Governance Structures
7. Health Human Resources
8. Cost Drivers
9. New or Enhanced Services, Procedures and Technologies
10. Accountability

The final section of the report entitled the *Actions for Change* provides the Government of Yukon with an informed set of options, alternatives, or simply direction for the government to consider. These are the explicit recommendations made by the YHCRC.

Like all other Canadian jurisdictions the report concludes that the Yukon is facing stresses and strains within their health care system that raises concerns about the sustainability of the health care delivery system into the future. The most notable concern is the cost pressures that results in expenditures in the health care sector growing at a rate significantly faster than the revenues available to Yukon. Analogous to an individual household, the Yukon Government cannot increasingly spend more on health care without either increasing revenues or reducing expenditures in other areas. It is as simple as that! The report clearly demonstrates that the growth in Yukon Government health care expenditures will outstrip the growth in Yukon Government revenues as well as the anticipated growth in GDP. If nothing is done to control the rate of growth of health care expenditures or increase revenues to fund it, the growth the health care expenditures will result in a funding gap that could be as much as \$250 million by 2018.

To exacerbate the situation, the Government of Yukon is apprehensive that the imminent termination in 2009/10 of over 10 million dollars per year in transitional health funding, provided by the federal government over the past 5 years, will seriously jeopardize to fiscal future of Yukon. Unless this federal funding is renewed, there will have to be major adjustments made to the government's fiscal framework in order to deal with these funding reductions. If transitional health funding such as the Territorial Health Access Fund (THAF) is not renewed on a permanent

basis the projected health care funding gap referenced above will grow from the projected \$250 million to approximately \$350 million.

Unilateral and cumulative funding cuts made to the Territorial Funding Agreement (TFF) in 1995/6 have contributed significantly to the present financial pressures that the Yukon Government is facing today in health care. Yukon has neither the fiscal flexibility to absorb these cost pressures nor the tax base to draw upon to offset the increases. The YHCRC makes the argument in the report that the federal government still has an ongoing and perhaps a moral responsibility to provide additional funding to health care in Yukon because of the impact of the federal funding cuts. Moreover, the federal government must acknowledge that the North and more specifically the Yukon, have much higher per capita health costs than their southern neighbors due to the high cost of providing these services as a result of the dispersed geography and diseconomies of scale. Add to this mix the fact that the population in the North is expected to grow due to increased northern development, the pressures on Yukon's health care system over the next decade are likely to grow substantially. With a cumulative impact of federal changes to the formula financing of almost a billion dollars over the past 12 years, the TFF is simply no longer fiscally adequate for the future demands of health care in Yukon.

The report also asserts that Yukoners participate in and assume some responsibility for contributing to the fiscal sustainability of health care. While Yukoners have a legitimate expectation of high quality health care programs and services, the analysis in the report demonstrates that many of the non-insured health programs offered to Yukoners are more generous than similar non-insured health programs available to their southern counterparts and at a much lower personal financial cost, including: lower rates of fees; deductibles; co-payments, and taxation in general. The report addresses these program and fee differences. Yukoners and their decision makers must acknowledge that to fully benefit from the Canadian federation, all citizens must contribute and if Yukon is to receive relief from the national government, Yukoners must also be seen as contributing fairly.

While the report identifies almost \$129.5 million in potential new health based revenue sources in the *Action for Change* section over a ten-year time horizon the health care funding gap referenced previously would still not be closed. In the worse case scenario, assuming that THAF funding is not renewed, applying the \$129.5 million in potential new revenues against the \$350 million funding gap identified would still leave a significant \$220.5 million funding shortfall. If THAF funding is renewed the shortfall could be reduced to \$120.5 million over 10 years after considering new potential revenues. The need to renew the THAF funding in some form or another and/or additional federal funding through other funding vehicles, is a key recommendation identified by the

Committee in order for the Yukon to strive to achieve a level of long term sustainability in the health care sector.

As noted earlier, the YHCRC recognizes that the issue of health care sustainability is not restricted to the fiscal components alone. While a good portion of the report and the recommendations focus on financial matters, the report examines other stressors affecting the Yukon's health care system.

The report also highlights the pressures associated with the shortages of professional health care providers. The stress of shortages in health care professionals is expected to worsen as this workforce ages and their clients age. Even if the Yukon could find or afford more professional staff, other pressures suggest that staffing alone may not be the solution to the problem over the longer term. Besides addressing the issue of health professionals the report also identifies various other opportunities for transformation, including: changes in health care delivery models; policy and regulations; procurement activities; technology; opportunities of an administrative nature and governance and accountability. Dealing with these areas collectively may in their totality help serve to mitigate the growth of health care costs.

The Committee's work recognizes that an increasingly aging Yukon population will add another significant dimension to the issue of health care sustainability. This rapidly expanding population of Yukoners who are over the age of 55 years and their increasing health care expectations, will add considerably to the overall usage of the health care system, further exacerbating the pressures on the financial front. This report identifies that this area of growth will be a major challenge that the Government will need to confront, especially in the area of Continuing Care.

In addition to the unique challenges concerning the Yukon's geographic size and its small and disperse population, the Yukon also faces similar challenge as its sister territories in other areas. Specifically, the territories have limited financial control over many health services, as they are highly dependant on their provincial neighbors to provide the bulk of the tertiary medical interventions for our residents, in southern facilities or through visiting specialists. The Yukon Government has minimal control over the cost drivers for these medical services, including medical travel, and in most cases, its population is too small to rationalize offering the services in Yukon. The YHCRC identified these challenges and attempted to provide some solutions in the report.

Finally the report suggests that health status of Yukoners has a significant impact on the sustainability of the health care system. While the health status of Yukoners is not dissimilar to most other Canadians, we face

some unique and special challenges and Yukoners must take personal responsibility for their own health with the support of government.

Recommendations

There are 43 recommendations made in Section D of the report under the heading *Actions for Change*, that address the broad issue of sustainability of the Yukon health care system. The recommended actions are far ranging and touch on every one of the ten identified *Pathways for Change*. The recommendations vary from suggested ways to transform some of the Yukon health care delivery models through to recommended changes to the user and fee charges in existing non-insured health programs and services. For quick reference, readers can refer to the end of this executive summary for a listing of the 43 recommendations.

In arriving at their recommendations the YHCRC has been careful in identifying options that will not reduce the existing health care service levels. In fact, most of the recommendations are targeted in a direction, which the Committee feels will ultimately enhance health care delivery in the Yukon.

The YHCRC recognizes that some of the recommendations may be controversial, particularly those which suggest new or increased user fees or levies, but the logic to address increases is provided and the YHCRC is of the opinion that most Yukoners will accept the logic presented.

While not prescriptive, the recommendations provide the reader with illustrations of the potential financial impact of program changes if various proposals were to be adopted. If the suggested changes identified were to be adopted, the YHCRC has calculated (as mentioned previously), that the potential new revenue and/or expenditure savings through increased efficiencies and program changes could amount to as much as \$129.5 million over a 10 year period, or about \$13 million on an annualized basis going forward (see financial summary in *appendix 3*). It should be noted that the savings/revenues for all of the recommendations could not be estimated due to the broad nature of the options proposed in some areas, particularly those affecting program expenditures. Consequently these potential savings/revenues are not captured in the total referenced. The additional revenue streams identified could be used to address cost pressures and improve the Yukon Health Care system in some of the identified areas of expenditure growth, such as acute and continuing care.

Most of the recommendations are autonomous of one another, and if adopted in whole or in part, could be implemented over a time frame that the government determines is consistent with their priorities and would be acceptable to the Yukon populous.

Summary of Recommendations

1. Personal and Collective Responsibility

Yukoners must increasingly take responsibility for their own personal well-being, and their utilization of health care services, in order to reduce their collective burden on the health care system. Governments accordingly must work in conjunction with individuals by offering appropriate and cost effective education, support services, interventions, and when necessary deterrents needed to make more healthy life style choices, and appropriate changes in service utilization. Changes that improve individual well-being are long-term investments to the health care system; however it is acknowledged that their benefits may not have an immediate impact on health outcomes or health care costs. Changes in service utilization can have more immediate impacts, but may take some time to take hold.

- Expand public health promotion awareness and marketing campaigns and offer education programs in the areas where Yukoners are at the greatest health risk, and where evidence demonstrates that they are effective programs. These areas of greatest risk include the prevention of accidents and injury, excessive alcohol usage, tobacco cessation and obesity.
- As a deterrent to smoking, ensure that Yukon tobacco taxes are maintained at rates which are in line with the tobacco tax rates in other Canadian jurisdictions. Preferably these taxation rates, which were recently increased in March 2008, will in the future be kept at a level which keeps them in the top 10 percentile of the taxation rates charged in other Canadian jurisdictions.
- Liquor taxes and mark-up should also be kept at levels comparable to or above other Canadian jurisdictions, as there is a strong correlation in the price of alcohol and reduced consumption.
- Consideration should be given to implementing some or all of the other five alcohol strategies identified in the Centre for Addictions and Mental Health report on “Avoidable Costs of Alcohol Abuse in Canada”.
- Continue to offer the public free or low cost immunization and flu programs as disease prevention strategies. These programs (including their promotion) should be expanded where there is evidence that they will be beneficial in reducing the prevalence of a disease.

- Federal territory-specific health funding needs to be extended beyond 2009/10 to help fund ongoing health reform and health promotion initiatives and contribute to the extraordinary costs of medical travel. See also section 5 “Federal Funding to the North”.

2. Funding Arrangements

Transparent and long-term stable funding arrangements are required for effective and efficient management, planning, administration, and delivery within the health care system. Whether the funding is federal/territorial transfers or interagency agreements, adequate and responsive funding is the key to cost effective management of health care resources. Moreover, funding arrangements must be needs-based and reflective of both volume and price for both operations and capital needs.

- Over the next year a mutually agreeable multi-year operation and capital funding arrangement(s) should be developed, jointly by the Departments of Health & Social Services and Finance, with Whitehorse General Hospital. This arrangement should provide the hospital with an annual funding allocation based on a combination of a core or “block” funding plus adjustment factors that will address annual shifts in volumes of interventions provided plus escalations for inflation and various cost escalators not within the control of WGH or the Department of Health. The funding model developed needs to be adaptable to allow for adjustment in service provision where mutually agreed upon. As well, it should provide for financial incentives for the introduction of innovative changes that reduce the use of acute care beds and emergency interventions. MB should approve the estimated funding annually on a multi-year basis and the multi-year agreements and annual updates should be reported in the legislature so that MLAs and the public are familiar with the long term funding commitments.

3. Health Programs and Services

Where *non-insured health programs and services*³ are offered to Yukoners that are reasonably comparable to the program and service levels provided elsewhere in Canada, these programs should be offered at user fees comparable to those paid in other Canadian jurisdictions. This logic reflects the reality that the Yukon, as part of the Canadian fiscal federation, receives federal funding to ensure the provision of comparable public programs and services to Yukoners at comparable levels of taxation. Consequently, Yukoners are not exempt from participating fairly in the provision of their health care services.

NON-INSURED HEALTH PROGRAMS AND SERVICES

(a) Medical Treatment Travel Program

- The government should consider introducing a user charge for the Out of Territory Medical Travel (non-emergency) Program. A user charge should be set at a level that will not deter use of the program and should recognize ability to pay. Changes to the program would also need to acknowledge the increased financial burden that could be placed on clients who need to travel multiple times in the course of the year for treatment and would find the cumulative user charges to be unmanageable. In this case a maximum annual user pay ceiling or cap could be introduced.

(b) Chronic Disease and Disability Benefits

- The government should consider introducing changes to the Chronic Disease and Disability Program that would result in a deductible and co-payment along similar lines to the drug programs that currently exist in the provinces. The re-developed program should include a deductible that recognizes a family's ability to pay and be accompanied with a reasonable co-payment for drug costs that is in line with what is provided in other Canadian jurisdictions. The inclusion of a maximum annual co-payment or cap on costs is also recommended.

³ Other health care services offered by governments, which are not required to be provided under the Canada Health Act which is generally restricted to paying for medically necessary physician and acute care services..

(c) Seniors Health Benefits – Pharmacare and Extended Health

- The government should consider introducing changes to the Senior’s Pharmacare and Extended Health Benefits Program that would result in a deductible and co-payment along similar lines to the senior’s drug and extended care programs that currently exist in the provinces. The re-developed program should include a deductible that recognizes a family’s ability to pay, and be accompanied with a reasonable co-payment for drug costs that is in line with what is provided in other Canadian jurisdictions.
- The inclusion of a maximum annual co-payment or cap on costs is also recommended.
- Eligibility should be restricted to seniors who are over 65 and not be based on marriage for a lower eligibility.

(d) Children’s Drug and Optical Program

- It is not recommended that the government consider changes in this program at this time. It serves a unique and small client base and the program already includes a reasonable maximum deductible per family.

(e) Hearing Services

- It is not recommended that the government introduce user charges or other fees for this program at this time. The program serves a relatively small client base and charging for the service would yield minimal net increased revenues after administrative and system costs are considered. However, the government should review the program every few years to ensure it is not creating financial barriers for the private sector entry into this service area.

(f) Continuing Care Services

- The daily accommodation rates charged residents living in the government’s continuing care long-term care facilities should be reviewed by government with a view of adjusting them upwards to more closely reflect the rates charged in the provinces. In establishing new rates consideration should be given to gradually increasing the rates over an extended time period, and possibly grandfathering existing residents in at the existing rates until they leave the facility.

INSURED HEALTH SERVICES

(g) (Health Insurance Premiums)

- The government should consider the introduction of health care premiums to assist in financing the increasing cost of existing health care services in Yukon and to fund the expansion of any new health care services.

4. Health Care Delivery Models

Yukon government must select health care delivery models that will improve patient outcomes and provide an appropriate range of services at the same or lower cost as the present health care delivery model. Alternative and creative delivery models are needed to maximize the cost effective/efficient deployment of scarce and sometimes shrinking health human resources if the Yukon Health Care system is to be sustained at current levels.

(a) Continuing Care

- Where projections indicate a future demand, the government should continue to invest in expanded home care, community support programs, and supported/assisted living. Intervention and care at this level is proven to keep individuals out of the acute care and facility-based long-term care system and in doing so provides a better level of appropriate services at a lower cost.
- The government should develop a comprehensive long range plan to increase residential long-term beds at Thompson Centre or a new facility(ies) to ensure that plans are in place for future expansion needs. Raising the residential long-term bed rates, as suggested elsewhere in this report may also have the benefit of leveling the playing field. This scenario would allow private or not-for-profit suppliers of long-term beds to enter the market; thereby alleviating some future pressures on government for lower level care beds.

(b) Collaborative Care Models

- The government should proactively encourage the expansion of collaborative (or team-based multidisciplinary) primary health care delivery model where it can be demonstrated that the model will work with chronic care patients and/or in clinical models, in an effort to

ensure better and accelerated access to primary care in a more appropriate and more cost effective manner.

- The government should encourage all the Yukon public health care providers to develop a plan to improve communication and collaboration that leads to better service delivery integration where it is evident that existing service “silos” are creating barriers to service delivery.

(c) Physician Specialist

- Locally available specialist services, provided either through resident specialists or visiting specialists as appropriate and possible, should be expanded where it can be demonstrated that they are likely to improve Yukoners access to these physician specialists’ services, and it is cost effective and feasible to do so.
- The Specialist Service Committee, (which currently assesses wait lists, volumes of services being provided in and out of the territory and medical travel trips/costs, and patterns of use in other jurisdictions), should be assisted in the development of quantitative and qualitative assessment tools that would improve how the Committee assesses which new specialties are required to improve Yukoners’ access to care. The tools developed should lead to an evidenced-based process that assists the Committee in arriving at sound selection decisions based on access, cost effectiveness and medical appropriateness and feasibility.

5. Federal Funding to the North

Federal funding to the North must recognize the requirement for enhanced and ongoing investment in the Yukon health care system to ensure that reasonably comprehensive health care interventions are universally accessible by Yukoners, in the same way as they are for other Canadians. This investment should take the form of targeted health care investments and/or increased base funding where appropriate. This requirement is based on the reality of the Canadian North and the many health delivery challenges not faced by other jurisdictions on the same scale (*e.g. small and dispersed population, large geographic distances, diseconomies of scale in health care delivery, immature health care system etc.*).

- Based on the demonstrated outcomes of how THAF funds have improved the effectiveness of the Yukon’s health care delivery, the federal government should be asked to extend the existing THAF funding for special initiatives beyond 2009/10. At the end of the extension period the federal government should consider permanently

entrenching this funding to the Yukon’s Formula Funding expenditure base.

- The federal government should be asked to review the 1994/95 five percent cut to the Yukon funding base that has resulted in an “adequacy” funding gap. As an outcome of the funding reduction the Yukon government has had to divert a larger portion of the reduced TFF transfers resources to health care.

6. Institutional Governance Structures

Changes in institutional governance structures should only be considered if it is determined to be highly likely that the change will lead to both an improvement in the alignment in the delivery of health care services, and improved cost efficiency and effectiveness in the service delivery.

(a) Yukon Hospital Corporation – Watson Lake General Hospital

- The government should examine if the transfer of Watson Lake Cottage Hospital to the control of Yukon Hospital Corporation will improve the alignment of responsibility for acute care service delivery in the Yukon and in doing so also improve the effectiveness and efficiency of these services.

(b) Other Services

- In the future, the government should consider the transfer of other services and facilities to Yukon Hospital Corporation if it can be demonstrated that the transfer will lead to both an improvement in the alignment in the delivery of health care services, and improved cost efficiency and effectiveness in the service delivery. Regular reviews should be conducted to ensure that both the alignment in the delivery of health care services and improved cost efficiency and effectiveness in the service delivery is achieved.
- The opportunity to share institutional services should be considered where it is both financially prudent to do so and the most appropriate service for residents of the facilities is assured.

(c) Co-location Opportunities

- The opportunities for the co-location of health services should be considered as part of the ongoing program and infrastructure requirements and planning processes of both the WGH and the

Department of Health and Social Services if it improves service integration and helps to reduce health service delivery costs.

7. Health Human Resources

Creative ways are needed to attract and retain physicians, nurses, and other health practitioners, in addition to the current recruitment and retention programs offered by the Yukon government. Health human resources will continue to be a scarce commodity over the next decade and consequently, staffing shortages mean that employers must do as much as they can to support and retain their current health care employees by offering attractive health work environments and good job satisfaction. As the workforce ages the cost of inaction on these fronts could be substantial to the health care system.

- The WGH should proceed with their planned review of acute care nursing mix to ensure that the most cost effective and appropriate utilization of resources and competencies, including workload is in effect at the facility.
- All Yukon health care facilities should review their scope of practice of their employees on a regular basis to ensure that the various health professions are able to operate within their appropriate and approved scope of practice and that their job descriptions appropriately reflect the approved scope of practice.
- The government should ensure that professional legislation allows all health professionals to work to their full scope of competencies. The review of legislation/regulations should include the examination and assessment of current trends in other jurisdictions pertaining to the practice of health care professionals and consider their applicability in Yukon. Specifically the government should continue its work currently underway to consider introducing Nurse Practitioner legislation in order to define and support Nurse Practitioners working in the Yukon. In general any scope of practice changes being contemplated need to be done in consultation with the appropriate health care practitioners who may be affected by such a change.
- The Government should continue to support and expand where possible the five broad initiatives under the Health Human Resources recruitment, retention and professional development strategies. Consideration of a recruitment and retention plan that grows to include a broader range of employers, should be considered to promote the attraction of health care professionals more generally. Consideration should be given to build on and expand current investments in, and actions to accommodate the integration of, new health care grads into the workforce. The ability to continue these programs is tied in part to

the continuation of federal funding programs to support these initiatives (*see also Pathway #5 – Federal Funding to the North*).

- Human resource policies of all Yukon institutions responsible for hiring health care professionals should be examined to ensure that barriers to sharing employees for skills development and cross training do not exist. For example, the Yukon Government and WGH should examine their pension plans and the recent federal pension reforms announced in the last federal budget to assess if these announced changes will offer increased flexibility for retired health care workers to return to work on a part-time basis without incurring pension penalties for doing so. Portability of pension plans from WGH to the Yukon Government should also be explored to allow for health care professionals to more easily transfer their skills from one institution to another while at the same time being able to maintain their pension plan.
- Continue to pursue opportunities for formal agreements with southern hospitals regarding the assessment/training of internationally trained professionals.
- The Department of Education in cooperation with the Yukon College, the Whitehorse General Hospital and the Department of Health and Social Services should on an ongoing basis, assess the needs and demands for professional health care training in the various health care sectors with the view of determining if it is practical and cost effective to offer that training in the Yukon at Yukon College, possibly in association with a southern educational institution. An area of immediate opportunity may be to provide local training opportunities to upgrade Registered Nurses to Nurse Practitioners.

8. Cost Drivers

All partners in health care delivery must search for opportunities to continually reduce the costs of acquiring goods and services known to be significant cost drivers of the Yukon’s health care system.

(a) Medivac Services Procurement

- The government should consider the public tendering of the air “medivac” program including allowing competition from providers not currently located in the Yukon.

(b) Drug Procurements

- The government should closely examine its options related to the reimbursement costs for prescription drugs (including bulk tendering) and initiate a negotiation process with representatives of the community pharmacists to achieve a new price and reimbursement arrangement. If that is not successful legislated pricing should be considered.

(c) Financing Opportunities

- The government and/or the Hospital Corporation may wish to consider the use of P3 for future health construction projects that adhere to the GAM policy 1.19, which establishes a clear process for an organization to use in identifying, evaluating, selecting and entering into a public-private partnership. Such a policy needs to include a comparison to traditional financing models in order to ensure the most effective financing tool is employed.

9. New or Enhanced Services, Procedures, and Technologies

New or enhanced services, procedures, and technologies should be utilized where a business case demonstrates that these will drive cost savings in the future, and/or significantly improve patient access and outcomes in a cost-effective way relative to other possible uses of that funding for health.

- The 811 line should be assessed after one year to see if the new service has been cost effective and if it should be modified in any way to better meet client needs.

- Other Telehealth opportunities should be sought out and its use expanded if it can be demonstrated that the application will be cost effective in improving access to care and improving health outcomes.
- New technologies such as MRI; digital tele-radiology; electronic health records; expansion of the Hospital Meditech system at WGH; and public health information systems should be considered where it can be demonstrated that they will be a more efficient and effective utilization of scarce financial and human resources while at the same time responding to clinical need and improving access to care and patient outcomes. A complete business case needs to be considered in each and every situation and assessed against all other technology options, and alternative use of the resources in other areas. New technology should not be implemented simply in response to public demands if the business case is not clearly demonstrated.

10. Accountability

Enhanced performance and accountability agreements with health care delivery providers need to be employed. The accountability agreements need to make use of quantifiable performance indicators and performance targets, developed as part of a strategic planning process, to ensure that the programs and services offered are accompanied by measurable performance outcomes that the Minister and public can reasonably assess.

- To improve accountability, the Minister of Health and Social Services, in consultation with the Board Chair, should be providing the Chair and Board of the Hospital Corporation with an annual letter of expectation that provides the Hospital Board with a written mandate and articulates the Minister's expectation for the board, as well as the Minister's obligations to the Hospital Corporation.
- The Department of Health and Social Services should continue to develop an accountability plan on an annual basis for the Government and Minister that identifies the Department's strategic direction and planned actions to achieve that direction. The plan needs to include the identification of measurable indicators that can be used by the government to assess performance and outcomes.

This page left blank intentionally.

Introduction

Preamble

Enormous progress has been achieved in the improvement of the health status of the populations of Western countries over the past fifty years. This development in health is related to the improvements in education, the labour market, incomes, housing conditions, and lifestyles. However, improved quality health care has also significantly contributed to this improvement. Considerable progress has been made in every field of physical and mental health. Advances in science, technology and pharmacology all contribute to our improved health care system, however, these improvements come with increased costs, expectations, and utilization.

Within the Canadian debate over health care the discussion around how to deal with increased costs, expectations, and utilization has been somewhat polarized. On one side of the debate some argue that the health care system is pushing expenditures to the point of collapse of the fiscal framework of the federation. On the other side some argue we can afford more and we need only to re-evaluate our priorities. Either way, our health care system is at a critical point. While some areas of the system may require more attention than others, overall, we need strategies for change that will take us into the future in a stable and sustainable manner. Given a growth rate that exceeds the increase in territorial resources, there are concerns surrounding the funding of the health care system that we cannot continue to ignore. Overall, the final objective is to simultaneously ensure: health improvement; disease prevention; equitable access; and viable and equitable funding; while at the same time to control the growth rate of public spending. Specifically, the objective of the Yukon government is to improve the performance of the health care system while restoring the growth of public spending to sustainable levels.

We are in a period of significant instability in the Canadian health care system. This change is manifested in the many federal, provincial and territorial health reviews across Canada, the changing nature and language of the move to sustainability and the new and varied responses to managing health care within the provinces and territories. The theme of change permeates the current literature and the experiences of those consulted within and outside Yukon. The objective of this review is to offer options for responding and managing change by developing a context and options to make informed decisions for Yukon.

The genesis of this report was at the request of the Yukon's Premier, Minister of Finance and Minister of Health who asked the Yukon Health Care Review (YHCRC) Committee to develop a focused medium-term plan for managing the change in the Yukon health care environment. The YHCRC has engaged in the Premier's and Ministers' mandate, acknowledging that the health care system is complex and diverse and that medicine and consumer needs and expectations continue to change in a web of interactions and interdependencies. Moreover, Yukon is not immune to the general constraints of the national system; Yukon is bound by the *Canada Health Act*, funding agreements, dependency on external health providers and provincial decision making, as well as a host of other linkages to external relationships within the national system. Ultimately, answers and definitive solutions within this state of change are neither simple nor easy to prescribe.

The mandate of the YHCRC was to first review the context, cost pressures, escalators, and sustainability of the Yukon health care system and to make recommendations regarding containing the growth in health care spending while maintaining access to care and quality of services. The Yukon is not alone in grappling with these issues. We have witnessed a growth industry in health care reforms, reviews, commissions, studies, and expert panels, all of which attempt to tender constructive views on improving the Canadian Health System – Yukon is no different and what follows provides the YHCRC's perspective on this dynamic discourse.

These various commissions and reports reveal the national concern that the health care system may no longer be sustainable unless attention is brought to bear on some form of system transformation. The YHCRC's report builds on the great depth and volume of work already accomplished and freely draws upon the existing wealth of text, ideas, and approaches previously provided by federal, provincial, territorial, academic, and private sector sources. However, the YHCRC's mandate is far more focused than many of the existing commissions and expert panels. Our scope will be confined primarily within those areas over which the Yukon Government has some influence.

Logic of the Report

Our objective is to provide a clear set of options or directions for managing change in the Yukon health care system. Equally important, we strived to provide the rationalization of our actions for change by developing clear statements of principles that are grounded in the observations of other jurisdictions, as well as the experiential knowledge of those health care professionals consulted within the Yukon health care delivery system. The following provides an overview of our logic for this document.

A. Environment of Change

Understand the nature of the change within the Canadian health care system.

Essentially this section is a selective overview of Yukon relevant health care system issues common to the national system and its 14 participating jurisdictions. There exist many current sources that provide comprehensive coverage of these issues, however, our mandate limits our scope and reporting to those factors related to sustainability. In addition, this section integrates what the YHCRC acquired from the presentations and submissions provided by groups representing the health care delivery sectors in Yukon.

The *environment of change* is organized into two major dimensions of the health care system; its components and its dynamics. The components, although arbitrary, are useful categories to discuss relevant aspects of the national and local health care system. These areas will be discussed in greater length in the body of this text, however, in summary they include the initial set of *components* labeled; (1) legislative and regulatory; (2) fiscal and financial; (3) administrative and operational; (4) consumption and access; and (5) behavioral and life-style. Secondly are included a set of interactions within or between components labeled *dynamics*; cost drivers (demographic, service expectations, chronic diseases) and cost escalators (drugs, home care and continuing care, end-of life care, human resources, new technologies, and other emerging cost escalators).

B. Markers of Change

Interpret and analyze this change in terms relevant to Yukon.

During the environmental scan of health care in Canada, YHCRC made explicit the directions or insights that emerged during this stage of the research. These *markers of change* may be lessons from other jurisdictions, trends in organizations, or the realities of the structural

dynamics within the client base – or any other such observations. In a practical sense, these markers are clearly identified in the report to ensure an unambiguous linkage from the environment to the final actions for change.

C. Pathways for Change

Identify organizational opportunities by translating change into clear and informed direction (policy direction or simply applied theory).

This step assembled the previous markers of change and synthesized them in terms of generalizations that can be used as *pathways for change*. More specifically, these are the principles for decision-making over the medium-term. These are the top ten covering statements or rationalizations for any subsequent decision-making. Analogous to a policy statement one or more of these *pathways for change* inform and can be linked to any given final action or recommendations offered. Moreover, an established linkage back to the environment exists for the validation of any given action recommended.

D. Actions for Change

Extend this direction to practical options, alternatives, or actions.

Actions for change take the form of a set of options, alternatives, or simply a possible direction for the government to consider or move towards over the long-term. These are the explicit recommendations of the YHCRC.

Overall Format

- A. Environment of Change**
 - I Components of the system**
 - Legislative and Regulatory
 - Fiscal and Financial
 - Administration and Operations
 - Consumption and Access
 - Behavioral and Lifestyle
 - II Dynamics of the system**
 - Cost Drivers
 - Cost Escalators

- B. Markers of Change**
 - I Components of the system**
 - II Dynamics of the system**
 - Cost Drivers
 - Cost Escalators

C. Pathways for Change in the Yukon Health Care System

The Ten Pathways for Changes
in the Yukon Health Care System

D. Pathways with Recommended Actions

Personal and Collective Responsibility

Funding Arrangements

Non-Insured Health Programs and Services

Health Care Delivery Models

Federal Funding to the North

Institutional Governance Structures

Health Human Resources

Cost Drivers

New or Enhanced Services, Procedures, and Technologies

Accountability

This page left blank intentionally.

A. Environment of Change

Many factors beyond the control of the Yukon health system influence the performance of the system and the health of the population. This environmental context includes an initial overview of the contextual environment of the Yukon health care system within two subsets: (I) the components of the system and (II) the dynamics of the system.

The first component section addresses five separate major dimensions of the health care system of interest to the mandate. These five components are somewhat artificial in nature; however, these categories are helpful in providing a simplifying function to what in reality is a very complex and inter-related socio-ecological system. Socio-ecological systems are evolving environments of the social and biological components and their dynamics. Given the dynamics between these components, socio-ecological systems are moving targets that are inevitably uncertain. They express dynamic interactions between co-evolving domains such as institutions, technologies, values, or policies that emerge at different temporal, spatial, and social scales. These dynamics of the system are the focus of the second section within the *environment of change*.

(I) Components of the system

This first section is a selective overview of relevant Yukon health care system issues related to the components of health care delivery common to the national system and its 14 participating jurisdictions. In addition, this first section integrates what the YHCRC acquired from the presentations and submission provided by groups representing the health care delivery sectors in Yukon.

The *components of the system* are useful categories used to discuss relevant aspects of the national and local health care system. These areas include the initial set of components labeled;

1. **Legislative and Regulatory** – these are elements of the system influenced by the constitutional, legal, and political realities of the national health care system.
2. **Fiscal and Financial** – these are the relevant constraints of the national intergovernmental financing arrangements including those for Yukon.
3. **Administration and Operations** – includes issues surrounding the administration and operations of health care in Canada and Yukon.

4. **Consumption and Access** – reflects the concerns and issues related to the demands and client needs exerted on the national health care system.
5. **Behavioral and Lifestyle** – relates to the health behaviors and other considerations surrounding the client base.

Throughout Section A and Section B of the report, the Pathways for Change which are developed and fully explained in *Section C -Pathways for Change-* are identified for ease of cross reference.

1. Legislative and Regulatory

Yukon is part of a long history of constitutional and legal division of powers that separates the roles and responsibilities for health care between the federal and provincial governments. Implicated in this history is the federal responsibility for ensuring health care in the territories. (Pathway #5)

Legislation covering health care services has existed in Canada since 1867, when the British North America Act came into force. Numerous Acts have been introduced and/or modified since those times to strengthen the financing, management and delivery of health services in Canada (*see appendix 1.1*). The Canadian Constitution determines the structure of Canada’s health care system as it defines the roles and responsibilities of the federal, provincial, and territorial governments. The provincial and territorial governments have most of the responsibility for delivering health services.

Yukon is inseparably a part of the overall national health care system of Canada and in order to obtain continued funds must abide by the conditions of the *Canada Health Act*. (Pathway #1, Pathway #3)

Canada’s publicly funded health care system is best described as an interlocking set of ten provincial and three territorial health insurance plans. Generally referred to as “medicare,” the system provides access to universal, comprehensive coverage for medically necessary hospital and physician services. These services are administered and delivered by the provincial and territorial governments, and are provided free of charge. The provincial and territorial governments fund health care services with assistance from the federal government.

In order to receive full allocation of federal funding for health care, the provincial and territorial health insurance plans must meet five criteria — comprehensiveness, universality, portability, accessibility, and public administration — that are provided in the federal government’s *Canada Health Act* (*see appendix 1.2*). In addition to setting and administering the

Canada Health Act and providing funding, the federal government provides or funds direct delivery of health care services to specific groups such as First Nations people living on reserves, Inuit, serving members of the Canadian Forces and the Royal Canadian Mounted Police, and eligible veterans. The federal, provincial, and territorial governments, and aboriginal organizations share aboriginal health services. The responsibility for public health is also shared.

Lastly, the federal Public Health Agency of Canada is responsible for coordinating disease prevention and control across internal and international borders, and for emergency response to infectious diseases when beyond what a province or territory can manage; however, public health services are generally delivered at the provincial/ territorial and local levels.

Yukon has full responsibility for administering the health care delivery system in Yukon, including the choices around what types of services are provided; how these services are administered; and for uninsured services, the costs to the users for any publicly funded services. In addition, the federal government shares a responsibility for funding health care delivery in Canada and in particular the emerging North. (Pathway #2, Pathway #3, Pathway #4, Pathway #5)

The provinces and territories administer and deliver most of Canada's health care services. Each provincial and territorial health insurance plan covers medically necessary hospital and doctors' services, without deductible amounts, co-payments, or charge limits. The provincial and territorial governments fund these services with support from federal fiscal transfers.

The role of the provincial and territorial governments in health care includes: administering their health insurance plans; planning, paying for and evaluating hospital care, physician care, allied health care, prescription drug care in hospitals and public health; and negotiating fee schedules for health professionals. Provincial and territorial governments also provide non-insured health services such as drugs prescribed outside hospitals; ambulance costs; and hearing, vision, and dental care which are not covered under the *Canada Health Act*.

Individuals not qualifying under the *Canada Health Act* may pay these costs directly, be covered under an employment-based group insurance plan, or buy private insurance. Provinces and territories have workers compensation agencies that provide health related services to workers injured on the job.

In Yukon, the health care insurance plans operated by the Yukon Government are the Yukon Health Care Insurance Plan (YHCIP) and the

Yukon Hospital Insurance Services Plan (YHISP). There are no regional health boards in Yukon and service delivery is administered from Whitehorse by the Department of Health and Social Services. The Whitehorse General Hospital operates as an acute care facility under the *Yukon Hospital Act* and is governed by a Hospital Corporation Board of Directors. There were 32,936 eligible persons registered with the Yukon health care plan on March 31, 2007.

Other non-insured health services provided to eligible Yukon residents by the Yukon Government include the Travel for Medical Treatment Program, the Chronic Disease and Disability Benefits Program, the Pharmacare and Extended Benefits Programs, and the Children's Drug and Optical Program. Non-insured health service programs include Continuing Care, Community Nursing, Community Health, and Mental Health Services.

2. Fiscal and Financial

Overall many Canadians and Yukoners believe access to health care services are a right of citizenship, however, the financial implications of providing unlimited access to health care is fiscally unsustainable let alone affordable. Both governments and citizens must reconsider their expectations. (Pathway #1, Pathway #3, Pathway #10)

Health care means a great deal to Canadians and many believe that Medicare defines Canada as a nation. Moreover, many Canadians view free access to health care services on demand as the right of every Canadian. The ultimate question will be what we can afford or even how affordable a publicly funded and publicly administered health system will be in the long-term. Recent provincial/territorial health budgets have risen well in excess of inflation, population growth, or the economy. Even with modest changes in the pattern of service delivery, basic factors (population growth, aging, inflation, rising costs of current programs) are projected to increase health expenditures by approximately five per cent per year.

There is significant agreement among many national (Romanow, Kirby) and provincial (Clair, Fyke and Mazankowski, Quebec Task Force) reviews that health costs will increase in future years. Kirby and Mazankowski anticipated substantive increases in health costs while Romanow and Fyke are more moderate in their cost projections. Romanow suggests escalation of costs and the need to make immediate changes while Kirby concludes the publicly funded health care system is not fiscally sustainable.

Several factors are placing increasing pressure on the system. They include increased demand for new and existing services, rising costs, a declining supply of health professionals, the need to make capital investments in health facilities, and public pressure to make costly new technologies accessible to all users. The protracted growth is related to a series of cost drivers and escalators discussed later in this report as part of the *dynamics of the system*. The sustained growth of health spending at rates higher than provincial and territorial revenues can limit our ability to pay for health services, and displaces other policy investments to promote health and well being, such as education, economic development, and tax relief.

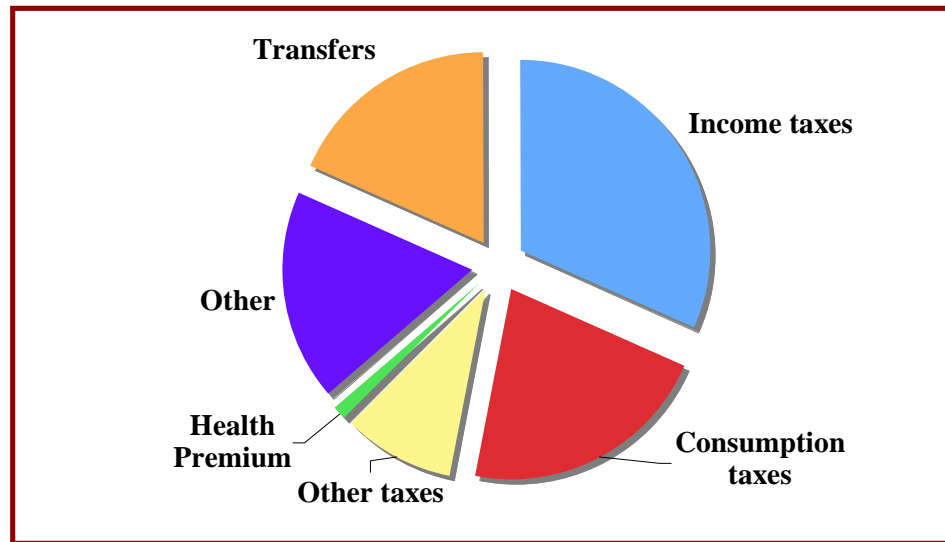
Overall, many commentators suggest that improved sustainability of the health care system comes with the improvement of health and the reduction of the reliance on the system through the continued promotion of wellness, disease prevention and management, and population health strategies. No matter what the solutions are, the current situation is well documented. The following provide a brief overview of the current fiscal and financial situation.

Revenues Sources

Provinces and territories have finite revenue sources to fund health care services, most of which are collected through taxation (income, consumption, and other taxes). Increased health costs must result in increased taxes, reduced services, or displaced non-health programs and services. (Pathway #1, Pathway #3)

The major sources of revenues for the provinces and territories include taxes (income, consumption taxes and others such as property taxes) and other own-source revenues, as well as health care premiums. Only Quebec, Alberta (to be terminated), and BC have explicit premiums while Ontario has implemented a health levy included as taxes (*see supplementary tables and graphs - revenues*).

Graph A1: Provincial and territorial government revenue - 2007



Source: Statistics Canada, FMS

The federal government provides funding for health care to the provinces and territories in the form of transfers. The major health transfer, Canada Health Transfer (CHT), is made on a per capita basis; a mechanism that does not in anyway recognize the true or relative costs of health care delivery in the north. (Pathway #5)

General-purpose transfers and specific-purpose transfers make up about 18 percent of provincial and territorial government revenues. There are two major transfers (inter-governmental fiscal arrangements) related to the health care system; equalization and the cash transfers for the national health care programs. Equalization is a federal transfer program for addressing fiscal disparities among provinces and enables less prosperous provincial governments to provide their residents with public services that

are reasonably comparable to those in other provinces, at reasonably comparable levels of taxation.

The cash transfers include the CHT and a series of trusts and other funding arrangements related to such agreements as the Health Accord or other areas of federal-provincial-territorial cooperation in health (*see appendix 1.3 for history of federal-provincial health funding*). The CHT program provides cash payments based on per capita entitlements, while equalization is only for provinces with fiscal capacity below a ten province standard.

The purpose of the Equalization program was entrenched in the Canadian Constitution in 1982. Equalization payments are unconditional and receiving provinces use these funds in many cases to pay for health care programs. Budget 2007 introduced a new Equalization program. For 2008-09, six provinces will receive over \$13.6 billion in equalization payments. The three territories are not eligible for Equalization. They receive funding under the Territorial Formula Financing Program. This funding mechanism will be discussed later on in this section.

**Table A1: Provincial Equalization
2008-09**

	NL	PEI	NS	NB	QC	MN	Total
<i>(\$ millions)</i>							
Equalization	899	322	1,571	1,584	8,028	2,063	14,468
<i>\$ Per capita</i>	1,781	2,310	1,679	2,111	1,038	1,732	

Source: Federal Finance

The CHT is the primary federal transfer to provinces and territories in support of health care. The CHT cash transfer will reach \$22.6 billion in 2008-09. CHT cash levels are currently set in legislation up to 2013-14, at which time they will reach \$30.3 billion. CHT support is allocated to provinces and territories on an equal per capita total entitlements basis until 2013-14, including both cash and tax point transfers. As of 2014-15, CHT will be allocated on an equal per capita cash basis. The CHT support is conditional on application of the national criteria and conditions of the *Canada Health Act*.

In addition to the CHT, health transfers and trusts have been provided from the federal government to the provinces and territories as part of a series of political accords on health – many of these arrangements, particularly the trusts are about to end. This situation leaves Yukon with the choice of terminating current programs or finding alternative funding sources. (Pathway #5)

For many years the most important fiscal topic for Ministers of Finance and Premiers was the impending financial crisis in health and what had been termed the “fiscal imbalance”. Fiscal imbalance describes the situation where one or more governments do not have the ability to raise sufficient revenues to fund their programming responsibilities, while other governments have more revenue than required to finance their areas of jurisdiction. The federal share of total government revenues has exceeded its share of spending responsibilities in almost every year since the Second World War. Health care was seen as the programming responsibility that drove the fiscal imbalance discussions. These discussions generated a series of health accords and funding agreements that addressed in some way the fiscal imbalance argument. Of current interest to Yukon are the last three political health accords.

1. The Agreement on Health Renewal and Early Childhood Development (2000) in which federal transfers were \$23.4 billion in additional funding, including:

- \$21.1 billion in additional Canada Health and Social Transfers (CHST) funding over five years, including \$2.2 billion for early childhood development earmarked in the CHST;
- \$1 billion over two years to provinces and territories in support of necessary diagnostic and treatment equipment;
- \$800 million to provinces and territories support innovation and reforms in primary care; and
- \$500 million to Canada Health Infoway to help accelerate the adoption of modern information technologies to provide better health care.

2. The First Ministers’ Accord on Health Care Renewal (2003) in which federal funding included:

- \$36.8 billion over five years to improve the accessibility, quality, and sustainability of the public health care system and to enhance transparency and accountability in health care spending.
- \$31.5 billion, was provided to provinces and territories through cash transfers, including:
 - \$16 billion over five years through a new Health Reform Transfer targeted to primary health care, home care, and catastrophic drug coverage;
 - \$14 billion in increased CHST cash transfers to provinces and territories over five years; and

- \$1.5 billion over three years to provinces and territories in a Diagnostic/Medical Equipment Fund in support of acquisition of equipment (and related specialized training) to improve access to publicly funded diagnostic services.
- The remaining \$5.3 billion supported federally directed initiatives under the 2003 Accord, such as increased funding for federal health programs for First Nations and Inuit, the creation of the compassionate care benefit under Employment Insurance, support for research hospitals, improved health care technology, and pharmaceuticals management.

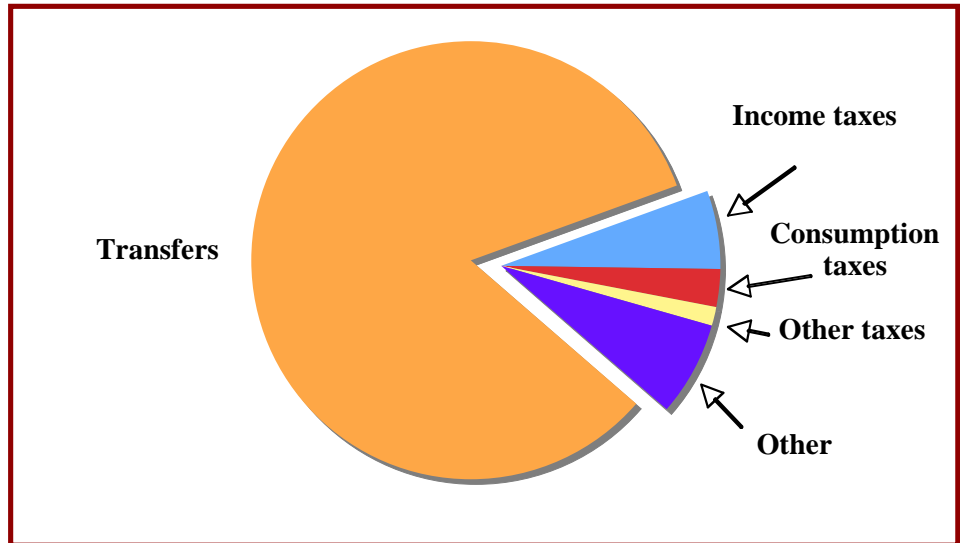
3. The 10-Year Plan to Strengthen Health Care (2004) included:

- \$41.3 billion over ten years, including:
 - \$35.3 billion to establish a new CHT base of \$19 billion in 2005-06 (closing the Romanow Gap), and apply a six per cent annual escalator effective 2006-07;
 - \$5.5 billion over ten years through the Wait Times Reduction Transfer to assist provinces and territories in their respective strategies to reduce wait times; and
 - \$500 million in 2004-05 for additional investments in medical and diagnostic equipment.

Yukon does not have the fiscal capacity enjoyed by the provinces and consequently it does not have the fiscal flexibility to raise significant funds through own-source revenues to meet the needs of escalating health care funds. (Pathway #5)

Using Statistics Canada's Financial Management System (FMS) data for 2007 income taxes represent about 35 percent of Yukon own-source revenues (income, consumption, other taxes, and other revenues). However when transfers are included, income taxes make up only six percent of total revenues. This contrasts to the total of all provincial and territorial averages whose income taxes make up 39 percent of own-source revenues and 32 percent of total revenues. Own-source revenues in Yukon make up 17 percent of all revenues, while own-source revenues for all provinces and territories is 82 percent.

Graph A2: Yukon General Government Revenue, 2007



Source: Statistics Canada, FMS

Once again using Statistics Canada FMS data for 2007, general and specific purpose transfers from the federal government make up almost 83 percent of all revenues for Yukon. Yukon benefited by the CHT and the other provisions of the *Health Accord* and other health agreements. In addition to these transfers, Yukon receives other major contributions from the federal government; a general-purpose grant, Territorial Formula Financing (TFF) that represents almost 60 percent of all revenues and various other specific purpose grants including health related transfers that make up approximately 23 percent of all revenues.

Territorial Formula Financing (TFF) is a program for the territories that addresses the federal government's responsibilities for providing comparable levels of government programs and services at comparable levels of taxation in the north. (Pathway #3, Pathway #5)

TFF is an annual unconditional transfer from the federal government to the three territorial governments that is intended to provide territorial residents with access to public services comparable to those offered by provincial governments, at comparable levels of taxation. TFF helps to fund public services such as hospitals, schools, infrastructure, and social services. In its original constructs, the TFF funding model recognized the high cost of providing public services in the North. As well, it recognized the challenges territorial governments face in providing these services to a large number of small, isolated communities.

The federal government has unilaterally imposed significant constraints on territorial financing in the past. Previously they suspended its principle-based approach. The federal government also imposed significant cuts in the nineties that according to the last estimates took over a billion dollars

out of the original formula. These cuts were disproportionately larger to the territories than to the provinces. As such the funding for Yukon government programs, including allocation to the health care system of Yukon, would be very different today if the original mechanism of financing was permitted to exist the way it had originally been designed. (Pathway #5)

In 1994/95 the federal government introduced an arbitrary five per cent Gross Expenditure Base (GEB) reduction to the formula. When viewed in relation to the fiscal restraint measures imposed on the provinces, federal measures for the territories were disproportionate. By way of example, while the two-year reduction in CHST entitlements represented about two per cent of provincial-local government revenues, this five per cent base cut in Yukon, because of the structure of the formula, translated into a seven per cent reduction in the grant or into a reduction of over six per cent in revenues, over three times the impact for the provinces. By 2004/05 this five percent cut to the GEB represented an average of over \$100 million a year for all three territories. The five per cent cut to the GEB actually translates into a seven per cent cut in the total value of the Yukon grant and has never been restored. For the Yukon alone, the cumulative impact of this five percent cut to the GEB has been a cumulative loss of \$194 million for the years 1996/97 to 2003/04 (by extrapolation this would represent a loss of approximately \$325 million by 2008/09).

In addition to this fiscal loss was the introduction of a Gross Domestic Product (GDP) ceiling in 1990. This measure restricted the growth of the Provincial-Local Expenditure (PL) escalator to the three-year average of the growth in the Canadian GDP – effectively distorting the very escalator (PL) that was designed to ensure that Yukon had adequate resources relative to the provincial governments. The GDP ceiling had the effect of preventing the territorial GEBs per capita from keeping up with provincial expenditures per capita as originally envisaged in the logic of TFF. In the Yukon Business Case presented to the federal government in August 2003, the cumulative impact of this measure alone for Yukon was estimated at \$659 million from 1990/91 to 2003/04. Although an offsetting measure related to population was introduced to TFF during the 1990's, taking this action into account the net impact of the GDP ceiling on the formula grant for Yukon was \$460 million as of 2003/04 (once again by simple extrapolation this would represent a cumulative loss of approximately \$760 million by 2008/09).

Simply stated, the actions of the federal government made the once adequate expenditure base of the territories inadequate and consequently incapable of sustaining the high costs of health or any other program delivery in the north. By 2008/09 both of these measures will have diverted over a billion dollars from the Yukon – funding originally

anticipated by the original logic of the TFF. Although the federal government has provided additional funding since the Business Case in 2003, the impacts of both of these restraint measures have never been fully addressed.

In 2004 the federal government suspended the TFF and temporarily introduced a unilateral funding arrangement with the territories. After the submission of the report of the Expert Panel on Equalization and Territorial Formula Financing, the Federal Budget 2007 returned TFF to a principle-based program, with three separate gap-filling formulas. The new TFF grant is based on the difference between a proxy of territorial expenditure needs (GEB) and their capacity to generate revenues. Each territory's GEB is adjusted annually by an escalator that reflects increases in relative growth in population in the territories compared to that of Canada and relative growth in provincial-local spending. The measurement of territorial revenue capacity uses the Representative Tax System, similar to that used by the Equalization program, for seven of the largest own-source revenues for the territories. A separate revenue block reflects the remaining eleven own-source revenue sources. Natural resource revenues continue to be treated outside of TFF.

**Table A2: Territorial Formula Financing
2008-09**

	Yukon	NWT	NU	Total
<i>(\$ millions)</i>				
TFF	564	805	944	2,313
<i>\$ Per capita</i>	18,166	18,704	30,265	

Source: Federal Finance

Acknowledging special requirements, inadequate transfers, and the needs of the north, the federal government has provided additional and specific health related trusts and funds to the north. However, these programs and their funds are about to expire. This will leave Yukon with a reduction of health funding of over ten million dollars a year. These funds must be renewed or replaced with adequate funding for health in Yukon if health care programs and services in Yukon are to attain national standards. (Pathway #5)

On February 20, 2003 the Government of Canada agreed to provide a total of \$60 million in funding over three years to the three northern territories (\$20 million each, \$6.7 million per year) in addition to the per capita funding announced at the 2003 First Minister's Meeting. This funding was intended to take into account the unique circumstances facing Nunavut, Yukon, and the Northwest Territories with respect to funding health care in the North.

In addition to this funding Yukon receives funding for health in the form of the CHT and a series of health trusts and other funds (e.g. THAF) (*see appendix 1.5 and 1.6*). Most of this health funding will terminate as of the fiscal year 2009/10.

Expenditures

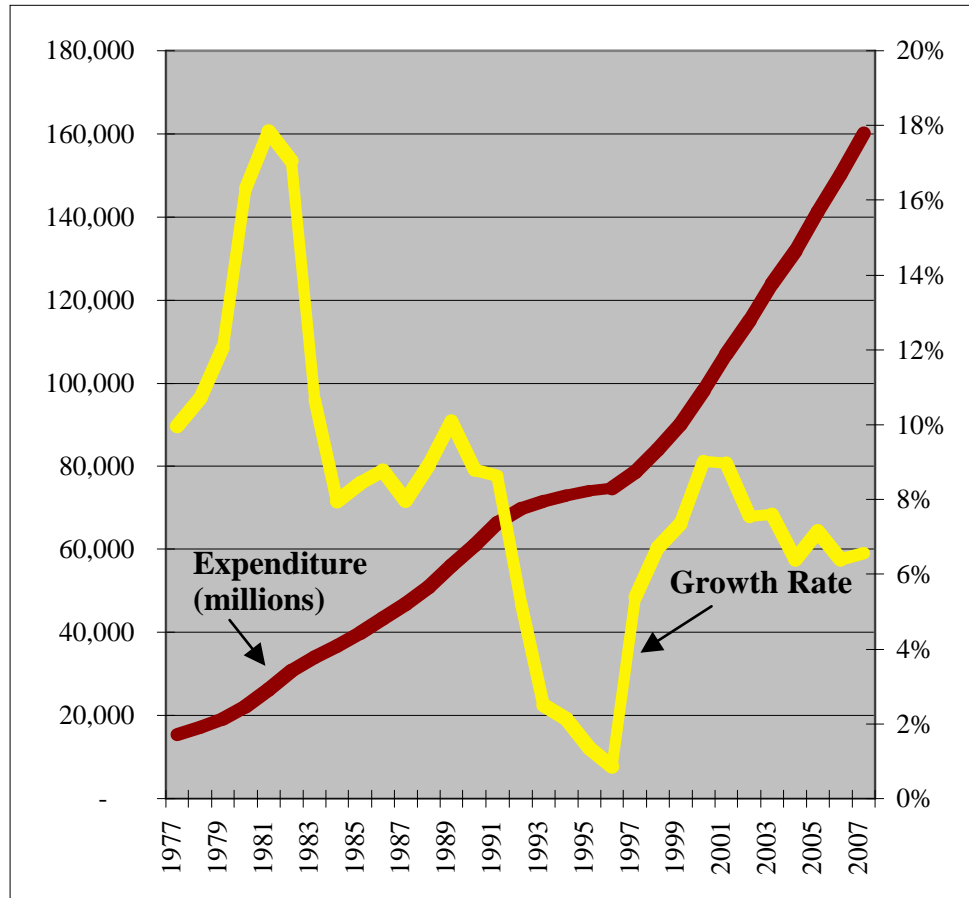
The single greatest challenge facing the national health care system today is dealing with overall health expenditures. Everything indicates that the upward pressure on health care costs will continue in the future. (Pathway #1, Pathway #8)

Based on Canadian Institute for Health Information (CIHI) data, from 1977 to 2007, total expenditures by provincial public and private sources on health services and products (as measured in current dollars) increased from \$15.5 billion to just over \$160 billion. Between 1988 and 2007 total health spending in Canada grew by over \$80 billion at an average of 7.4 percent for this ten-year period. Since 1998, total health care expenditures have grown almost 7.2 per cent on average. Ten years ago, provincial government spending on health represented approximately 34 per cent of the program spending; today, it accounts for almost 40 per cent of the total provincial and territorial program spending (*see supplementary tables and graph - expenditures*).

New technologies, procedures, and medications are increasing in complexity and sophistication, all contributing to the costs of offering care. Chronic diseases related to population aging are increasing in importance, and in general, the current demographic shifts will ultimately have a significant impact on health care costs.

Health care is expensive. It will become more expensive before it gets more efficient. In 2007 Canada spent \$438,721,917 per day on health care or about \$18,280,080 per hour, Yukon spent \$577,260 per day on health care or about \$24,053 per hour.

**Graph A3: Total Health Expenditure and Growth Rate, Canada
Current Dollars - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

Public financing of insured services remains the most acceptable means in Canada of paying for health care. A tax-based single payer system appears as the most accepted approach for paying for health care. However, if Health Care is to remain financed by taxation, more has to be done to reduce the growth of spending. When the economy is expanding, tax revenue keeps up with health spending. However, in a recession or slowdown health spending is at risk of outpacing revenue thus increasing the possibility that future fiscal and taxation challenges will displace other government priorities.

Between 1977 and 2007, private sector spending (inflation-adjusted) rose more quickly than public sector spending. In Canada, higher spending between 1984 and 2006 can be partly attributed to population growth (accounting for 13 percent) and inflation (accounting for 41 percent). However, other factors, such as changes in practice patterns and new/additional technologies and services, have also contributed to this increase.

Looking only at provincial and territorial health expenditures, provincial/territorial growth rates on average in Canada are exceeding seven percent a year. Yukon growth rate is one of the highest at 7.7 percent.

**Table A3: Provincial/Territorial and Per Capita Health Expenditure, Provinces, Territories, and Canada
Current Dollars – 2007**

	Total		Per Capita	
	(\$millions)	10 Yr. Ave. (%)	(\$)	10 Yr. Ave. (%)
N.L.	1,851	6.5%	3,637	7.5%
P.E.I.	418	6.5%	3,010	6.2%
N.S.	2,944	7.6%	3,144	7.6%
N.B.	2,455	6.5%	3,274	6.5%
Que.	21,951	6.0%	2,853	5.4%
Ont.	39,536	7.1%	3,082	5.7%
Man.	4,141	7.3%	3,499	6.8%
Sask.	3,519	7.2%	3,580	7.6%
Alta.	12,617	10.8%	3,695	8.7%
B.C.	13,745	6.1%	3,154	5.0%
Y.T.	151	7.7%	4,830	7.7%
N.W.T	243	6.5%	5,728	5.7%
Nun.	255	10.2%	8,229	8.3%
Canada	103,827	7.1%	3,156	6.0%

Source: National Health Expenditure Database, CIHI

Note: NWT and Nunavut a seven year average

Yukon has the third highest per capita expenditures (both for total of public and private and for solely provincial/territorial per capita expenditures) on health care in Canada, only exceeded by the other two territories. These high per capita expenditures reflect the high costs of providing these services in the North and must be recognized by the federal government and Yukoners alike. (Pathway #1, Pathway #5)

Health expenditure per capita varies among provinces and territories because of different age distributions. Population density and geography also affect health expenditure, particularly in the case of the territories. Other factors that affect health expenditure include population health needs and the manner in which health care is delivered (including the balance between institutional and ambulatory care). Health expenditure per capita is highest in the territories because of the large geographical areas and low population densities. In 2007, total (both public and private) health expenditure per capita (see supplementary tables and graphs) in Canada reached \$4,867, with the highest value at \$10,903 per

capita in Nunavut and the lowest in Quebec at \$4,371 with Yukon expending approximately \$7,047 per capita. For provincial/territorial governments (Table A3) alone these values for 2007 were an average of \$3,156, with the highest value still at \$8,229 per capita in Nunavut and the lowest in Quebec at \$2,853 with Yukon Government expending approximately \$4,830 per capita.

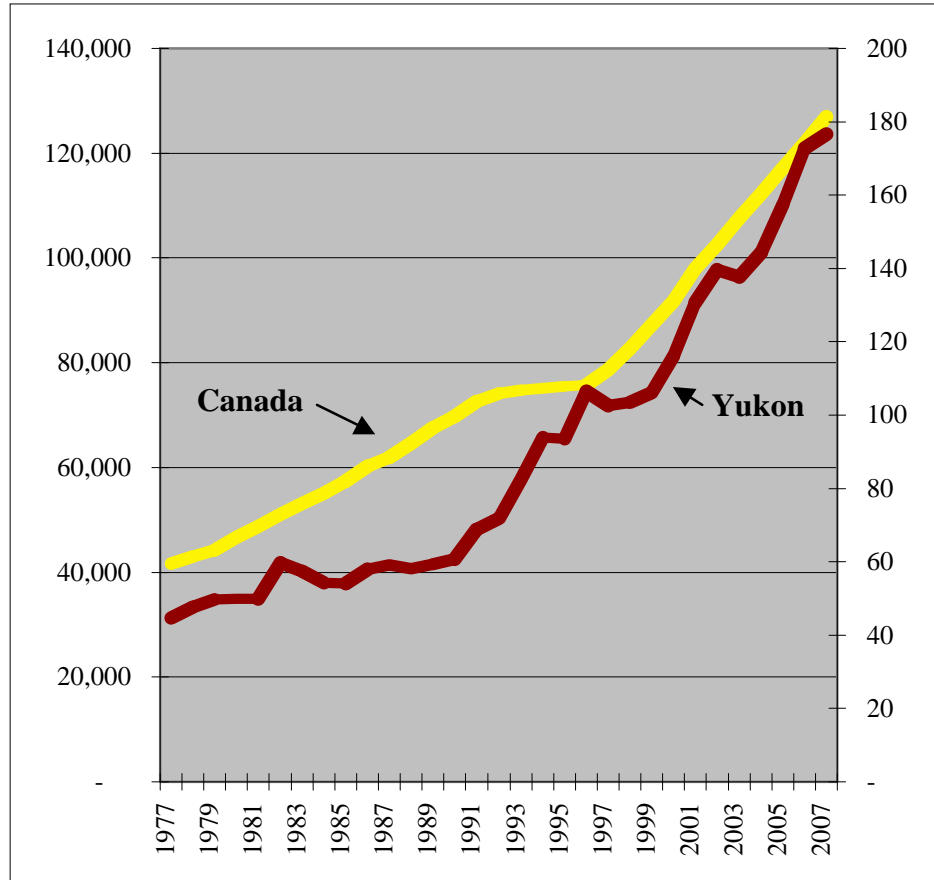
Using the Yukon Government's estimates of its own expenditures over the past ten years, health care costs have risen slightly more than nine percent on average. If that trend continues, costs will rise from actual costs of \$112.9 million on 2007/08 to \$266.1 million by 2017/18. (Pathway #1, Pathway #5)

The growth in health expenditure is exceeding the inflation rate in Canada, indicating a real growth that in the long-term is unsustainable and is taking up a greater proportion of provincial and territorial budgets and over-all resources each year. Yukon has been exceeding the national growth rate significantly over the past 20 years. (Pathway #1, Pathway #5)

Analyzing health spending relative to changes in inflation is a useful measure to determine the growth of health spending. The comparison permits the evaluation of whether health spending has kept pace with or exceeded general price increases. Health care now accounts for almost 40 percent of all provincial/territorial program spending. The increased spending exceeds the growth of the economy and the rate of inflation.

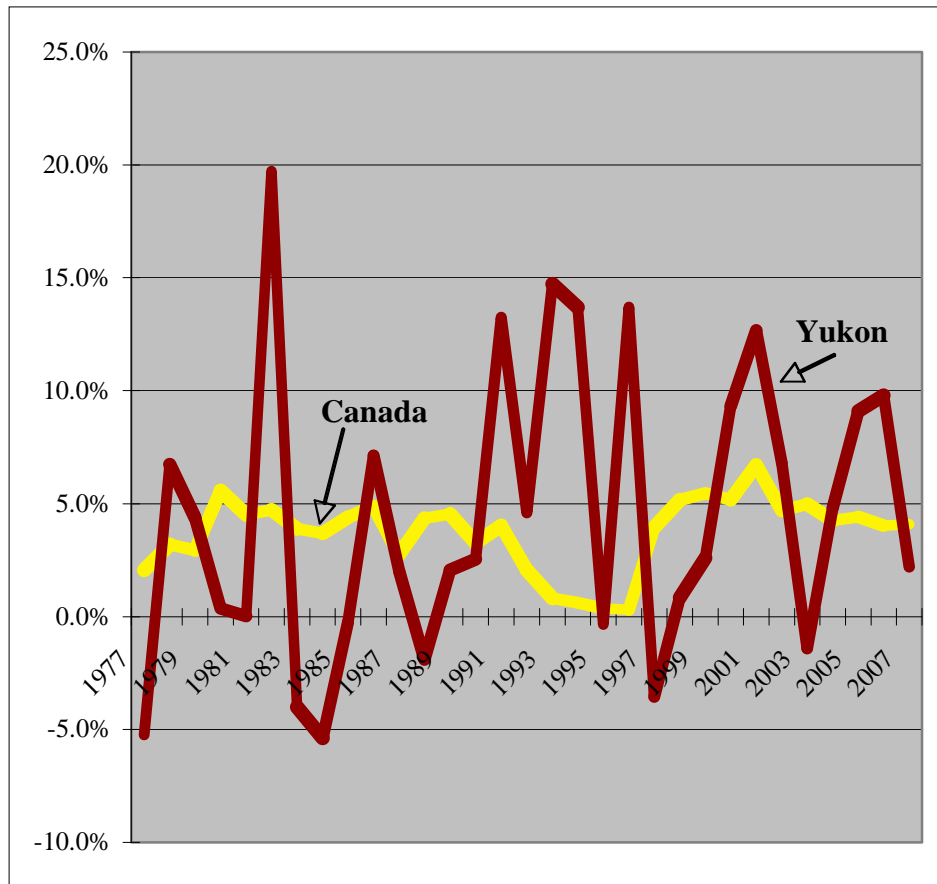
In real terms, Yukon health expenditure in 1997 dollars (net of inflation) has quadrupled while health expenditure in Canada, as a whole, has tripled in value. Changes in constant health expenditure in Yukon have increased faster than the national average over the last 30 years (1977 and 2007). Canada averaged 3.7 percent while over the entire 30 years Yukon averaged over 4.5 percent. In the last five years in constant dollar terms Yukon has also exceeded the national average growth rate at 4.9 percent compared to the Canada average of 4.4 percent.

**Graph A4: Total Health Expenditure, Canada and Yukon
Constant Dollars (1997) - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

**Table A4: Total Health Expenditure Growth Rates,
Canada and Yukon
Constant Dollars (1997) - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

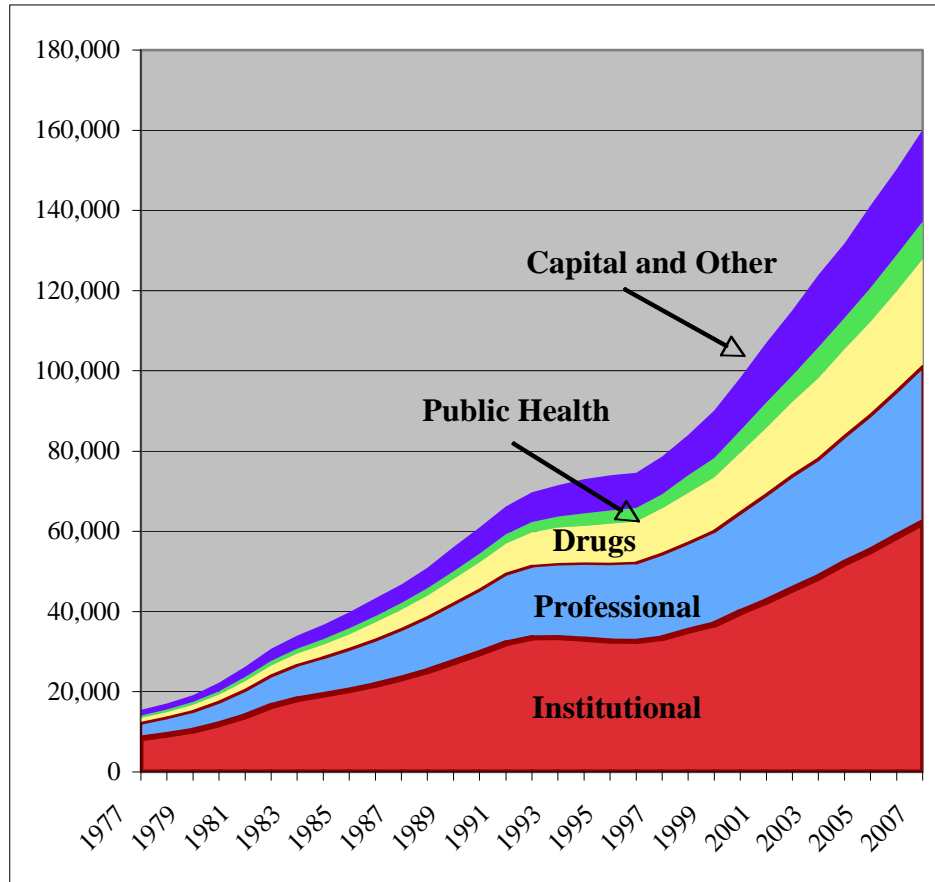
The above graph shows health expenditure in constant dollars, which nets out the effect of inflation, consequently, anything above 0%, represents real growth. Clearly on average, health expenditure exceeded the rate of inflation every year over the past 30 years, averaging 3.7 percent.

Where and how health care expenditure is being spent has changed over the past 30 years, including the reduction in the proportion of institutional spending and the rapid relative increase in the expenditures on drugs, public health, and capital, which includes many of the new technologies being introduced into the health care system. (Pathway #1, Pathway #9)

Over the past 30 years the pattern of expenditures has changed. In 1977, 54 percent of total expenditure on health was for institutional services (*see supplemental tables and graphs - expenditures*). Thirty years later this component represented 39 percent of total expenditure. The proportion of total health expenditure at around 34 to 26 percent has remained fairly constant over the 30 years for professional services. Drugs have taken up

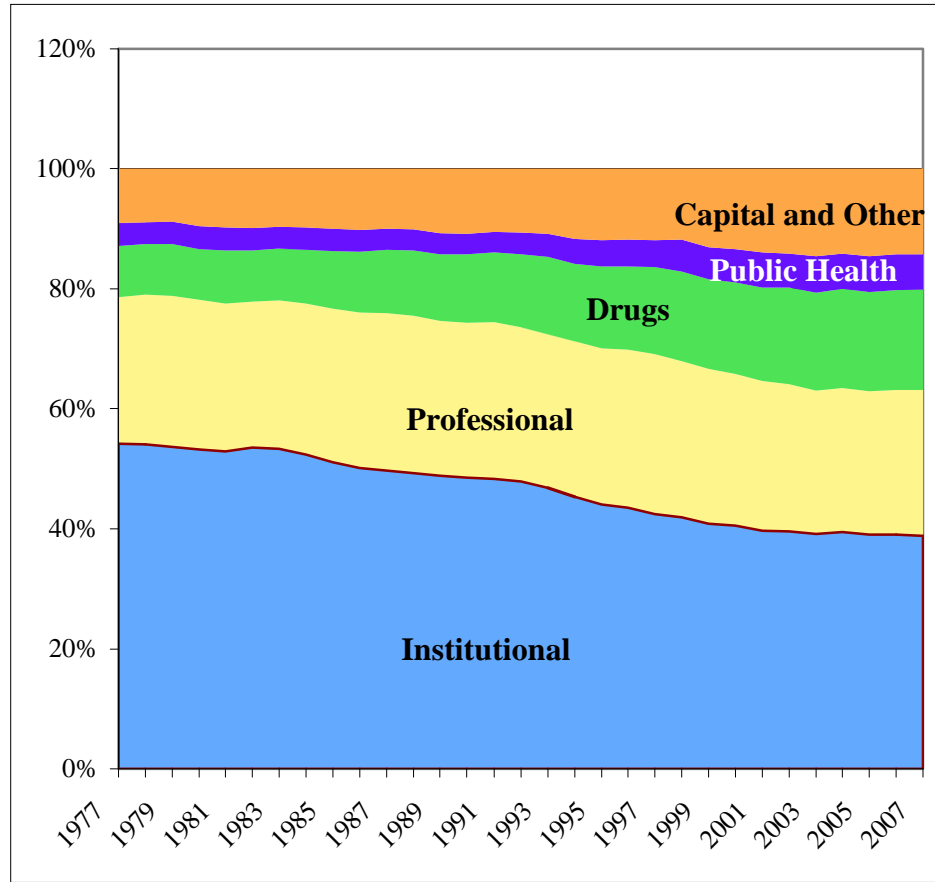
almost twice what they had in 1977 as have capital expenditures that include many of the new emergent technologies.

**Graph A5: Total Health Expenditure by Use, Canada
10 Year Average - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

**Graph A6: Percent Health Expenditure by Use, Canada
10 Year Average - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

In dollar terms the biggest expenditures in health care are within hospitals and other institutions, followed by the costs of professionals and drugs. These are the areas where the greatest potential for cost containment exists. (Pathway #2, Pathway #4, Pathway #6, Pathway #8)

Health dollars are used to purchase health care goods and services, to provide capital investment, to administer public and private insurance plans and public health programs, and to fund research.

These uses are grouped into twelve major categories (uses of funds) throughout most of the National Health Expenditure data series.

For Canada, hospitals make up the largest component of health care spending, accounting for 28 percent of total health expenditure in 2007. Drugs represent the second largest share (17 percent), while physicians make up the third largest share (13 percent) (see supplementary tables and graphs - expenditures).

Hospitals have traditionally accounted for the largest share of Canadian health expenditure. Nationally, spending on hospitals was \$45.5 billion in 2007. However, hospitals' share of total health dollars has fallen over time while other major areas of health care expenditure have grown more rapidly. Spending on hospitals was about 28 percent of total health expenditure in 2007 - down from about 45 percent in 1997. The share of total health expenditure allocated to drugs increased over time, to about 17 percent in 2008, up from nine percent in the mid-1970s. In 2007, 13 percent of total health expenditure was allocated to physician care.

The pattern of health expenditures in Yukon is different than for Canada as a whole, reflecting the unique challenges of providing health services and meeting health care needs in the North. (Pathway #5)

In Yukon the distribution of expenditures is markedly different than in the rest of the country. In 2007, Yukon spent less on hospitals (21 percent versus 28 percent) and more on other institutions (18 percent versus ten percent), but when combined, Yukon's total expenditure on all institutions is similar to the Canadian total (38 percent). Yukon spends less on drugs (10 percent versus 17 percent) and capital while over three times as much on public health (17 percent versus six percent). This may reflect the reliance on external institutions and "medivacs".

Table A5: Percentage Growth in Total Health Expenditure by Use, Yukon - 1977 and 2007

	1997		2007		Growth
	(\$milions)	(%)	(\$milions)	(%)	(%)
Hospitals	29	28%	47	21%	161%
Other Institutions	9	9%	41	18%	466%
Physicians	11	11%	21	10%	190%
Other Professional	10	10%	15	7%	145%
Drugs	11	10%	23	10%	215%
Capital	3	3%	5	2%	187%
Public Health	16	16%	38	17%	230%
Administration	5	5%	9	4%	190%
Other	9	9%	22	10%	253%
Total	103	100%	221	100%	215%

Source: National Health Expenditure Database, CIHI

The manner in which health care is financed is an important consideration; including the degree of public coverage and private insurance for services not included in the *Canada Health Act* and the level of remuneration of health personnel. There is a well-established role for private sector participation in the national health care system. (Pathway #4)

The national system is made up of a continuum of funding sources. They range from:

- fully publicly funded activities that include hospital and physician services termed “medically necessary”. These services are paid for by the government and are covered under the *Canada Health Act*.
- to privately funded services that are paid for by individuals or private insurance firms (e.g. dental care, prescription and non-prescription drugs, and optometric care).
- and also those in between that may be paid for certain groups by provincial-territorial governments, individuals, or insurance companies depending on varying criteria (e.g. home care, long-term care, prescription drugs, other extended benefits and ambulances).

However, these three sources can be considered as two sources of funding: (a) public including payments by governments at the federal, provincial/territorial and municipal levels and by Workers’ Compensation Boards and other social security schemes and (b) private sector funding consists primarily of health expenditures by households and private insurance firms.

Provincial and territorial health services provided by the private sector has steadily increased in Canada over the past 30 years from 23 percent to almost 29 percent of all expenditure. This trend is expected to continue as greater demands are put on the public health sector. However, in Yukon this trend has been in the opposite direction starting at a private sector proportion of 24 percent in 1977 to only 19 percent by 2007. This situation may be a result of the size of the market or inherent market barriers within Yukon. (Pathway #3, Pathway #4, Pathway #7, Pathway #8)

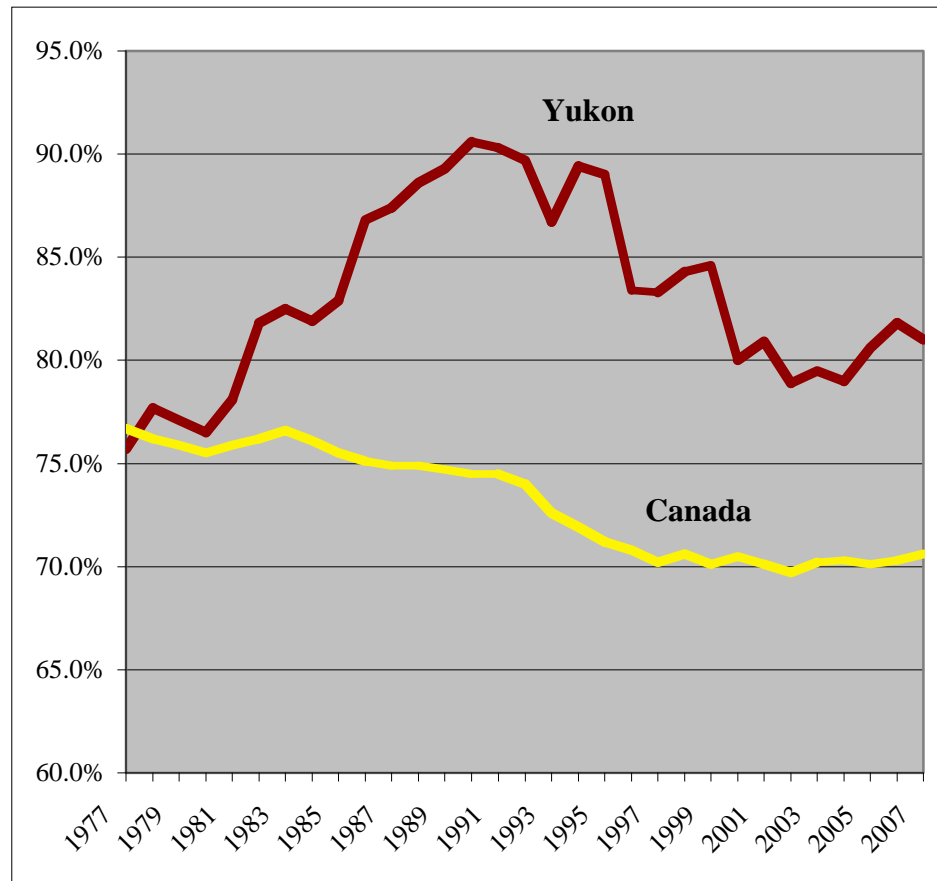
Over 29 percent of all health care expenditure in Canada is within the private sector, almost a 26 percent increase over thirty years (23 percent in 1977). This trend has been consistent for the entire period. Yukon has reversed this trend and has lost private sector expenditure over this period going from 24 percent in 1977 to 19 percent in 2007. Yukon has one of the lowest proportions of private expenditure in Canada, only higher than the other two territories. Provinces range from a high of 32.8 percent in Ontario to a low of 22.2 percent in Saskatchewan.

**Table A6: Total Expenditure by Source and Province and Territory
Percent - Current Dollars - 2007**

	Public		Private	
	(\$millions)	(%)	(\$millions)	(%)
N.L.	1,954	76.6%	597	23.4%
P.E.I.	466	71.5%	186	28.5%
N.S.	3,216	70.8%	1,324	29.2%
N.B.	2,658	69.9%	1,145	30.1%
Que.	24,119	71.7%	9,513	28.3%
Ont.	42,888	67.2%	20,926	32.8%
Man.	4,683	75.4%	1,530	24.6%
Sask.	3,962	77.8%	1,129	22.2%
Alta.	13,613	74.0%	4,790	26.0%
B.C.	14,682	71.5%	5,860	28.5%
Y.T.	179	81.0%	42	19.0%
N.W.T	294	87.8%	41	12.2%
Nun.	321	95.0%	17	5.0%
Canada	113,035	70.6%	47,098	29.4%

Source: National Health Expenditure Database, CIHI

**Graph A7: Percent Public Health Expenditure - Yukon and Canada
Percent, Current Dollars – 2007**



Source: National Health Expenditure Database, CIHI

The analysis tells us that the highest per capita and absolute expenditures occur for the population under one year of age and for the population aged 65 years and older. For Yukon this phenomena is even more pronounced with per capita expenditures over 70 years of age many times that of the national average. (Pathway #1, Pathway #8, Pathway #9)

The distribution of provincial/territorial government health expenditures by age and sex, in millions of dollars and per capita dollars, is included in the supplementary tables. The influence of hospital and physician expenditures is evident for seniors, ages 65 and older, who consumed more than 44 percent of all provincial/territorial government health spending in 2005, while making up just over 13 percent of the population.

Females accounted for about 56 percent of all provincial government health spending in 2005, with female seniors the most at over 26 percent. Senior males accounted for about 18 percent of health expenditures. For hospital and physician services, spending per capita is high for infant care, with costs estimated to be greater than \$7,000 per person for both sexes.

From youths aged 1 to adults aged 49, spending per person slowly increases but does not exceed \$2,000 per person. There is a pronounced increase in per capita spending in the senior age groups.

As the Yukon population ages the extremely high levels of expenditures in the senior age cohorts will have to be addressed. (Pathway #1, Pathway #3)

Yukon appears to have an even greater age disparity for expenditures than the national averages. For infants, Yukon and national expenditures estimates are roughly similar, as are the expenditures for males cohorts under the age of 70 years. Interestingly, in Yukon, expenditures for women under 50 years of age are two to three times the national average. Of greater interest is that as the Yukon population ages, expenditures in the age cohorts over 70 years of age are sometimes three and four times that of the national average. The numbers of elderly in these age groups are relatively small for Yukon and may create some volatility in the data, however, the high levels of expenditures is consistently seen in all senior age cohorts.

**Table A7: Total P/T Health Expenditure by Age and Sex - Yukon
Total Expenditure and Per Capita – 2005**

	Total		Per Capita	
	Female (\$millions)	Male (\$millions)	Female (\$)	Male (\$)
<1	1.1	1.4	6,053	7,741
1-4	2.4	1.6	3,981	2,425
5-9	2.4	2.0	2,377	2,187
10-14	2.2	2.1	2,021	1,889
15-19	3.0	2.6	2,582	2,051
20-24	3.8	2.6	3,409	2,119
25-29	3.9	1.9	3,988	2,284
30-34	4.3	2.4	3,933	2,550
35-39	3.9	2.8	3,158	2,388
40-44	4.5	3.7	2,851	2,671
45-49	4.9	4.6	3,157	3,114
50-54	4.4	4.5	3,490	3,204
55-59	4.0	4.4	4,175	3,926
60-64	3.2	3.6	5,276	4,467
65-69	3.1	3.8	8,162	7,572
70-74	3.7	4.2	12,957	12,973
75-79	3.4	3.5	18,521	20,570
80-84	4.0	2.5	38,493	23,592
85-89	5.0	1.9	71,816	81,762
90+	1.3	0.5	42,095	19,460

Source: National Health Expenditure Database, CIHI

Sustainability, Revenues, and Expenditure

Royal Commissions, Special Committees, Academics, and Consultants have reviewed Canada's health care system. Whether the studies have been national, provincial or regional scope, these studies all point to the need for the health care system to be sustainable. (Pathway #8)

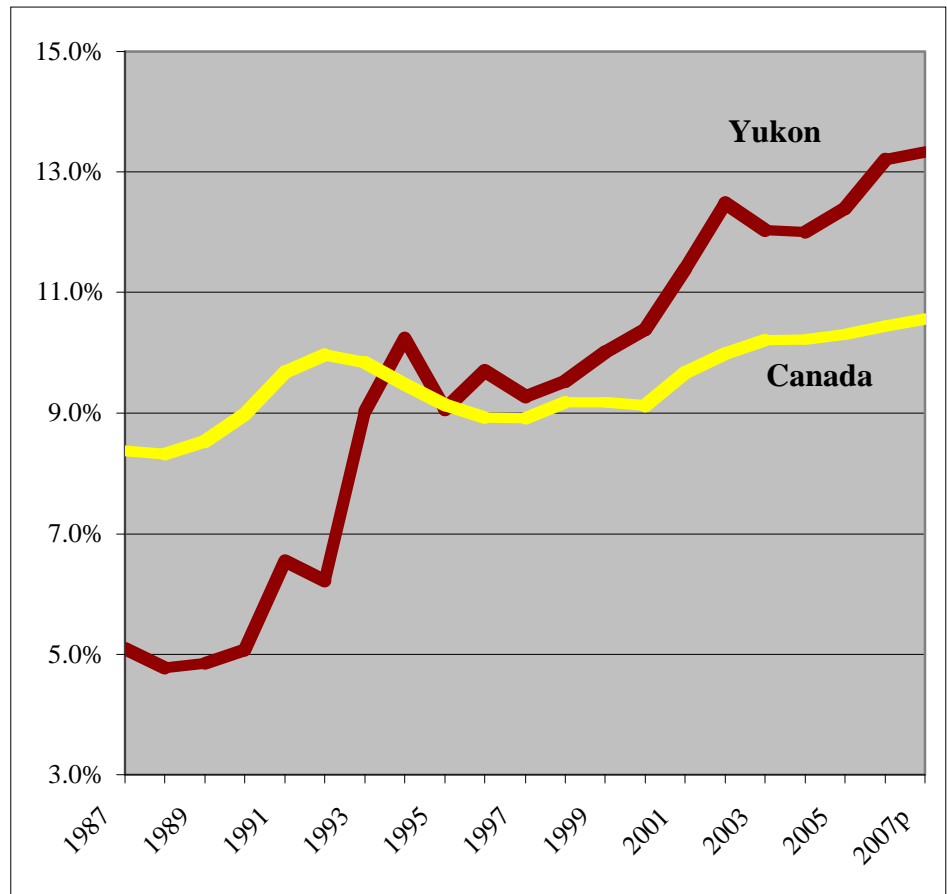
Over the ten-year trend period (1997/98 to 2006/07), health spending has been growing in excess of the growth in revenues in most provinces and territories. Averaged across all provinces and territories, government health spending has grown at an annual rate over seven percent. The national average, annual growth rate for total available provincial revenue, has been less than six percent. Government health spending has also grown faster than provincial GDP. Sustainability of the existing health care system is important because taxpayers fund it and the ultimate concern is with the overall tax burden to the payers.

There is a direct relationship between increasing health care spending and the overall growth in the economy. GDP serves as a useful measure to evaluate the growth in health expenditure. The logic is if health spending exceeds the rate of economic growth, the economy may not be able to support the expenditure growth on a permanent basis.

Yukon spends more, as a percent of GDP, on health care than any province other than PEI. Moreover, the increase in the proportion of GDP spent on health care is the highest, suggesting a growth rate that is unsustainable in the long-term. (Pathway #3, Pathway #4, Pathway #5)

Health expenditure as expressed as a percentage of territorial GDP was 5.1 percent in 1977; in 2007 it has increased by 162 percent to 13.3 percent; the largest increase of any jurisdiction in Canada. This higher than average increase is likely largely due to the fact that there were very few services available in the Yukon in 1977 compared to other jurisdictions, and over the past three decades the Yukon has improved services to a more comparable level. The second largest growth rate was seen in Ontario at 41 percent, with Canada as a whole seeing a 26 percent growth over the thirty-year period. Health expenditure in Canada as a whole stood at 10.6 percent of GDP in 2007 compared to 13.3 percent for Yukon. Once again Yukon GDP figures may be more variable than the national average, however, the annual growth in the proportion of GDP spent on health care has risen in a stable and consistent manner for the thirty-year period (*see supplementary tables and graphs - sustainability*).

**Graph A8: Total Health Expenditure as Percentage of GDP
Current Dollars - 1987 to 2007**



Source: National Health Expenditure Database, CIHI

The proportion of territorial spending on health has risen by over 80 percent in the last 30 years in Yukon, significantly faster than the Canadian average growth of 22 percent and in large part reflective of Yukon “catching up” in its ability to offer a level of services comparable to elsewhere in Canada. As the proportion of expenditure on health grows Yukon Government must structurally diminish expenditures on other priorities. (Pathway #5, Pathway #8)

Health expenditures were equivalent to 28.2 percent of total provincial and territorial government expenditure in 1993 and 32.7 percent of program expenditures (total expenditure less debt charges). Health expenditure decreased as a percent of government expenditures during the next two years during the major federal reduction in transfer payments of the mid nineties.

Currently, provincial and territorial government health expenditure, as shares of total and program expenditures have increased to around 35 percent and 39 percent respectively, in 2006.

Yukon, along with the other two territories has one of the lowest proportions of government spending on health care in Canada. This is a reflection of the other expenditures that are included in total territorial expenditure. The territorial government directly administers such functions as education; expenditures that are covered by school boards in the south. However, what is of interest is the growth in the proportion of health as part of government expenditure. Yukon spent 9.7 percent of its total government expenditure on health 30 years ago; it now spends almost 18 percent, an increase of over 80 percent. For Canada in total this growth has changed from 32.1 percent to 39.2 percent, or a growth in the proportion of government spending on health of 22.1 percent.

Table A8: Total P/T Expenditure as Percentage of Program Spending Current Dollars - 2006 and 1987

	2006	1987	Change
	(%)	(%)	(%)
N.L.	32.5%	28.8%	12.8
P.E.I.	34.1%	27.9%	22.3
N.S.	40.5%	32.6%	24.3
N.B.	40.8%	29.0%	40.7
Que.	32.4%	29.5%	9.9
Ont.	44.9%	37.6%	19.3
Man.	42.7%	32.6%	31.0
Sask.	39.0%	33.3%	17.2
Alta.	36.7%	25.5%	44.3
B.C.	42.0%	33.2%	26.4
Y.T.	17.5%	9.7%	80.7
N.W.T.	17.1%	12.8%	33.4
Nun.	24.3%	---	---
Canada	39.2%	32.1%	22.1

Source: National Health Expenditure Database, CIHI

The spread between the growth rate of health expenditure and available provincial/territorial revenues indicate an unsustainable state – the differential for Yukon is even greater at about two full percentage points. (Pathway #1, Pathway #5)

The real story of health care expenditure is its growth in comparison to the revenues available to fund health care. In Canada, total health care expenditure has been growing at a rate of 7.2 percent between the years 1986 and 2006. During this period, total provincial and territorial revenues have been increasing at a rate of 5.8 percent. The discrepancy between

these rates of growth represent the potential short fall in the provincial and territorial capacity to pay for health services. Moreover, the implications of these differential growth rates are that health departments must consume resources elsewhere in the system; resources currently spent on other public programs and services.

For Yukon, the spread in growth rates is even larger. Using the Canadian Institute of Health Information (CIHI) data, the ten-year growth rate in health expenditure between 1997 and 2007 has been 7.7 percent, a half percentage point greater than the national average, while revenues have grown at 5.7 percent. The two percent differential between expenditures and revenues indicates once again a challenge for long-term sustainability.

If health care expenditures and revenues grow at current rates, Yukon will have a health care deficit of almost a quarter of a billion dollars over the next ten years; a short fall that Yukon has neither the tax base to draw upon, nor the fiscal flexibility to absorb. (Pathway #1, Pathway #5)

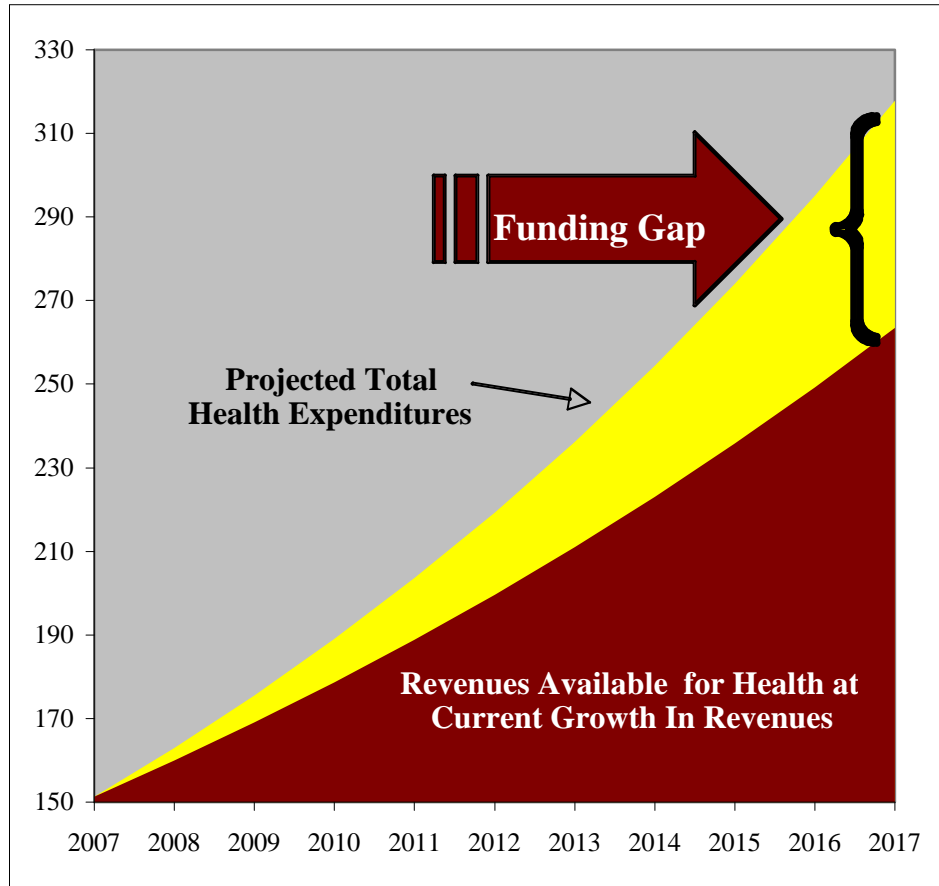
When compared to revenues, there appears to be a significant gap that is anticipated between the increase in government revenues and the increase in health care costs. In absolute value, taking the year 2007 as a base, the deficit between revenues and expenditures would be \$249 million in 2017. The entire problem of health funding for Yukon is summarized in Table A9 and Graph A9. To fill this gap, the government has no other choice than to take new initiatives in order to act both on expenditures, to slow its growth, and on revenues, to reduce the pressure on public finances. This deficit projection assumes that existing special health funding arrangements (e.g. THAF) will continue beyond their 2010/11-expiry date. As discussed elsewhere in this report the funding gap will be significantly greater if there is a failure on the part of the federal government to renew these funds.

Table A9: Yukon Funding Gap
Current Dollars (adjusted for calendar year) - 1987 to 2007

	YTG Health Expenditures		YTG Total Revenues	
	(millions)	(% growth)	(millions)	(% growth)
1987	29	6.6%	273	6.3%
1988	33	13.8%	296	8.4%
1989	36	8.5%	309	4.5%
1990	39	6.6%	327	6.0%
1991	46	18.1%	346	5.9%
1992	49	7.6%	355	2.4%
1993	58	18.3%	435	22.6%
1994	71	23.0%	477	9.7%
1995	69	-3.8%	487	2.2%
1996	68	-1.7%	454	-6.7%
1997	70	2.9%	452	-0.6%
1998	74	6.6%	478	5.7%
1999	78	5.8%	483	1.2%
2000	84	6.9%	535	10.7%
2001	97	15.6%	515	-3.7%
2002	102	5.4%	538	4.4%
2003	104	1.7%	585	8.7%
2004	113	9.1%	644	10.1%
2005	125	10.4%	722	12.1%
2006p	147	17.3%	774	7.3%
2007p	151	3.2%	827	6.8%
10 Year Ave.		7.7%		5.7%

*Source: Federal Finance
National Health Expenditure Database, CIHI, Statistics Canada*

**Graph A9: Yukon Funding Gap
2007 to 2017**



The high growth rates of health expenditures expressed as percentage of GDP or program expenditures are a consequence of the losses to the expenditure base through previous federal action. With the original expenditure base now inadequate, Yukon has not had the funds to fully invest in the health care infrastructure and now is experiencing a greater need to expend funds in health, unfortunately, at the expense of other areas that are important to the long-term sustainability of Yukon, e.g. economic development and basic infrastructure (already well developed in other jurisdictions). (Pathway #5)

3. Administration and Operations

Governance Structure

Good governance is about organizational effectiveness, efficacy, and efficiency. Good governance is about structure and processes that ensure a comprehensive system of stewardship and accountability. (Pathway #4)

The recent Health Canada report on sustainability and health care (2008) suggested the funds currently in the system need to be used differently to maximize their value. In their words, this requires a willingness and commitment to make fundamental changes in the way health care is organized and delivered. Innovation and ideas from other sectors should be welcomed. (Pathway #4, Pathway #6)

This same report also commented on the need for long-term, stable funding and its relationship to efficient and effective organizational governance.

Specially, fixed, single-year funding may not allow the degree of flexibility required to achieve and sustain the fundamental structural shifts that are needed. Multi-year budgets may help to generate efficiencies, and encourage innovation, organizational change, and cost savings over time. (Pathway #2, Pathway #6)

Another aspect of governance is the manner of organization and centralization of the health care system. The trend in the provinces appears to be a reversal of the decentralization experienced in the past. Many jurisdictions have collapsed or eliminated regional autonomous units in an attempt to increase organizational effectiveness. The number of health authorities or regions in some cases are seen as an impediment to patient care as it reduces standardization of procedures and care and generates an environment of competition for services and resources. In some contexts, competition has been evaluated as unhealthy because it generates duplication and organizational structures that are focused on individual units rather than the overall health system, patient care, or the costs to the taxpayer.

Another area of health organizational effectiveness to emerge is the need to consider the alternative structuring of the delivery system for health professionals.

It appears well established that a key strategy in primary health care renewal is to expand the use of inter-professional teams to deliver care. A team-based care approach is associated with the reduction of wait times for appointments, a focus on prevention, and coordination of the

contributions of all of the health care professionals involved. (Pathway #4, Pathway #7)

Unfortunately, the greatest challenges for inter-professional teams are the establishment of the roles and responsibilities of each of the team members and the acceptance of the value of the contributions of each of the members of the team.

Collaborative Team Approach

An organizational issue that was repeatedly referenced in some of the presentations to the YHCRC was the concept of collaborative or interdisciplinary team models of cooperation. For the most part, supporters of this approach to health care delivery were non-physicians. Their observations were supported mainly by studies and experiences with the model in other jurisdictions. Although there are many definitions of and variations on describing the collaborative approach, collaborative care is the most common term applied, but the terms multidisciplinary, inter-professional, shared or team care are often used.

Collaborative care promoters argue that this approach optimizes the users access to the skills and competencies of a wide range of health professionals and provides a broader focus on health that includes health promotion and the prevention of illness. Those professionals who are less than enthusiastic of the model and do not believe that collaborative care alone can solve the gaps between the requirement for and the availability of health professionals indicate that it is only one aspect of any solution to improving patient care.

Teamwork and collaboration in health care is certainly a topical issue demanding a great deal of attention and there are many reports and studies calling for improved collaboration as a key strategy in health care revitalization. It appears obvious that a health care system that supports effective teamwork can improve the quality of care, promote greater safety, and address the current stresses of health care professional workloads. However, there are many obstacles to overcome if this approach is to be successfully adopted into the mainstream of the health care system in the short-term. Many presenters indicated that the new generation of health care professionals are exposed to this approach in their training and many expect it and actively seek opportunities that are consistent with this expectation. Nevertheless, a collaborate model of health care, at the very minimum can work in many environments depending upon the motivation, shared objectives, and willingness of the individuals involved to make the approach successful. Conversely, without the willingness to participate on the part of professionals in the system and a commitment to collaborate, this model would be doomed to failure.

The lesson learned from other jurisdictions is that the collaborative team approach will flourish in the right environment or situation. If it is to be an organizational objective or option then policy makers must critically evaluate current policies and systems structures that are presently barriers to the transformation to team-based health care. The Canadian Health Services Research Foundation (June 2006) suggests that these barriers include: conflicting policies and approaches, inadequate human resource planning, regulatory/legislative frameworks that operate independently of each other, funding, and remuneration mechanisms that discourage collaboration. (Pathway #4, Pathway #7, Pathway #9)

Health professionals

Maintaining an adequate supply of workers is now one of the most critical issues facing many provincial and territorial governments. (Pathway #7)

Shortages and imbalances in the supply of health care providers have been well documented both within Canada and internationally. Many jurisdictions have reassessed approaches to human resources in an attempt to find new and innovative ways to deal with shortages and imbalances of health care providers both in geographic distribution and in modes of delivery. Recruitment and retention of skilled employees is expected to be a challenge throughout the labour market in coming years as we experience a major demographic shift.

The supply of health professionals is now decreasing as the workforce ages, the number of people retiring increases, and the supply of available graduates declines. The newer graduate workforce is also changing. Alteration in gender balances and graduates considering different lifestyle options change the established requirements for health care recruitment.

Yukon has slightly more than the national average of nurses per 100,000 population, though the number (1,230)⁴ is less than that of the four maritime provinces, NWT, or Manitoba. However, Yukon has a much larger proportion of part-time nurses than the national average. (Pathway #7)

Nurses constitute the largest group of health care providers in Canada, making up almost two-thirds of the total. There are two regulated nursing groups in the Yukon: registered nurses (RNs) and licensed practical nurses (LPNs – also known as Registered Nursing Assistants and Registered

⁴ The CIHI figures represent the number of registered nurses **registered** in the Yukon. It does not reflect the numbers working in the Yukon at any one time. The YRNA advise that they have a number of registrants who only work in the Yukon on term (sometimes short-term) positions for holiday relief etc.

Practical Nurses). Registered Psychiatric Nurses (RPNs) are not yet regulated in the Yukon but work is progressing in that direction.

Table A10: Number of Nurses and Rate per 100,000 Population Provinces and Territories - 2006

	Nurses	Population	Rate
N.L.	8,154	510	1,600
P.E.I.	2,027	139	1,463
N.S.	11,964	934	1,280
N.B.	10,326	749	1,378
Que.	81,118	7,652	1,060
Ont.	115,145	12,687	908
Man.	14,510	1,178	1,232
Sask.	11,604	985	1,178
Alta.	32,639	3,376	967
B.C.	36,303	4,310	842
Y.T.	384	31	1,230
N.W.T	1,125	73	1,541
Nun.	..	..	..
Canada	325,299	32,624	997

Source: CIHI

Note: Northwest Territories and Nunavut data are combined for 2006

Table A11: Number of Nurses, Full and Part Time Canada and Yukon - 2006

	Yukon		Canada	
		(%)		(%)
Total	384		325,299	
full time	178	46%	175,736	54%
p/t and casual	206	54%	149,563	46%
RN	324		252,948	
full time	138	43%	141,047	56%
p/t and casual	186	57%	111,901	44%
LPN	60		67,300	
full time	40	67%	31,282	46%
p/t and casual	20	33%	36,018	54%
RPN	..	..	5,051	
full time	..	..	3,407	67%
p/t and casual	..	..	1,644	33%

Source: CIHI

Overall in Canada the supply of physicians is decreasing as a ratio to the population. Yukon has one of the highest proportions of physicians but one of the lowest proportions of specialists, making it highly reliant on external or visiting resources. It should be noted that the CIHI numbers for Yukon physicians include both full time as well as part time physicians, thus the numbers may not fully reflect physician availability. (Pathway #7)

Figures recently released by CIHI indicate that the number of physicians has increased in Canada. However, while the total number of specialists increased, the number of family physicians did not grow as rapidly and when population growth is considered the growth is even less (*see tables and graphs – health professionals*).

Table A12: Number of Physicians and per 100,000 Population Provinces and Territories, 2006

	All	Family	Specialists	Ratio
N.L.	1,018	526	492	1.07
P.E.I.	207	127	80	1.59
N.S.	2,049	1,120	929	1.21
N.B.	1,325	793	532	1.49
Que.	16,533	8,390	8,143	1.03
Ont.	22,141	10,637	11,504	0.92
Man.	2,125	1,096	1,029	1.07
Sask.	1,571	894	677	1.32
Alta.	6,574	3,567	3,007	1.19
B.C.	8,635	4,731	3,904	1.21
Y.T.	70	63	7	9.00
N.W.T	48	35	13	2.69
Nun.	11	10	1	10.00
Canada	62,307	31,989	30,318	1.06

Source: CIHI

Note: Northwest Territories and Nunavut data are combined for 2006

4. Consumption and Access

While rising expectations are creating pressure to increase spending on new drug therapies and acute care, they are severely limiting the ability of the system to innovate and shift resources to other areas of need. Growing public expectations of the system is a very critical issue. (Pathway #1)

The demand for services is increasing in almost every area for a variety of reasons including population growth, the availability of new drugs and technology and increasing public expectations. People are asking for more doctors, nurses, drugs, technology, family supports, and complementary health services. They want to be able to access care in their own communities, and they are concerned about wait lists for services.

In the past, the World Health Organization has reiterated that any national system necessarily must make choices and set priorities in order to define all the services offered to the general public. The dialectic between public demand or consumption and the systems capacity to provide services defines how our systems' priorities are being met.

Consumption

Many health commentators appear to believe that no country in the future will be able to offer its population everything that science and technology will make it possible to offer. (Pathway #1)

The demand for health care services is theoretically unlimited. No matter what technology or therapeutic tools emerge, our capacity to provide and afford this science is bounded by the realities of physical and financial limits. Society will never be able to meet all the demands for care. For our purposes, consumption does provide a portrait of both the demand and supply of our health care services, while access offers some perspective on where services limitations exist.

Access to care

A key component of a well-functioning health care system is how quickly people can access the care they require when they need it. For many Canadians, access is related to how long they have to wait for an appointment, test, or surgery. (Pathway #4, Pathway #10)

The Canadian Community Health Survey (CCHS) (2005) found that most (80 percent) Canadians aged 12 or older consulted a medical doctor at least once in the year prior to the survey. Almost 90 percent of people

aged 65 and older saw a general practitioner at least once, and among that group, 44 percent had four or more contacts.

Waits times were reported for obtaining care from a specialist. Statistics Canada reported that, in 2005, roughly 19 percent of the 2.8 million Canadians who visited a medical specialist experienced difficulties and over two-thirds (approximately 68 percent) of this group said they waited too long for an appointment. The median wait time was four weeks, unchanged since 2003 (*see tables and graphs – access and consumption*).

After a patient sees a doctor, there may be a need for further exploratory tests to determine a diagnosis. These tests can vary from basic blood work to scans using medical imaging technologies such as magnetic resonance imaging (MRI) or computed tomography (CT). Approximately one-third of those waiting had to wait over a month (one to three months), and another ten percent had to wait over three months.

Yukoners were as satisfied with health care services as the national comparison. Eighty-five percent indicated very or somewhat satisfied with overall health care services (*see supplementary tables*). When it comes to hospital services in Yukon a greater number of clients were satisfied. Eighty-eight percent of Yukoners indicated the quality of hospital services to be excellent or good, compared with 82 percent for the national average.

Median wait times for specialized services were less in Yukon than in the rest of Canada. (Pathway #1)

Overall, the median wait for Yukoners for specialist visits was a month shorter than in the south, as was the wait for non-emergency surgeries. Diagnostic test waits in Yukon were two months compared to three months (average) elsewhere in Canada.

5. Behavioral and Lifestyle

Health now includes behavioral lifestyle choices and other socio-economic factors. An individual's personal habits in areas such as smoking, drinking, eating, and routine exercise have been shown to have a significant impact on one's health. (Pathway #1)

Medical advances and continued economic progress have traditionally been considered the main cornerstones for controlling disease and improving health. However, this view has broadened to include the socio-ecological aspects of the determinants of health. The levels of health and disease in any society are determined by both biological factors, such as genetics, and by non-biological factors that include personal behavior, financial resources, social status, and cultural and educational background (*see appendix 1.4*).

In Yukon, the age cohort of 65 years and older is increasing faster than in any of the southern provinces, in fact, this expensive age cohort in terms of health expenditures, increased at an annual rate over twice the national average. (Pathway #3, Pathway #5)

Yukon has a distinctively different age distribution than that found in the provinces. It shares with the other two territories the fact that there are proportionately fewer individuals 65 years of age and over. Although this age cohort is increasing, it represents 7.9 percent of the total Yukon population (2007) compared to 13.4 percent for the rest of Canada. This age group had an annual percent change of 5.5 percent considerably faster growth rate than for Canada average of 2.3 percent (*see supplementary tables and graphs – lifestyles and behaviors*).

Presently, Yukon also has a larger potential work force (15 to 64 years), which is shrinking at an annual rate less than the national average (minus 0.6 percent versus 1.2 percent growth for the national average).

Overall, Yukoners have very similar lifestyle behaviors as most Canadians, however, there are a few areas that require attention. Yukoners tend to drink more and more frequently than Canadians as a whole. Almost 28 percent of Yukoners have more than five drinks more than 12 times a year compared to 22 percent for the national average (*see supplementary tables*). Similarly, Yukoners smoke more frequently than the average with over 30 percent smoking daily compared to 16.5 percent for the national average.

One other area of interest is the measure of potential years of life lost as a result of injuries and suicides. Yukon has a statistic three times the national average for total unintentional injuries (1,861 yrs. versus 612 yrs.

for Canada) with males (2,767 yrs.) having measures three times Yukon females (930 yrs.).

The following is a Statistics Canada profile that provides a basic Canada/Yukon comparison reinforcing the view that there are no major differences other than those mentioned above. This is a very limited comparison however and a comprehensive comparison is outside the scope of this report.

**Table A13: Canadian Community Health Survey Indicator Profile
Canada, Number and Percent - 2005 (CCHS 2.1)**

	Canada Number (number)	Percent (percent)
Very good or excellent self-rated health	16,295,062	60.1%
Very good or excellent self-rated mental health	19,783,687	72.9%
With arthritis or rheumatism	4,442,555	16.4%
With diabetes	1,325,120	4.9%
With asthma	2,249,703	8.3%
With high blood pressure	4,052,614	14.9%
Injuries within the past 12 months	3,647,567	13.4%
1 or more two-week disability days	4,542,804	16.7%
Participation and activity limitation	8,040,620	29.6%
Current daily or occasional smoker	5,874,689	21.7%
Exposed to second-hand smoke at home	1,847,735	8.7%
in vehicles and/or public places	4,019,688	19.0%
in vehicles	1,714,576	8.1%
in public places	3,116,444	14.7%
Complete restriction on smoking at home	17,235,732	63.5%
Complete restriction on smoking at work	11,137,070	65.3%
Smoking initiation age (5 to 14 years)	6,016,535	36.6%
5 or more drinks on one occasion, 12 or more a year	4,609,378	21.8%
Leisure-time physically active or moderately active	13,824,175	51.0%
Life stress, quite a lot (18 years and over)	5,708,013	23.2%
Overweight, self-reported, BMI 25.00 to 29.99 (adult)	8,132,642	33.4%
Obese, self-reported, BMI 30.00+ (adult)	3,764,664	15.5%
Self overweight or obese. Self-reported (Youth)	454,905	17.9%
Very strong/somewhat belonging to community	16,907,385	62.3%
Has a regular medical doctor	23,232,228	85.6%
Contact - medical doctors in past 12 mo.	21,770,193	80.2%
Contact - dental professionals in past 12 mo.	17,275,776	63.7%
Contact - alternative health providers in past 12 mo.	3,715,228	13.7%
Influenza immunization, less than one year ago	8,881,432	32.7%

Source: Statistics Canada, Canadian Community Health Survey

**Table A14: Canadian Community Health Survey Indicator Profile
Yukon, Number and Percent - 2005 (CCHS 2.1)**

	Yukon Number <i>(number)</i>	Percent <i>(percent)</i>
Very good or excellent self-rated health	15,385	56.6%
Very good or excellent self-rated mental health	20,036	73.7%
With arthritis or rheumatism	3,760	13.8%
With diabetes	1,160	4.3%
With asthma	2,373	8.7%
With high blood pressure	3,071	11.3%
Injuries within the past 12 months	4,236	15.6%
1 or more two-week disability days	5,300	19.5%
Participation and activity limitation	7,685	28.3%
Current daily or occasional smoker	8,257	30.4%
Exposed to second-hand smoke at home	1,561	8.2%
in vehicles and/or public places	2,438	12.9%
in vehicles	1,347	7.1%
in public places	1,497	7.9%
Complete restriction on smoking at home	16,741	61.6%
Complete restriction on smoking at work	14,697	78.5%
Smoking initiation age (5 to 14 years)	8,390	47.2%
5 or more drinks on one occasion, 12 or more a year	5,964	27.9%
Leisure-time physically active or moderately active	15,668	57.6%
Life stress, quite a lot (18 years and over)	5,549	22.8%
Overweight, self-reported, BMI 25.00 to 29.99 (adult)	7,290	30.3%
Obese, self-reported, BMI 30.00+ (adult)	4,295	17.8%
Selfoverweight or obese. Self-reported (Youth)	540	18.8%
Very strong/somewhat sense of belonging to community	18,831	69.3%
Has a regular medical doctor	20,002	73.6%
Contact with medical doctors in past 12 mo.	21,195	78.0%
Contact with dental professionals in past 12 mo.	14,554	53.5%
Contact with alternative health providers in past 12 mo.	5,486	20.2%
Influenza immunization, less than one year ago	8,241	30.3%

Source: Statistics Canada, Canadian Community Health Survey

(II) Dynamics of the system

This second section of the *environment of change* is a selective overview of relevant Yukon health care system issues related to the dynamics of the health care delivery system common to the national system and its 14 participating jurisdictions. In addition, this second section integrates some of what the YHCRC heard in the presentations and submissions provided by groups representing the health care delivery sectors in Yukon. Many of the details surrounding the issues raised in Whitehorse are found in the *pathways to change* section, however; most major issues will at least be identified in the following section.

For presentational purposes, this second section of the *environment of change* includes a set of interactions within or between components we have labeled the *dynamics of the system* and includes discussion and observations related to cost drivers (demographic, service expectations, chronic diseases) and cost escalators (drugs, home care and continuing care, end-of life care, health human resources, new technologies, and other emerging cost escalators).

The classification used for the dynamics of the system is informed by the work of the provincial and territorial Ministers of Health who categorized the dynamics of increasing health care costs into two major types. In their report, *Understanding Canada's Health Care Costs*, they made the distinction between basic *cost drivers*; including population and aging and *cost accelerators*; including emerging and new technologies, new drugs and genetically-specific drugs, increased incidence of chronic and new diseases, declining productivity gains, and rising consumer expectations. This classification was further refined in the Conference Board of Canada's (CBoC) cost driver paper (2007). Borrowing from the CBoC work and that of the Ministers this section is divided into two major divisions: cost drivers and cost escalators.

Cost Drivers

Cost drivers, for our purposes, include those underlying structural forces in the Yukon health care environment that have a direct influence on health care costs; these drivers include such dynamics as population growth, aging, demand, chronic diseases, and inflation. Regrettably, the Yukon Government has little control over these dynamics but must be prepared to identify, plan, and respond to them as they advance and exert their influence on both the supply of professionals and demand for services in the health care system.

In general, the current popular topic of population aging has been a cost driver that has received a great deal of attention, however, it appears at least in the past to have been a small driver of costs compared to other

sources according to studies on population aging. Inflation (as reflected in salary increases and higher costs of supplies) has been the biggest cost driver over the past decade. Similarly, the expansion or enrichment of health care services over time (such as new technologies, long-term care, home care, and pharmaceutical drugs) is a very important factor driving costs. By way of example, today the average Canadian receives more than one and a half times more health care services than his or her equivalent three decades ago. Finally, the cost of end-of-life medical treatment is also a significant health care cost driver since the largest proportion of a user's total lifetime health expenditure occurs during the final years of life.

Demographics

Demographics affect the health care system in two ways.

First, they structurally influence or determine the future demand for health care resources. Essentially demand is a function of the absolute and relative internal distribution of population growth. Simply, demand grows and changes as the many different life stages of a population cycle through the system, i.e. infants demand very different health care services as do youth, the work force, or the elderly. (Pathway #1)

Second, demographics affect the supply side of health care both in terms of the available productive work force as a tax base to pay for services as well as influencing the human resources pool available to staff the health care system. This latter issue will be further discussed in the section on human resources. (Pathway #5, Pathway #7)

Population Growth

Canada's population stood at 31,612,897 in 2006, according to the most recent census, with a growth rate of 5.4 per cent from 2001 to 2006. Although Canada's population is growing more slowly than it has in the past, our growth rate is higher than that in most industrialized countries.

Over the past five years (2003 to 2007) Canada's population grew at a rate of 4.1 percent with the greatest growth seen in the West; 9.9 percent for Alberta and 5.4 percent for BC. Yukon witnessed a modest 1.3 percent.

However, Yukon's population is small and is influenced to a large degree by economic shifts and opportunities rather than purely demographic dynamics. This makes demographic projections and consequently health care demand projections subject to mainly exogenous variables and very difficult to undertake with any degree of accuracy. (Pathway #2)

What can be said is that with the current interest in and expansion of development in the North, it is reasonable to expect significant population

growth over the coming decade. While the percentage of growth is difficult to predict, experience in the NWT with its diamond mines and related development, for example, demonstrates that such population growth can occur quickly and has major impacts on local resources including the health care system.

Table A15: Population Estimates and Demographic Growth 2003-2007

	2003	2006	2007	Change from 2003
	(000)			
N.L.	518.4	509.9	506.3	-2.3%
P.E.I.	137.3	138.0	138.6	0.9%
N.S.	936.5	935.1	934.1	-0.3%
N.B.	751.2	749.2	749.8	-0.2%
Que.	7,494.7	7,651.0	7,700.8	2.7%
Ont.	12,262.6	12,705.3	12,803.9	4.4%
Man.	1,161.9	1,178.5	1,186.7	2.1%
Sask.	994.7	987.5	996.9	0.2%
Alta.	3,161.4	3,370.6	3,474.0	9.9%
B.C.	4,155.4	4,320.3	4,380.3	5.4%
Y.T.	30.6	31.2	31.0	1.3%
N.W.T	42.2	42.4	42.6	0.9%
Nun.	29.2	30.4	31.1	6.5%
Canada	31,676.1	32,649.5	32,976.0	4.1%

Source: Statistics Canada, CANSIM

Note: Population as of July 1.

Population Aging

Although somewhat an intuitive concept, population aging is the process in which the proportions of adults and seniors increase, while the proportions of children and adolescents decrease. Or more technically, population aging occurs when fertility rates decline at the same time as life expectancy remains constant or improves.

During the next ten years as the postwar generation baby boomers age, Canada will experience a major demographic shift as they move through the age pyramid. This change will impact upon the health system in many ways from simply greater numbers of patients through to the distributional shifts in types and complexities of services required. In addition, the effects of aging becomes even more critical when the health care workforce is considered in two ways; first as reduction in the relative labour available and second in the reduction of the community support pool for the patient because there will be fewer family members to support their aging parents, which in itself will increase the demand for more health care services.

While many seniors are living healthier lives, the incidence of diseases like cancer, heart disease, diabetes and dementia is still expected to increase. Consequently, demand is expected to rise for acute care, long-term care, home care, mental health, geriatrics, and other services. (Pathway #1, Pathway #3)

Similar to other developed countries, the Canadian population is aging rapidly. Over the next ten years the proportion of the population aged 65 and over will rise from 13 per cent of the total population to 16 per cent, or 5.7 million, by 2016. Those over 55 years of age will grow from a proportion of 25 percent in 2006 to 30 percent ten years later (2016). As a result of this differential growth rate, the age groups below 20 years of age will decrease in numbers by almost ten percent while the age group 65 years and older will, as a whole, increase by 33 percent over the next ten years.

Older people (55 years and older) now outnumber youth (under 20 years of age) in Canada by approximately 2.3 percent, however, using Statistics Canada projections (medium scenario), this situation will increase to over 50 percent by 2016. Similarly, those over 65 years of age will grow 33 percent by 2016. This group represents a cohort that is disproportionately a high cost consumer of health care services. While it is recognized that the health care sector is already experiencing a lack of health care professionals, this will likely worsen after 2010, when shortages will be felt across the broader labour force. It is important to note that all Canadian provinces and territories are currently faced with an aging population.

**Table A16: Population Estimates and Demographic Growth
Canada - 2006-2016**

	2006	2011	2016	Change from 2006-16
	(000)			(%)
All ages	32,547.2	33,909.7	35,266.8	8.4%
0 to 4	1,697.5	1,724.7	1,559.0	-8.2%
5 to 9	1,842.6	1,780.8	1,672.1	-9.3%
10 to 14	2,084.6	1,916.4	1,815.3	-12.9%
15 to 19	2,164.8	2,170.4	1,976.1	-8.7%
20 to 24	2,252.9	2,295.3	2,274.5	1.0%
25 to 29	2,226.1	2,330.2	2,335.9	4.9%
30 to 34	2,222.6	2,354.8	2,399.5	8.0%
35 to 39	2,351.1	2,327.1	2,397.7	2.0%
40 to 44	2,698.3	2,409.3	2,342.0	-13.2%
45 to 49	2,671.5	2,711.2	2,398.5	-10.2%
50 to 54	2,363.9	2,651.5	2,672.9	13.1%
55 to 59	2,082.5	2,327.4	2,596.9	24.7%
60 to 64	1,583.3	2,027.9	2,256.2	42.5%
65 to 69	1,227.3	1,513.1	1,925.4	56.9%
70 to 74	1,044.2	1,130.8	1,386.1	32.7%
75 to 79	878.0	907.6	979.9	11.6%
80 to 84	638.3	692.2	711.8	11.5%
85 to 89	342.8	422.2	454.8	32.7%
90 to 94	137.3	169.2	204.9	49.2%
95 to 99	33.1	42.4	52.4	58.3%
100 and over	4.7	5.4	6.8	44.7%

Source: Statistics Canada, CANSIM

Note: Statistics Canada Medium growth scenario applied: combines assumptions of fertility and immigration similar to recent years along with moderate growth in life expectancy.

The aging of the ‘baby boomer’ is one of the demographic topics most frequently discussed and debated. This group will impact both the supply and demand side of the health care equation through retirement and in the numbers and types of services demanded.

Some anticipated changes include the overall increase in health care costs as a result of well informed demands by politically knowledgeable consumers for greater and improved choice and options in health care, increased need for chronic disease management, and prolonged and long-term demands by a population with an increasing life expectancy. (Pathway #1, Pathway #9)

A different perspective on the matter suggests that the baby boomer generation may be on average healthier than their predecessors and new technologies and treatment options may simultaneously reduce the rate of health care use. However, there is no clear agreement on what the future may in fact be.

In summary, population aging already has an effect on health funding, and one thing that is clear is that, as the population ages, health care costs will rise, since per capita expenditures are higher for the elderly. Old age is not tantamount to health care dependency, but the growth in the number of seniors will lead to an increase in the number of health care clients in absolute terms and obviously more health care expenditure.

Considering the impact of population aging on health care costs, some predict that we are heading for an inevitable crisis while others believe that we will be able to deal with population aging. The Romanow Commission suggests that population aging could be responsible for generating an increase of 30 per cent in real per capita health expenditure by the year 2030. Although it is recognized that general population aging has an effect on health care costs as consumption of health services goes up with age, aging has in the past not been the principal cause of rising costs in the health care sector. According to many provincial estimates, aging in itself is not the most important cost driver of health expenditure. The Conference Board projects that provincial and territorial health care spending will increase annually by 5.3 per cent in nominal terms through to 2020 and aging accounts for 0.8 per cent of the real growth in health care spending. The impact of the aging population would be one-third (0.8 per cent of 2.4 per cent) of estimated real health care expenditure growth.

No matter whether the aging of the population is or is not the primary driver of health care costs, the impact of aging on the sustainability of the health care system must be taken seriously and appropriate action must be taken. In Yukon as elsewhere, chronic conditions emerge as a result of aging, increasing the dependence on the health care system and consequently increasing services consumed. The per capita provincial/territorial health expenditure for a Yukoner was approximately \$4,018 based on current projected expenditure compared to \$2,810 for Canada (2005). According to national statistics, the per capita health care costs to support a person 65 to 69 years is roughly 52 percent higher than the national average per capita health care costs – in Yukon this translates to about \$7,828 per person 65 to 69 years of age. For those aged 70 to 74, the per capita health care costs are about 84 percent higher than the national average per capita health care costs, or about \$12,865 per person.

The cost is over double the national average per capita health care costs for those over 75 to 79, or about \$19,514 per person and almost triple for

80 to 84 years (\$31,042) and three and half times by 85 to 89 years of age (\$74,276). An aging population will without a doubt have a profound effect on health system operating costs for the Yukon Government. (Pathway #1)

Geography

Canada is one of the most urbanized nations—almost 80 per cent of Canada’s population resides in urban areas. These are areas in which economies of scale and efficiencies of proximity add to the efficiency and effectiveness of health care delivery systems. This is not the case for the realities of Yukon. (Pathway #5)

In general, the health of people in rural, remote, and northern communities is poorer than urban residents. Compared with urban inhabitants, people living in rural or remote areas have shorter life expectancy, higher deaths rates, and higher infant mortality rates. The poor health status in remote areas is associated with a range of socio-ecological factors and conditions that influence health - income, employment and working conditions, education, and personal health practices.

Northern realities and health needs are different from those in urban areas. The reality of living in remote areas is that there are fewer health care services. Geographic isolation and problems with access to and shortage of providers and services are multidimensional problems. The major problem of access, travel time, and scope of services available are always present. (Pathway #5)

Overall health expenditure is influenced by geography in many ways.

Firstly, the distances from major urban centers costs money. Specifically transportation costs directly influence the expenditures required for all programs and services. Distance indirectly influences the capacity to attract and retain health care staff thus impacting economic activity (income, employment, markets, cost of production, transportation costs); health, social, and cultural accessibility (health status, education, training and others); mobility, availability, and access to health care, social services, or any government program and service.

Secondly, costs are impacted by the geographic reality of the dispersion of the population in Yukon, as it does not permit the benefits associated with population concentration such as accessibility, population thresholds, interconnectedness, size of resource bases, and overall capacity.

Lastly, the Yukon environment requires a more distributed health care delivery system in an effort to offer equitable health care delivery. This is manifested in a system with broader distribution of human resources (the

mix of nurses, doctors, and other health professionals), capital resources (health equipment, ambulance services, and other physical infrastructure), and program capacity (ability to offer an effective and equitable system accessible to its citizens.)

New Generation Service Expectations

Increased user and supplier expectations of health care systems are resulting in the additional cost of health care around the world. Costs go up when expectations surpass productivity improvements. The next generation of older and high cost consumers of health care is demanding more from the health care system than the generation before it. In addition the baby boomer generation and their sense of entitlement for service also continues to feed and influence all users expectations.

The baby boomer generation is educated, has access to health education through such sources as the Internet, and in comparison to the previous elderly cohort is wealthier. Moreover, they are politically skilled and expect greater access to a broader set of health services than previously available. The consequences of a large group of discerning and demanding generation of users will increasingly put pressure on the health care system to provide greater quality and quantity of health care services. (Pathway #1, Pathway #3)

The expectations of the baby boomer generation also influence the expectations of the suppliers of health care in respect to their incomes, relative status, workload, and working conditions. As the health care labour force retires and critical professional shortages emerge competition for their services drives costs in the market place. Health professionals are increasingly becoming well coordinated in their wage and other work related demands.

Chronic Diseases

Chronic diseases are the most preventable, however, they do come with high human and financial costs. Chronic diseases are the leading cause of death and disability in industrialized countries. The most common chronic diseases affecting Canada include cardiovascular diseases, cancer, mental illnesses (including stress and anxiety), diabetes and chronic obstructive lung diseases. The most important common risk factors and areas for prevention for chronic diseases are:

Smoking and the exposure to second-hand smoke - This is a major risk for respiratory diseases, cardiovascular diseases, and cancer. It is responsible for about one-quarter of all deaths among people between 35 and 84 years of age.

Obesity - This is a major contributor to cardiovascular diseases, diabetes, some mental disorders, and some cancers.

Physical inactivity - Lack of physical activity is a risk factor for cardiovascular diseases, several types of cancer, diabetes, psychological stresses, and osteoporosis.

Unhealthy diets - Over consumption of saturated fats and under-consumption of fiber are risk factors for several cancers and cardiovascular diseases. Diets rich in vegetables and fruits may reduce the risk of certain cancers, cardiovascular diseases, and diabetes.

These risk factors reflect choices we make in our daily lives. If Yukoners are encouraged to make improvements and healthier choices in these areas, chronic disease associated costs could be reduced. (Pathway #1)

Cost Escalators

Once again borrowing from the CBoC classification, cost escalators are those mechanical dynamics that have an impact on health care costs. They include such factors as: pharmaceuticals, new technologies, home care, access, patient safety, health human resources, and the environment. Cost escalators include factors that the Yukon Government has some or at least greater control over than they have for cost drivers.

The choice of investment in any health care cost escalator is a cost benefit examination of the overall costs of the goods and services and their effectiveness and efficacy for patient outcomes. (Pathway #8. Pathway #9)

Drugs

Federal/Provincial/Territorial governments in Canada share responsibility for managing prescription drugs. Health Canada at the federal level, regulates clinical trials, authorizes drug entry to the market, and monitors and reviews the prices of patented drugs. The federal government offers drug coverage for special groups (e.g., First Nations, veterans, members of the Canadian Forces, federal inmates). The provinces and territories provide drug benefits for either all residents or specific groups such as seniors, social assistance recipients, and individuals with certain diseases or conditions. The governments individually determine which drugs will be reimbursed under their drug programs.

Drugs may be one of the biggest challenges for costs containment for the health care system. It has been the fastest-growing component of health care during the past 25 years. Moreover, prescription drug costs are the most important component of drug spending, and they are the single

most important reason for escalating expenditures. (Pathway #8, Pathway #9)

Drugs are the fastest growing part of health care, rising from ten percent of total health care expenditure in 1985 to 18 percent in 2007. Public coverage in 2007 paid for over 45 percent of total prescription drug spending in Canada. The rising cost of drugs overall is accounted for by both increased utilization of drugs as well as the increasing cost of the drugs themselves.

The growth of drug expenditures reflects the increases in the price of prescribed drugs and a shift to more expensive drugs. In addition, some commentators have observed that over-prescriptions and inappropriate prescriptions on the part of some professionals have been contributing to the increase in hospital budgets.

In Canada, we collectively spend more on prescription medicines than we do on physicians. In contrast to physician and hospital services, we must pay privately for most drugs. Next to hospital care, Canada spends more on drugs than any other major category of the health care system. Citing CIHI report on drugs (2007), total expenditure on drugs in Canada was forecast to be \$27 billion in 2007. The actual share of the total health care expenditures was forecasted at 17 percent, almost twice what it was in 1985 (9.5 percent). Total drug expenditure per capita in Canada is projected at \$818 in 2007. Hence, prescribed drug costs are the most important component of drug spending, and they are the single most important reason for escalating expenditures. Overall, prescribed drugs represent 84 percent of total drug expenditures in 2007 (\$22.5 billion) while expenditure on non-prescribed drugs was five percent of the total (\$4.4 billion). Non-prescribed drugs are typically financed out-of-pocket by consumers and include over-the-counter drugs and personal health supplies.

Most relevant for Yukon is the fact that public-sector expenditure on prescribed drugs in Canada as a whole was forecast to have reached \$10.8 billion in 2007, an annual growth rate of 9.3 percent, while private-sector expenditure on prescribed drugs is forecast to have reached \$11.7 billion.

In all provinces and territories combined, over 52 percent of medication expenditures are funded by the patients themselves, either directly at the pharmacist or through private insurance – particularly group insurance contracted through their employer. In 2007, provincial/territorial government expenditure on prescribed drugs is forecast to be over \$9.2 billion representing 40.9 percent of all drug expenditures up from \$1.6 billion in 1988 and representing 42.6 percent of total expenditure. All provinces and territories provide some form of prescribed drug coverage to seniors and social assistance recipients.

**Table A17: Distribution of Prescribed Drug Expenditure
by Source of Finance
Canada - 1988 and 2007**

	1988		2007	
	(\$ million)	(%)	(\$ million)	(%)
P/T Governments	1,592.7	42.6	9,185.3	40.9
Federal Direct	89.3	2.4	646.1	2.9
Social Security Funds:				
WCBs	20.8	0.6	157.6	0.7
QC Fund			775.7	3.4
Total Public Sources	1,702.8	45.6	10,764.7	47.9
Private Insurers	1,130.3	30.2	7,808.6	34.7
Households	903.7	24.2	3,899.7	17.4
Total Private Sources	2,034.0	54.4	11,708.3	52.1
Total All Sources	3,736.8	100.0	22,473.0	100.0

Source: CIHI, Drug Expenditures in Canada

There is considerable variation in the level and growth of drug expenditure across the provinces and territories. In addition, there is disparity in public drug benefits across Canada and in the mechanisms used to provide those benefits. Differential consumption is influenced by several factors, including differences in structure and coverage of provincial/territorial drug subsidy programs, the presence of private insurance, age and sex distribution of the populations, health need, and other structural aspects of the health care delivery systems in each of the provinces or territories.

In terms of per capita consumption of drugs, Yukon is below the national average. On a per capita basis, Yukoners consume \$722 of drugs while the national average is \$818. However, when public expenditures on prescribed drugs is considered, i.e. those paid by the Yukon Government, Yukon is the highest jurisdiction per capita at \$392, well above the national average of \$327 and above Nunavut and almost twice that of NWT. The Yukon Government finances 68.7% of prescription drug purchases versus the national average of 47.9%. (Pathway #1, Pathway #8)

Prescribed drugs are the leading cost escalator in the health care system. Canada spends almost 27 percent of all health expenditures on drugs, more on drugs than any other major component of health care after hospitals. Prescribed drugs represent 83 percent of these expenditures. Drug costs are growing at a much greater rate than other elements of health care. According to CIHI, total public and private expenditures on prescribed drugs have grown by approximately 876 percent from 1985 to 2007, with a 191 percent increase from 2000 to 2007 alone and reaching a total

annual expenditure of \$22.4 billion in 2007. Yukon figures are very similar with a growth of 989 percent since 1985 and 185 percent since 2000 to 2007 for a total of \$17.8 million. This rapid escalation in drug expenditures threatens the sustainability of the health care system and creates challenges for government spending in non-health sectors as well.

Table A18: Total Drug Expenditure by Province/Territory and Canada - 2007

	Total Drug Expenditure (Per Capita)		
	Amount (\$)	Annual Change (%)	% of Total (%)
N.L.	852	11.7	17.0
P.E.I.	788	6.7	16.8
N.S.	847	6.1	17.5
N.B.	910	8.3	17.9
Que.	862	5.6	19.7
Ont.	878	6.5	17.6
Man.	710	5.4	13.5
Sask.	766	9.3	14.8
Alta.	719	6.1	13.3
B.C.	660	5.4	14.0
Y.T.	722	3.5	10.3
N.W.T	476	3.0	6.0
Nun.	600	4.8	5.5
Canada	818	6.3	16.8

Source: National Health Expenditure Database, CIHI

**Table A19: Public Prescribed Drug Expenditure
by Province/Territory and Canada - 2007**

	Public Prescribed Expenditures (Per Capita)		
	Amount	Annual Change	% of Prescribed Total
	(\$)	(%)	(%)
N.L.	306	25.5	40.9
P.E.I.	229	12.9	35.5
N.S.	277	10.4	39.7
N.B.	252	9.3	32.4
Que.	389	7.8	52.2
Ont.	341	8.3	46.6
Man.	310	6.8	52.7
Sask.	332	18.3	51.5
Alta.	287	8.0	50.2
B.C.	241	6.1	45.6
Y.T.	392	3.6	68.7
N.W.T	218	3.0	55.4
Nun.	369	5.5	70.6
Canada	327	8.4	47.9

Source: National Health Expenditure Database, CIHI

There are cost related factors that can be controlled and considered. These factors include everything from simple volume to such things as contract prices. These are the leverage points any government has to influence overall total public expenditures on drugs. (Pathway #8, Pathway #9)

Although the ingredient prices of drugs, once on the market, are relatively stable, the overall cost of drugs may be influenced by two major factors, volume and price.

First and most obvious, simply the volume consumed impacts total drug expenditures. Absolute volume is a result of the number of users or the quantity of drugs used. Population size affects the number of potential users in an area (Yukon versus Ontario). Demographics such as age, gender, and ethnic distribution, as well as changes in health status, also play a role in determining levels of drug expenditure. Changes in the health status of the population can be the result of the emergence of new diseases, epidemics, and changes in the prevalence or severity of existing disease. Typically, healthier populations use fewer drugs. Increased costs for drugs are also influenced by the increased use of medications for preventive purposes and in part from population aging.

Another determinant of the volume of drugs consumed and ultimately paid for relates to the structure of the health care system in any given jurisdiction. Policy choices drive who gets what and at what price or level of contribution (formulary listings, eligibility of the health care plan,

potential user fees or deductibles, and potential of private insurance coverage).

The obvious lesson of other jurisdictions regarding controlling the overall volume of drugs is that the more accessible and generous public spending is, the cheaper the drug is to the users and ultimately the greater likelihood of user consumption. (Pathway #1, Pathway #8)

New drugs pose another challenge. There are many reasons why new drugs are substituted for existing drugs either within a given class or between classes of drugs. However, if there is a price difference overall expenditures will be influenced through substitution. In addition, new drugs may be adopted to treat illnesses previously deemed untreatable, thus increasing price.

Pharmaceutical companies also influence demand and ultimately volume as they actively promote their products to health professionals. By doing so they play a significant role in influencing trends in drug expenditure. The increase in consumption does not depend only on the patient; it also results from drugs prescribed by the physician. Consumers and professionals alike are educated or otherwise informed of the efficacy of drugs through such techniques known as detailing and direct-to-consumer advertising. Such techniques create a demand for specific drugs and exert pressure on users and providers to increase the demand for more and/or expensive alternative drugs.

Second, total drug expenditures are also driven by price changes. The growth in spending on drugs is not primarily a result of increased prices for existing products but rather it is generally attributable to the rapid uptake of new, more expensive products. A variety of price indices show that the prices of existing drugs have been relatively stable for the past ten years. Increased prices are then primarily the result of new drugs being substituted for older drugs, as they are typically introduced at higher costs than the products they displace.

In addition these changes are a function of changes in the unit prices of drugs (both patented and non-patented), to retail and wholesale mark-ups and professional fees, substitutability of generics, and the pressures of international prices and inflation.

Virtually all those health professionals heard from during the YHCRC's discussions in Whitehorse raised the issue of the generous pharmacare program in Yukon for seniors. The coverage and the benefits paid are inconsistent with what is offered in other jurisdictions. (Pathway #1, Pathway # 3)

Yukon has four prescription drug and/or supply programs that were developed to provide financial support to eligible Yukon residents: the pharmacare program provides drugs and supplies to those 65 or older and their spouses who are 60 years of age and older; extended benefits program for hearing, dental, and optical coverage for the elderly; the chronic disease and disability program for prescription drugs and supplies for health care registrants with chronic conditions; and the children's drug and optical program for drugs, supplies, and limited optical coverage to children and young people with limited incomes.

Public drug plans across Canada for seniors vary significantly in coverage and contribution levels, making comparison somewhat problematic. Most plans however have some form of beneficiary payments, whether it be a premium, some form of deductibility, co-payment, or out-of-pocket expense. Yukon and NWT are the only jurisdictions not to have a premium, deductible, or some other co-payments on the part of the beneficiary of the drug program. (Pathway #1, Pathway # 3)

Expenditures in these programs are driven by price and volume, (drug costs and the number of recipients). In the Yukon, add to this the lack of competition, small volumes (economies of scale), and demographics (rising aging population), and it is anticipated that the Yukon government's drug programs will likely double in cost over the next five years. Clients eligible for the Chronic Disease and Pharmacare Programs have been increasing at about seven percent annually. Compounding this, the number of claims being submitted for each person is going up. Both in Yukon and the rest of Canada, drug costs have been going up at about 16 percent annually.

Yukon has a small number of pharmacists who work collaboratively together. This makes it difficult to obtain competitive pricing for drugs covered under the various programs. Pharmacy operating costs are higher in the North. They also experience difficulty in recruiting and retaining trained staff. The northern reality has contributed in part to the higher mark ups charged through government programs. As a result, Yukon has one of the highest markups permitted under its programs in Canada. (Pathway #1, Pathway #3, Pathway #8)

Home Care and Continuing Care

Home care provides several inter-related and at times overlapping functions. These include a restorative function that enables clients to receive care and support following some interventions or procedures; a maintenance and prevention function; a substitution function, in which less expensive services are substituted for more costly services; and a supportive function for family caregivers. Many provinces have legislation related to public home care while other provinces and

territories have Orders-in-Council related to home care. In most provincial jurisdictions, home care has been delegated to regionally based authorities. Yukon, has a publicly provided care delivery system administered by publicly funded employees. Across Canada, many other models of delivery are supported; from fully public to combinations of publicly and privately operated continuing care.

Similar to most provinces and territories, Yukon has a residency requirement as part of its criteria for admission to long-term care. In many provinces there are direct fees for non-residents, supplies, equipment, and drugs, as well as for adult day care, meals-on-wheels, and respite care. All jurisdictions provide acute care, continuing care, and palliative/end-of-life care. Finally, in all home care programs across Canada, nursing services are provided. As well, a range of medical equipment and/or supplies is provided, however, in some jurisdictions they are subject to limits or criteria.

However, long-term care and home care are not publicly insured under the *Canada Health Act*. These services are governed by provincial and territorial legislation resulting in a wide variety of different services, cost coverage and standards. This ultimately ends in a lack of program consistency within Canada.

Nationally, the percentage of seniors in long-term care is declining. However, in absolute numbers the totals are increasing because of sheer volume, as well as, the aging of the populations. This situation is further exacerbated by the introduction of increasing numbers of functionally limited younger adults and children into the system and also the growth in expectations from the general public to look after others.

There has been a move to home care over the past ten years driven by fiscal, demographic and political imperatives, and public demand. Canada's population is aging and the greatest demand for home care is in the population over age 80. Over the next ten years, the 80 years and over population is expected to increase significantly. (Pathway #3)

Yukon like the rest of Canada is experiencing a growth in the population of older Canadians with longer life expectancy, but at the same time is seeing an increasing demand for services for the younger population. Both the younger and older patients are requiring greater and more complicated medical care. This presenting pressure on the system is also accompanied by greater public expectations for a better quantity and quality of service.

Having appropriate continuing care services in place can reduce demand on other high cost items and overall costs to the system by pushing health care to the lowest cost appropriate, service delivery model – “the right

care at the right place at the right time”. (Pathway #4, Pathway #6, Pathway #8)

The number of beds needed for continuing care will gradually double over the next ten years from the current 152 being funded, to well over 200. Most of the beds will be needed at the extended and intermediate care level. Services provided by home care are mostly provided to people who are 75 years of age or older. According to the Yukon Department of Health, in 2005 one-fifth of Yukoners who were over 75 years of age required facility-based care, this figure is now down to one in ten; slightly lower than the national average of 12 percent. Yukoners require facility-based care because many of Yukon’s small communities are fairly isolated and lack sufficient support systems to keep the family member safely in their home or community. The high rate of alcohol and drug abuse in the territory is also a factor – some of those needing long-term care are suffering from alcohol and drug abuse related dementias.

Continuing Care is one of the most rapidly growing segments of the health care industry in North America. All areas of Continuing Care have come under increasing public scrutiny. Negative publicity surrounding nursing homes has led to demands for an improved physical environment, care standards, and quality of life. Canadians are entering care facilities at an older age and at a higher level of acuity. Care facilities are now providing complex care for both the elderly and the young; both groups are living longer than in the past.

Despite the growing demand and program uptake in Yukon, fees charged for services do not reflect the true costs of delivery in any way nor are they in line with those charged in other jurisdictions in Canada. (Pathway #1, Pathway #3, Pathway #8)

The differential between Yukon and other jurisdictions is significant ranging from the lowest annual charge (maximum values, 2006) in Yukon of \$7,650 to a high of \$66,631 in NB, \$57,981 in PEI, and \$33,600 in Newfoundland. Most other Canadian jurisdictions were in the \$14,000 to \$24,000 range for annual fees for long-term care accommodations.

A large proportion of health care expenditures occur in the last year of life. What is important is the impact on the margin of additional health care dollars spent not only in terms of cost effectiveness but what it offers in terms of the restoration of health or the enhancing of the quality of life. (Pathway #9)

The issues that end-of-life expenditures raises is the basic economic and ethical question of opportunity costs for these expenditures within the health care system, or simply how best can these expenditures be invested from a population health perspective.

In many cases it is not always clear that expensive end-of-life treatments are what the patient or the family necessarily desires. Moreover, in certain cases it is not always evident that the actual expenditures improve the patient's overall quality of life. This issue is beyond the YHCRC's work. However, the question remains as to how the balance of opportunity costs will be handled in the future as resources become even more limited.

Health Human Resources

Physician services are important cost escalators in two ways; directly physicians are a significant human resource expenditure through fee-for-service and/or other employment arrangements and indirectly in their role in generating other costs in the system, such as ordering laboratory tests, diagnostic procedures, prescribing medications, and admitting patients to health care facilities.

With respect to incomes, the relative share of health care dollars directed to physician payment has been fairly stable over time at just over 20 per cent of total health care spending. Average hours worked decreased over the decade for both specialists (-6 per cent) and general practitioners. The flow of women into the profession has had an impact on the overall average workweek. Comparisons of full-time, full-year physicians show that women averaged just less than 50 hours a week, whereas men averaged 56.

There is also a shift in the types of services being provided by in office practice rather than hospitals and an increase in the overall quantity being provided. While fee-for-service is still the prevailing payment model for physicians, an increasing number of physicians receive payment through alternative payment plans. As far as nurses are concerned, over 70 percent of them work in hospital settings and long-term care facilities where they are paid on the basis of hours worked rather than by volume of services provided.

A large proportion of Yukon health care professionals are expected to retire over the next few years as the average age of Yukon family physicians is approximately 50 years of age, which is slightly older than the Canadian average of 48.2 years. Over the ten year planning period, this statistic means that Yukon is at risk of losing up to half the physician population to retirement. If physicians in the Yukon follow the trend of reducing their hours of work as they approach the pre-retirement phase of their careers, the shortage of physicians could be further exacerbated.

In 2007, 23 percent of Yukon registered nurses were over the age of 55 and it would be expected that many of these nurses would be retiring in the next few years. Impending shortages due to an aging workforce are not limited to physicians and nurses and will ultimately include other

health professionals such as physiotherapists, pharmacists, lab technicians, medical imaging staff, and other technical and practical support staff. Yukon is not an isolated labour market and as all other provinces and territories will be facing the same labour shortage, recruitment and retention of health care professionals will increasingly be difficult and even more costly in an escalating competitive market. Add this situation to the potential implications of an aging population with all its presenting problems, then the costs of recruitment and retention can only be greater than it is at present.

The Yukon Department of Health estimates that physician costs have grown an average of about 7.3 percent over the last five years, with a significant spike in growth over the last three years of 12 percent. Moreover, as physicians have gained a strong bargaining position because of national and international shortages, it is expected that physician costs in Yukon will rise to about \$20 million in 2007/08 from the current year's projection of about \$15 million.

Recruitment and retention of health professionals in the North is a major factor in the rising expenditures in these areas. Pay scales that are higher than southern jurisdictions, retention bonuses, and recruitment incentives are all factors resulting in expenditure increases in these areas. (Pathway #5, Pathway #7)

The proportion of the labour market willing to relocate to northern and more rural areas is always less than those professionals looking to locate themselves in large urban centers with an established client base and a well-developed technical medical infrastructure. Greater compensation and more incentives are required to recruit the staff needs for the North; a logical consequence of this reality. This northern "premium" adds to the already higher labour costs for northern jurisdictions. (Pathway #5, Pathway #7)

Once again, the Yukon Department of Health indicates that recruitment and retention costs have jumped 348 percent since 1997/98, going from \$195 thousand to \$875 thousand last year. Relocating nurses, social workers, and other professionals to the North is costing an average of about \$10,000 per person. Increasing competition between jurisdictions also drives costs in Yukon because when demand exceeds supply, costs increase.

A further complication of the North's population and geographic situation is that as specialized and expensive diagnostic equipment is becoming the standard in the South (CT Scans, MRI's) Yukon often does not have the volume of patients to support the capital and O&M costs of this equipment. The financial consequences of this circumstance is that Yukon either invests in this equipment and accepts its underutilization or they

rely on high cost of medical travel to southern centers to perform these required procedures.

New Technologies

Technological change is said to account for about a quarter of current health expenditure growth in the United States. It is likely to account for a similar share of cost increases in Canada. Medical technologies range from computers that assist practitioners with clinical decision-making to robotic devices that facilitate delicate surgical interventions.

New technologies also include pharmaceuticals that are the fastest-growing cost component of Canadian health care. However, changes in clinical practice and health care costs due to non-pharmaceutical technologies have also been significant over the past decade. Such pure technologies as biomedical imaging have already had an important impact on diagnostics, medical treatment, and surgical procedures. Although diagnostic equipment is very expensive, the most sizeable expense in this technology is not capital but the personnel required to operate the equipment and interpret the results. For Yukon, as in the rest of Canada, technology has become the expected standard and people demand access to the latest health technology such as CAT Scans, Positive Emission Tomography (PET) Scans and MRI's.

As mentioned before, Yukon does not have the economies of scale to always justify the cost effectiveness of some of these technologies compared to the large urban centers in the South. However, as important diagnostic tools for physicians, some technology must be purchased out of necessity and to avoid the “medivac” and medical consequences of not having them. The example provided to the YHCRC was that in the South, approximately 12 to 15 thousand scans are performed annually on a single CAT Scan while in Yukon, the CAT Scan is used for about 12 hundred scans, or about ten percent of the comparative southern usage.

The most significant challenge facing Imaging Services is the availability of trained personnel in the many diagnostic applications. (Pathway #5, Pathway #7)

The number of diagnostic machines and scans performed in Canada has increased considerably. CIHI estimates annual growth of between nine percent and 14 percent in the number of CT and MRI scans. In addition, PET scans have added to the use of diagnostic imaging. Demand for diagnostic machines and scans has grown faster than population growth or aging and even as new units are added the waiting times still remain and in some cases grow.

Today, the average hospital patient in Canada stays for fewer days and is “sicker” than the average hospital patient of a decade ago. A significant difference in this decade has been shorter lengths of stay and the increased use of day surgery and outpatient procedures. (Pathway #4)

Recent technologies have permitted medical treatments to be undertaken with shorter times and with less surgical intervention and have permitted hospital systems to downscale some of their surgical facilities. Less invasive surgeries can be performed on a day-surgery basis and ultimately require less demands on the hospitals. However, as many procedures such as knee and hip replacements and cataracts are increasingly easier to perform the demand for these procedures quickly outstrips the productivity improvements gained by such technologies. These types of procedures have increased at a rate far beyond that of other surgical areas, and far beyond what would be expected from population growth and aging alone. Despite the increase in surgeries, waiting lists are still an issue because technology has increased demand, or there are an increased number of people who can benefit by having such surgeries.

Added to this, is the introduction of genetics and related biotech research that has led to new pharmaceutical research and drugs. CBoC estimates that one-third of drugs currently in clinical testing are of this type and will represent a significant cost driver in the future.

Emerging and Other Cost Escalators

Access Issues

Yukon government has limited control over the population demand for health care services. Many of the eligibility requirements for government services and programs are legislated and required under the *Canada Health Act*. If a person meets the eligibility requirements, they are entitled and consequently Yukon Government has no discretion around providing such service; simply the resident must receive the service. This reality presents challenges for small jurisdictions without the flexibility of a large health care system to be able to absorb rare events or the ability to deal with the unforeseen financial liabilities of certain health conditions. (Pathway #5)

Access to health care is a promise to Canadians enshrined as one of the five principles of the *Canada Health Act*. The First Ministers’ Accord (2003) reaffirmed that “all Canadians (must) have timely access to health services on the basis of need, not ability to pay, regardless of where they live or move in Canada”. The *Canada Health Act* requires that Yukon Government have legislation ensuring that Canadians will not be charged for medically necessary services. The Yukon’s *Health Care Insurance Plan Act* and *Hospital Insurance Services Act* ensure that Yukon residents

will not incur personal costs for either medically necessary physician or hospital services. This essentially means that Yukon government has no control over demand and little control over supply. If people access a service Yukon Government must pay for it and must employ adequate health care personnel to fulfill any presenting demand.

Drug and travel programs are also regulated under the *Health Act* and *Travel for Medical Treatment Act*. Similarly to medical services the drug and travel programs regulations establish the criteria for eligibility. If someone meets the eligibility criteria, they are entitled to coverage. Although Yukon government cannot control demand, it does have some choices about how it meets the obligation to cover a service or product for their drug and travel programs.

Other issues related to new pressures on the access to health services include the lack of consistency across Canada for what is considered to be a “medically-necessary” health service and the large geographic variations in the availability of these health services across the nation are to be accommodated. Services that are publicly-available in one province or territory, might not be available in others and this creates a dynamic of pressure to include in Yukon’s list of services all those found elsewhere in the system, i.e. the maximum set rather than the minimum set of services, programs, or products. This can be a significant health system cost driver.

Medical Travel

The Medical Travel Program provides financial support to ensure that eligible Yukon residents are able to travel from the communities to Whitehorse and from Yukon to southern health care facilities for required medical treatment. The program pays for the travel of the client and in some cases, when medically required, the travel of an escort.

Consequently, financial support for medical travel is available to all eligible residents in recognition of the fact that it is not cost effective or otherwise feasible for many physician and hospital services to be offered locally. These costs are unique to northern regions and they increase the total cost of service provision significantly. Without these programs there would be a large proportion of the population that could not afford to access services, resulting in a significant negative impact on the overall health of Yukon people. (Pathway #5)

Costs for out of territory “medivacs” began to exceed the costs for out of territory scheduled flights for medical travel in about 2000/01. Based on current rates of growth, both in price and volume, the costs for out of territory “medivacs” will be one of the most significant costs for medical travel in future years. The Department of Health estimates that the cost for all of medical travel will almost double in the next five years. Over the

last five years, the Yukon Department of Health has seen a significant increase in “medivacs” and leading the increase has been the more expensive out of territory “medivacs”.

In addition to an increasing number of out of territory “medivacs”, the average cost of out of territory “medivacs” has risen over the last few years. Over a five-year period the numbers of medically associated travel trips has doubled (115 percent) from 2,517 trips in 2002/03 to 5,407 trips in 2007/08 (forecast). During this time period the cost to the government went from \$4.4 million to \$8.0 million, or a corresponding growth of 80 percent. Eighty percent of these medical expenditures were for travel out of territory to southern medical facilities.

A doubling of medical travel out of territory appears to be due in part to a greater reliance on out of territory specialists and highly specialized services and the demand for access to necessary technology and testing, as well as, the potential impact of an aging population. (Pathway #1, Pathway #3, Pathway #5)

Patient Safety

In the last few years, patient safety has come to the forefront of health system issues, especially after studies conducted in the United States, United Kingdom, and Australia estimated the extent of adverse events and their human and economic costs. A large number of reports and articles have been produced on patient safety, both nationally and internationally.

Although not a major cost escalator, currently the costs associated with measures to improve patient safety will become significant. Some provinces are now faced with the spread of infections in hospitals as well as other patient concerns that will ultimately suggest the need for changes in health care procedures, infrastructures, and personnel training and qualifications. In addition, there has been public interest in the topic of medical errors. Although possibly an inevitable part of our culture of blame, the popular focus on such things as error or patient safety will nevertheless drive new investments in the future health care system. (Pathway #4)

Environmental Issues

The relationship of environmental exposures and human health is multifaceted. Health problems can arise as a result of voluntary or involuntary exposure to physical and chemical agents derived from human activity. According to the Conference Board’s *Performance and Potential report (2003-2004)*, Canada’s environmental performance ranks only 16th among 24 industrialized countries.

Although the direct impact of environmental issues are usually thought of as being outside the health care systems, there will be increasing pressure for solutions to be found within it. Simply, although these issues are not currently constructed as health care responsibilities, there is a potential for the public to look to the health care system for solutions in the future, which results in incurring new costs.

Other Hospital Costs

Yukon relies heavily on out of territory hospitals to provide more specialized services to Yukon residents. These hospitals are also experiencing significant cost increases, and want to pass on these increases through the amounts charged to Yukon. (Pathway #1, Pathway #2, Pathway #4)

Yukon Department of Health indicated that to maintain current services, projections are that Whitehorse General Hospital costs will rise from \$21.4 million to \$27.1 million and costs for services in out of territory hospitals are expected to go from \$7.6 million to \$11.2 million in 2007/08. The total hospital costs for Yukon residents rise from about \$29 million to \$38 million. In and out of territory hospital costs are rising at an average of about 5.4 percent annually.

Most of the expenditures of the hospitals are for personnel costs (up about 70 to 75 percent) and are the product of collective agreements. However, other costs exist. Physicians want access to technology in order to make decisions about the care they provide to their patients. People expect to have access to technology for themselves and their families. However, technology comes with a cost – both to purchase and operate. Therefore, hospitals must respond with the provision of appropriate and cost effective technology and compete in the marketplace to recruit technologists to operate the equipment.

This page left blank intentionally.

B. Markers of Change

(I) Components of the system

1. Legislative and Regulatory

- Yukon is part of a long history of constitutional and legal division of powers that separates the roles and responsibilities for health care between the federal and provincial governments. Implicated in this history is the federal responsibility for ensuring health care in the territories. (Pathway #5)
- Yukon is inseparably a part of the overall national health care system of Canada and in order to obtain continued funds must abide by the conditions of the *Canada Health Act*. (Pathway #1, Pathway #3)
- Yukon has full responsibility for administering the health care delivery system in Yukon, including the choices around what types of services are provided; how these services are administered; and for uninsured services, the costs to the users for any publicly funded services. In addition, the federal government shares a responsibility for funding health care delivery in Canada and in particular the emerging North. (Pathway #2, Pathway #3, Pathway #4, Pathway #5)

2. Fiscal and Financial

- Overall many Canadians and Yukoners believe access to health care services are a right of citizenship, however, the financial implications of providing unlimited access to health care is fiscally unsustainable let alone affordable. Both governments and citizens must reconsider their expectations. (Pathway #1, Pathway #3, Pathway #10)

Revenues Sources

- Provinces and territories have finite revenue sources to fund health care services, most of which are collected through taxation (income, consumption, and other taxes). Increased health costs must result in increased taxes, reduced services, or displaced non-health programs and services. (Pathway #1, Pathway #3)

- The federal government provides funding for health care to the provinces and territories in the form of transfers. The major health transfer, Canada Health Transfer (CHT), is made on a per capita basis; a mechanism that does not in anyway recognize the true or relative costs of health care delivery in the north. (Pathway #5)
- In addition to the CHT, health transfers and trusts have been provided from the federal government to the provinces and territories as part of a series of political accords on health – many of these arrangements, particularly the trusts are about to end. This situation leaves Yukon with the choice of terminating current programs or finding alternative funding sources. (Pathway #5)
- Yukon does not have the fiscal capacity enjoyed by the provinces and consequently it does not have the fiscal flexibility to raise significant funds through own-source revenues to meet the needs of escalating health care funds. (Pathway #5)
- Territorial Formula Financing (TFF) is a program for the territories that addresses the federal government’s responsibilities for providing comparable levels of government programs and services at comparable levels of taxation in the north. (Pathway #3, Pathway #5)
- The federal government has unilaterally imposed significant constraints on territorial financing in the past. Previously they suspended its principle-based approach. The federal government also imposed significant cuts in the nineties that according to the last estimates took over a billion dollars out of the original formula. These cuts were disproportionately larger to the territories than to the provinces. As such the funding for Yukon government programs, including allocation to the health care system of Yukon, would be very different today if the original mechanism of financing was permitted to exist the way it had originally been designed. (Pathway #5)
- Acknowledging special requirements, inadequate transfers, and the needs of the north, the federal government has provided additional and specific health related trusts and funds to the north. However, these programs and their funds are about to expire. This will leave Yukon with a reduction of health funding of over ten million dollars a year. These funds must be renewed or replaced with adequate funding for health in Yukon if health care programs and services in Yukon are to attain national standards. (Pathway #5)

Expenditures

- The single greatest challenge facing the national health care system today is dealing with overall health expenditures. Everything indicates that the upward pressure on health care costs will continue in the future. (Pathway #1, Pathway #8)
- Yukon has the third highest per capita expenditures (both for total of public and private and for solely provincial/territorial per capita expenditures) on health care in Canada, only exceeded by the other two territories. These high per capita expenditures reflect the high costs of providing these services in the North and must be recognized by the federal government and Yukoners alike. (Pathway #1, Pathway #5)
- Using the Yukon Government's estimates of its own expenditures over the past ten years, health care costs have risen slightly more than nine percent on average. If that trend continues, costs will rise from actual costs of \$112.9 million on 2007/08 to \$266.1 million by 2017/18. (Pathway #1, Pathway #5)
- The growth in health expenditure is exceeding the inflation rate in Canada, indicating a real growth that in the long-term is unsustainable and is taking up a greater proportion of provincial and territorial budgets and overall resources each year. Yukon has been exceeding the national growth rate significantly over the past 20 years. (Pathway #1, Pathway #5)
- Where and how health care expenditure is being spent has changed over the past 30 years, including the reduction in the proportion of institutional spending and the rapid relative increase in the expenditures on drugs, public health, and capital, which includes many of the new technologies being introduced into the health care system. (Pathway #1, Pathway #9)
- In dollar terms the biggest expenditures in health care are within the hospitals and other institutions, followed by the costs of professionals and drugs. These are the areas where the greatest potential for cost containment exists. (Pathway #2, Pathway #4, Pathway #6, Pathway #8)
- The pattern of health expenditures in Yukon is different than for Canada as a whole, reflecting the unique challenges of providing health services and meeting health care needs in the North. (Pathway #5)

- The manner in which health care is financed is an important consideration, including the degree of public coverage and private insurance for services not included in the *Canada Health Act* and the level of remuneration of health personnel. There is a well-established role for private sector participation in the national health care system. (Pathway #4)
- Provincial and territorial health services provided by the private sector has steadily increased in Canada over the past 30 years from 23 percent to almost 29 percent of all expenditure. This trend is expected to continue as greater demands are put on the public health sector. However, in Yukon this trend has been in the opposite direction starting at a private sector proportion of 24 percent in 1977 to only 19 percent by 2007. This situation may be a result of the size of the market or inherent market barriers within Yukon. (Pathway #3, Pathway #4, Pathway #7, Pathway #8)
- The analysis tells us that the highest per capita and absolute expenditures occur for the population under one year of age and for the population aged 65 years and older. For Yukon this phenomena is even more pronounced with per capita expenditures over 70 years of age many times that of the national average. (Pathway #1, Pathway #8, Pathway #9)
- The highest per capita and absolute expenditures occur for the population under one year of age and for the population ages 65 years and older. For Yukon this phenomena is even more pronounced with per capita expenditures over 70 years of age many times that of the national average. (Pathway #1, Pathway #8, Pathway #9)
- As the Yukon population ages the extremely high levels of expenditures in the senior age cohorts will have to be addressed. (Pathway #1, Pathway #3)

Sustainability, Revenues, and Expenditure

- Royal Commissions, Special Committees, Academics, and Consultants have reviewed Canada's health care system. Whether the studies have been national, provincial or regional scope, these studies all point to the need for the health care system to be sustainable. (Pathway #8)

- Yukon spends more, as a percent of GDP, on health care than any province other than PEI. Moreover, the increase in the proportion of GDP spent on health care is the highest, suggesting a growth rate that is unsustainable in the long-term. (Pathway #3, Pathway #4, Pathway #5)
- The proportion of territorial spending on health has risen by over 80 percent in the last 30 years in Yukon, significantly faster than the Canadian average growth of 22 percent. While this can largely be attributed to Yukon “catching up” in its ability to provide a level of services comparable to elsewhere in Canada, it is clearly impacting overall use of government resources. As the proportion of expenditure on health grows Yukon Government must structurally diminish expenditures on other priorities. (Pathway #5, Pathway #8)
- The spread between the growth rate of health expenditure and available provincial/territorial revenues indicate an unsustainable state – the differential for Yukon is even greater at about two full percentage points. (Pathway #1, Pathway #5)
- If health care expenditures and revenues grow at current rates, Yukon will have a health care deficit of almost a quarter of a billion dollars over the next ten years; a short fall that Yukon has neither the tax base to draw upon, nor the fiscal flexibility to absorb. (Pathway #1, Pathway #5)
- The high growth rates of health expenditures expressed as percentage of GDP or program expenditures are a consequence of the losses to the expenditure base through previous federal action. With the original expenditure base now inadequate, Yukon has not had the funds to fully invest in the health care infrastructure and now is experiencing a greater need to expend funds in health, unfortunately, at the expense of other areas that are important to the long-term sustainability of Yukon, e.g. economic development and basic infrastructure (already well developed in other jurisdictions). (Pathway #5)

3. Administration and Operations

Governance Structure

- Good governance is about organizational effectiveness, efficacy, and efficiency. Good governance is about structure and processes that ensure a comprehensive system of stewardship and accountability. (Pathway #4)
- The recent Health Canada report on sustainability and health care (2008) suggested the funds currently in the system need to be used differently to maximize their value. In their words, this requires a willingness and commitment to make fundamental changes in the way health care is organized and delivered. Innovation and ideas from other sectors should be welcomed. (Pathway #4, Pathway #6)
- Provinces have recently moved to centralize health care administrative structures in an effort to regain efficiencies and improve governance structures and processes. (Pathway #4)
- Specially, fixed, single-year funding may not allow the degree of flexibility required to achieve and sustain the fundamental structural shifts that are needed. Multi-year budgets may help to generate efficiencies, and encourage innovation, organizational change, and cost savings over time. (Pathway #2, Pathway #6)
- It appears well established that a key strategy in primary health care renewal is to expand the use of inter-professional teams to deliver care. A team-based care approach is associated with the reduction of wait times for appointments, a focus on prevention, and coordination of the contributions of all of the health care professionals involved. (Pathway #4, Pathway #7)

Collaborative Team Approach

- The lesson learned from other jurisdictions is that the collaborative team approach will flourish in the right environment or situation. If it is to be an organizational objective or option then policy makers must critically evaluate current policies and systems structures that are presently barriers to the transformation to team-based health care. The Canadian Health Services Research Foundation (June 2006) suggests that these barriers include: conflicting policies and approaches, inadequate human resource planning, regulatory/legislative frameworks that operate independently of each other, funding, and remuneration mechanisms that discourage collaboration. (Pathway #4, Pathway #7, Pathway #9)

Health professionals

- Maintaining an adequate supply of workers is now one of the most critical issues facing many provincial and territorial governments. (Pathway #7)
- Yukon has slightly more than the national average of nurses per 100,000 population, though the number (1,230) is less than that of the four maritime provinces, NWT, or Manitoba. However, Yukon has a much larger proportion of part-time nurses than the national average. (Pathway #7)
- Overall in Canada the supply of physicians is decreasing as a ratio to the population. Yukon has one of the highest proportions of physicians but one of the lowest proportions of specialists, making it highly reliant on external or visiting resources. . It should be noted that the CIHI numbers for Yukon physicians include both full time as well as part time physicians, thus the numbers may not fully reflect physician availability. (Pathway #7)

4. Consumption and Access

- While rising expectations are creating pressure to increase spending on new drug therapies and acute care, they are severely limiting the ability of the system to innovate and shift resources to other areas of need. Growing public expectations of the system is a very critical issue. (Pathway #1)

Consumption

- Many health commentators appear to believe that no country in the future will be able to offer its population everything that science and technology will make it possible to offer. (Pathway #1)

Access to care

- A key component of a well-functioning health care system is how quickly people can access the care they require when they need it. For many Canadians, access is related to how long they have to wait for an appointment, test, or surgery. (Pathway #4, Pathway #10)
- Median wait times for specialized services were less in Yukon than in the rest of Canada. (Pathway #1)

5. Behavioral and Lifestyle

- Health now includes behavioral lifestyle choices and other socio-economic factors. An individual's personal habits in areas such as smoking, drinking, eating, and routine exercise have been shown to have a significant impact on one's health. (Pathway #1)
- In Yukon, the age cohort of 65 years and older is increasing faster than in any of the southern provinces, in fact, this expensive age cohort in terms of health expenditures, increased at an annual rate over twice the national average. (Pathway #3, Pathway #5)

(II) Dynamics of the system

Cost Drivers

Demographics

Demographics affect the health care system in two ways.

- First, they structurally influence or determine the future demand for health care resources. Essentially demand is a function of the absolute and relative internal distribution of population growth. Simply, demand grows and changes as the many different life stages of a population cycle through the system, i.e. infants demand very different health care services, as do youth, the work force, or the elderly. (Pathway #1)
- Second, demographics affect the supply side of health care both in terms of the available productive work force as a tax base to pay for services as well as influencing the human resources pool available to staff the health care system. This latter issue will be further discussed in the section on human resources. (Pathway #5, Pathway #7)

Population Growth

- Yukon's population is small and is influenced to a large degree by economic shifts and opportunities rather than purely demographic dynamics. This makes demographic projections and consequently health care demand projections subject to mainly exogenous variables and very difficult to undertake with any degree of accuracy. However, given current interest in the north and northern development, it is reasonable to expect population growth in the decade ahead. (Pathway #2)

Population Aging

- While many seniors are living healthier lives, the incidence of diseases like cancer, heart disease, diabetes and dementia is still expected to increase. Furthermore, demand is expected to rise for acute care, long-term care, home care, mental health, geriatrics, and other services. (Pathway #1, Pathway #3)
- Some anticipated changes include the overall increase in health care costs as a result of well informed demands by politically knowledgeable consumers for greater and improved choice and options in health care, increased need for chronic disease

management, and prolonged and long-term demands by a population with an increasing life expectancy. (Pathway #1, Pathway #9)

- No matter whether the aging of the population is or is not the primary driver of health care costs, the impact of aging on the sustainability of the health care system must be taken seriously and appropriate action must be taken. In Yukon as elsewhere, chronic conditions emerge as a result of aging, increasing the dependence on the health care system and consequently increasing services consumed. The per capita provincial/territorial health expenditure for a Yukoner was approximately \$4,018 based on current projected expenditure compared to \$2,810 for Canada (2005). According to national statistics, the per capita health care costs to support a person 65 to 69 years is roughly 52 percent higher than the national average per capita health care costs – in Yukon this translates to about \$7,828 per person 65 to 69 years of age. For those aged 70 to 74, the per capita health care costs are about 84 percent higher than the national average per capita health care costs, or about \$12,865 per person. The cost is over double the national average per capita health care costs for those over 75 to 79, or about \$19,514 per person and almost triple for 80 to 84 years (\$31,042) and three and half times by 85 to 89 years of age (\$74,276). An aging population will without a doubt have a profound effect on health system operating costs for the Yukon Government. (Pathway #1)

Geography

- Canada is one of the most urbanized nations—almost 80 per cent of Canada’s population resides in urban areas. These are areas in which economies of scale and efficiencies of proximity add to the efficiency and effectiveness of health care delivery systems. This is not the case for the realities of Yukon. (Pathway #5)
- Northern realities and health needs are different from those in urban areas. The reality of living in remote areas is that there are fewer health care services. Geographic isolation and problems with access to and shortage of providers and services are multidimensional problems. The major problem of access, travel time, and scope of services available are always present. (Pathway #5)

New Generation Service Expectations

- The baby boomer generation is educated, has access to health education through such sources as the Internet, and in comparison to the previous elderly cohort is wealthier. They are politically skilled and expect greater access to a broader set of health services than previously available. The consequences of a large group of discerning and demanding generation of users will increasingly put pressure on the health care system to provide greater quality and quantity of health care services. (Pathway #1, Pathway #3)

Chronic Diseases

- These risk factors reflect choices we make in our daily lives. If Yukoners are encouraged to make improvements and healthier choices in these areas, chronic disease associated costs could be reduced. (Pathway #1)

Cost Escalators

- The choice of investment in any health care cost escalator requires a cost benefit examination of the overall costs of the goods and services and their effectiveness and efficacy for patient outcomes. (Pathway #8, Pathway #9)

Drugs

- Drugs may be one of the biggest challenges for costs containment for the health care system. It has have been the fastest-growing component of health care during the past 25 years. Prescription drug costs are the most important component of drug spending, and they are the single most important reason for escalating expenditures. (Pathway #8, Pathway #9)
- In terms of per capita consumption of drugs, Yukon is below the national average. On a per capita basis, Yukoners consume \$722 of drugs while the national average is \$818. However, when public expenditures on prescribed drugs is considered, i.e. those paid by the Yukon Government, Yukon is the highest jurisdiction per capita at \$392, well above the national average of \$327 and above Nunavut and almost twice that of NWT. (Pathway #1, Pathway #8)
- There are cost related factors that can be controlled and considered. These factors include everything from simple volume to such things as contract prices. These are the leverage points any government can use to influence overall total public expenditures

on drugs. (Pathway #8, Pathway #9)

- The obvious lesson of other jurisdictions regarding controlling the overall volume of drugs is that the more accessible and generous public spending is, the cheaper the drug is to the users and ultimately the greater likelihood of user consumption. (Pathway #1, Pathway #8)
- Virtually all those health professionals heard from during the YHCRC's discussions in Whitehorse raised the issue of the generous pharmacare program in Yukon for seniors. The coverage and the benefits paid are inconsistent with what is offered in other jurisdictions. (Pathway #1, Pathway #3)
- Public drug plans across Canada for seniors vary significantly in coverage and contribution levels, making comparison somewhat problematic. Most plans however have some form of beneficiary payments, whether it be a premium, some form of deductibility, co-payment, or out-of-pocket expense. Yukon and NWT are the only jurisdictions not to have a premium, deductible, or some other co-payments on the part of the beneficiary of the drug program. (Pathway #1, Pathway #3)
- Yukon has a small number of pharmacists who work collaboratively together. This makes it difficult to obtain competitive pricing for drugs covered under the various programs. Pharmacy operating costs are higher in the North. They also experience difficulty in recruiting and retaining trained staff. The northern reality has contributed in part to the higher mark ups charged through government programs. As a result, Yukon has one of the highest markups permitted under its programs in Canada. (Pathway #1, Pathway #3, Pathway #8)

Home Care and Continuing Care

- There has been a move to home care over the past ten years driven by fiscal, demographic and political imperatives, and public demand.
- Canada's population is aging and the greatest demand for home care is in the population over age 80. Over the next ten years, the 80 years and over population is expected to increase significantly. (Pathway #3)
- Having appropriate continuing care services in place can reduce demand on other high cost items and overall costs to the system by pushing health care to the lowest cost appropriate, service delivery

model – “the right care at the right place at the right time”. (Pathway #4, Pathway #6, Pathway #8)

- Despite the growing demand and program uptake in Yukon, fees charged for services do not reflect the true costs of delivery in any way nor are they in line with those charged in other jurisdictions in Canada. (Pathway #1, Pathway #3, Pathway #8)
- A large proportion of health care expenditures occur in the last year of life. Often times these expenditures are incurred in acute care facilities and are usually associated with dramatic and costly interventions, which may or may not be appropriate. What is important is the impact on the margin of additional health care dollars spent not only in terms of cost effectiveness but what it offers in terms of the restoration of health or the enhancing of the quality of life. Hence the need to find the right balance between acute care and continuing care services. (Pathway #9)

Health Human Resources

- Recruitment and retention of health professionals in the North is a major factor in the rising expenditures in these areas. Pay scales that are higher than southern jurisdictions, retention bonuses, and recruitment incentives are all factors resulting in expenditure increases in these areas. (Pathway #5, Pathway #7)
- The proportion of the labour market willing to relocate to northern and more rural areas is always less than those professionals looking to locate themselves in large urban centers with an established client base and a well-developed technical medical infrastructure. Greater compensation and more incentives are required to recruit the staff needs for the North; a logical consequence of this reality. This northern “premium” adds to the already higher labour costs for northern jurisdictions. (Pathway #5, Pathway #7)

New Technologies

- The most significant challenge facing Imaging Services is the availability of trained personnel in the many diagnostic applications. (Pathway #5, Pathway #7)
- Today, the average hospital patient in Canada stays for fewer days and is “sicker” than the average hospital patient of a decade ago. A significant difference in this decade has been shorter lengths of stay and the increased use of day surgery and outpatient procedures. (Pathway #4)

Emerging and Other Cost Escalators

- Yukon government has limited control over the population demand for health care services. Many of the eligibility requirements for government services and programs are legislated and required under the *Canada Health Act*. If a person meets the eligibility requirements, they are entitled and consequently Yukon Government has no discretion around providing such service; simply the resident must receive the service. This reality presents challenges for small jurisdictions without the flexibility of a large health care system to be able to absorb rare events or the ability to deal with the unforeseen financial liabilities of certain health conditions. (Pathway #5)
- Financial support for medical travel is available to all eligible residents in recognition of the fact that it is not cost effective or otherwise feasible for many physician and hospital services to be offered locally. These costs are unique to northern regions and they increase the total cost of service provision significantly. Without these programs there would be a large proportion of the population that could not afford to access services, resulting in a significant negative impact on the overall health of Yukon people. (Pathway #5)
- A doubling of medical travel out of territory appears to be due in part to a greater reliance on out of territory specialists and highly specialized services and the demand for access to necessary technology and testing, as well as, the potential impact of an aging population. (Pathway #1, Pathway #3, Pathway #5)
- Although not a major cost escalator, currently the costs associated with measures to improve patient safety will become significant. Some provinces are now faced with the spread of infections in hospitals as well as other patient concerns that will ultimately suggest the need for changes in health care procedures, infrastructures, and personnel training and qualifications. In addition, there has been public interest in the topic of medical errors. Although possibly an inevitable part of our culture of blame, the popular focus on such things as error or patient safety will nevertheless drive new investments in the future health care system. (Pathway #4)
- Yukon relies heavily on out of territory hospitals to provide more specialized services to Yukon residents. These hospitals are also experiencing significant cost increases, and want to pass on these increases through the amounts charged to Yukon. (Pathway #1, Pathway #2, Pathway #4)

C. Pathways for Change in the Yukon Health Care System

Overview

Akin to the provinces and other territories, it can be demonstrated through the financial modeling that was explored in the *Environment of Change* section of this report that for at least the next 10 years there will be an ever-increasing deficit between the forecasted growth in Yukon Government revenues and the anticipated escalation in Yukon Government health care expenditures. This annual shortfall or expenditure gap will continue to widen as an aging population and other identified health care cost drivers/cost escalators, (such as the cost of new technologies and pharmaceuticals), add to the expenditure pressures already facing the Yukon health care delivery systems.

The forecast expenditure gap cannot be sustained without government actions, which introduce changes or transformations into the health care system that will help moderate the growth in the deficit. These actions could consist of a combination of two main options: increase revenue sources; and/or make changes in health care delivery and management that increase the efficiency and effectiveness. The alternative is for government to make a conscious decision that expenditures made by government in other program areas outside of health, must be curtailed or eliminated to meet the growing health care demands. Ultimately the health care delivery in the Yukon needs to be sustainable over the longer term by ensuring that the health needs of the residents of Yukon are met within the ability of the Yukon and Canadian taxpayers (who fund a substantial portion of the Yukon expenditures through transfers) to pay for the health care services, without compromising the ability of the government to meet both the health care and other program needs now and into the future.

To begin to address the transformation that is required, the following overarching themes or pathways have been developed by the YHCRC tasked with reviewing the sustainability of the Yukon health care system. These pathways for change have been derived from the review of the evidence obtained from the environmental scan of the health care system at both the national and local level, combined with an examination of the cost drivers that will continue to place financial pressures on the Yukon health care system and presented in some detail in sections A and B of this report. The ten pathways identified are evidence based and serve as the overarching rationale for the specific actions that the YHCRC is recommending that the Yukon Government consider.

The Ten Pathways for Changes in the Yukon Health Care System

1. Personal and Collective Responsibility

Yukoners must increasingly take responsibility for their own personal well-being, and their utilization of health care services, in order to reduce their collective burden on the health care system. Governments accordingly must work in conjunction with individuals by offering appropriate and cost effective education, support services, interventions, and when necessary deterrents needed to make more healthy life style choices, and appropriate changes in service utilization. Changes that improve individual well being are long-term investments to the health care system, however it is acknowledged that their benefits may not have an immediate impact on health outcomes or health care costs. Changes in service utilization can have more immediate impacts, but may take some time to take hold.

2. Funding Arrangements

Transparent and long-term stable funding arrangements are required for effective and efficient management, planning, administration, and delivery within the health care system. Whether the funding is federal/territorial transfers or interagency agreements, adequate and responsive funding is the key to cost effective management of health care resources. Moreover, funding arrangements must be needs based and reflective of both volume and price for both operations and capital needs.

3. Health Programs and Services

Where *non insured health programs and services*⁵ are offered to Yukoners that are reasonably comparable to the program and service levels provided elsewhere in Canada, these programs should be offered at user fees comparable to those paid in another Canadian jurisdictions. This logic reflects the reality that the Yukon, as part of the Canadian fiscal federation, receives federal funding to ensure the provision of comparable public programs and services to Yukoners at comparable levels of taxation, consequently Yukoners are not exempt from participating fairly in the provision of their health care services.

⁵ Other health care services offered by governments which are not covered under the Canada Health Act

4. Health Care Delivery Models

Yukon government must select health care delivery models that will improve patient outcomes and provide an appropriate range of services at the same or lower cost as the present health care delivery model. Alternative and creative delivery models are needed to maximize the cost effective/efficient deployment of scarce and sometimes shrinking health human resources if the Yukon Health Care system is to be sustained at current levels.

5. Federal Funding to the North

Federal funding to the North must recognize the requirement for enhanced and ongoing investment in the Yukon health care system to ensure that reasonably comprehensive health care interventions are universally accessible by Yukoners, in the same way as they are for other Canadians. This investment should take the form of targeted health care investments and/or increased base funding where appropriate. This requirement is based on the reality of the Canadian north and the many health delivery challenges not faced by other jurisdictions on the same scale (*e.g. small and dispersed population, large geographic distances, diseconomies of scale in health care delivery, immature health care system etc.*).

6. Institutional Governance Structures

Changes in institutional governance structures should only be considered if it is determined to be highly likely that the change will lead to both an improvement in the alignment in the delivery of health care services, and improved cost efficiency and effectiveness in the service delivery.

7. Health Human Resources

Creative ways are needed to attract and retain physician, nurses, and other health practitioners, in addition to the current recruitment and retention programs offered by the Yukon government. Health human resources will continue to be a scarce commodity over the next decade and consequently, staffing shortages mean that employers must do as much as they can to support and retain their current health care employees by offering attractive health work environments and good job satisfaction. As the workforce ages the cost of inaction on these fronts could be substantial to the health care system.

8. Cost Drivers

All partners in health care delivery must search for opportunities to continually reduce the costs of acquiring goods and services known to be significant cost drivers of the Yukon's health care system.

9. New or Enhanced Services, Procedures, and Technologies

New or enhanced services, procedures, and technologies should be utilized where a business case demonstrates that these will drive cost savings in the future, and/or significantly improve patient access and outcomes in a cost-effective way relative to other possible uses of that funding for health.

10. Accountability

Enhanced performance and accountability agreements with health care delivery providers need to be employed. The accountability agreements need to make use of quantifiable performance indicators and performance targets, developed as part of a strategic planning process, to ensure that the programs and services offered are accompanied by measurable performance outcomes that the Minister and public can reasonably assess.

D. Actions for Change in the Yukon Health Care System

Overview

The ten *Pathways for Change* that the YHCRC has identified can be transformed into specific actions that the Committee recommend that the government consider in its planning of the future of the Yukon Health Care system.

The *Actions for Change* proposed are generally not precise or prescriptive because the government in conjunction with the Department of Health and Social Services are best positioned to determine the most effective way to implement the proposed actions. While the YHCRC often times provides some specific example of possible outcomes in the analysis contained in this section of the report, they are generally provided for illustrative purposes to allow the reader to understand the potential financial magnitude of an action.

It should also be noted that the actions proposed by the YHCRC under each pathway heading, are in most cases mutually exclusive and the timing for implementing some or all the recommended actions can be staged to fit within a timeframe developed by government. In other words, not all the actions necessarily need to be implemented simultaneously or immediately. However, given that the outcome of many of these actions may take several years to have any real financial impact, timely consideration and interventions will assure an earlier payback.

The actions are presented by referencing the individual *Pathway for Change*, providing a brief synopsis where this *Pathway* could be put into effect in the Yukon Health Care system and then concluding with a recommended action.

Pathways with Recommended Actions for Change

1. Personal and Collective Responsibility

Yukoners must increasingly take responsibility for their own personal well-being, and their utilization of health care services, in order to reduce their collective burden on the health care system. Governments accordingly must work in conjunction with individuals by offering appropriate and cost effective education, support services, interventions, and when necessary deterrents needed to make more healthy life style choices, and appropriate changes in service utilization. Changes that improve individual well-being are long-term investments to the health care system; however, it is acknowledged that their benefits may not have an immediate impact on health outcomes or health care costs. Changes in service utilization can have more immediate impacts, but may take some time to take hold.

Synopsis

It is a well-documented fact that individuals and families have a personal responsibility for their own health through the decisions they make and the actions they follow. In 1999 the *Yukon Health Summit 99* chaired by Dr. Frank Timmermans explored this question at some length and affirmed the responsibility of the individual in this personal health decision making process, while acknowledging at the same time that governments may need to be supportive in helping individuals make the right choices that will lead them to improved well-being. Individuals also make choices about the utilization of the variety of health care services available to them.

Poor choices on either the personal health or utilization front are costly to the Yukon health care system and contribute to the poor deployment of limited health resources, especially if these inappropriate patterns can be changed. For example, it is known that persons who smoke, or drink excessively, or do not take appropriate action to avoid injuries, are much more likely to be in poorer health and consequently use the health care system at a higher rate than those in the population who do not partake in what is referred to as “riskier behaviors”. Using expensive acute care emergency services instead of a family physician or visiting a health clinic, for non-emergent health issues, is the most documented situation where the inappropriate utilization of health care services is observed.

The public health indicator data reviewed by the YHCRC indicate that Yukoners generally fall in line with the national statistics on population

health in most of the areas that are measured. Some areas they excel in and are ranked high in these areas of good behaviors, such as fitness and exercise. However, there were a number of riskier behaviors that stand out, where it is documented that Yukoners were well above the national average. These areas include:

- higher rates of accident and injuries than the national average,
- higher rates of smoking than the rest of the Canadian population,
- higher rates of alcohol consumption, which might be considered to be excessive, and
- higher rates of obesity than the rest of Canada.

It is recognized that making a change to ones life styles that lead to improvements in health outcomes, is a longer-term investment that needs to be made by both the individual and where appropriate, with the support and assistance of their governments.

The Yukon Government is already investing in many of these high-risk areas. The Department of Health and Social Services provides public information for example, on birth control, STD's, and appropriate alcohol consumption behaviors. The government has also recently encouraged people to quit smoking through an increase in tobacco taxes. The Department of Health and Social Services also supports tobacco cessation through programs and promotional campaigns. Workplace safety promotion is available through organizations like the WCHSB.

There are always opportunities for the government to move on the health promotion/intervention front. The issue is what areas provide the best return for the dollars invested. A few areas are explored.

Alcohol abuse costs each Canadian about \$463⁶ a year and the direct health care costs exceed those of cancers. Implementing some or all of the six intervention strategies as suggested in the Centre for Addictions and Mental Health report on *Avoidable Costs of Alcohol Abuse in Canada* (February 2008) could save Yukon up to \$1 million annually based on an extrapolation of the estimated national savings. The six intervention strategies outlined in the report include: increasing alcohol taxation; lowering the blood alcohol concentration (BAC) legal limit from 0.08 per cent to 0.05 percent; zero tolerance BAC for all drivers under age 21; increasing the legal minimum drinking age from 19 to 21 years of age; a

⁶ Centre for Addictions and Mental Health report on "Avoidable Costs of Alcohol Abuse in Canada" February 2008

Safer Bars intervention; and brief interventions (routine screening with concise advice for problematic alcohol users by primary care physicians or other health professionals).

Immunization programs are also a way to reduce costs in the health care system. Individuals who take advantage of these immunization and vaccination programs generally tend to require fewer health care interventions (visits to physicians, nurses, and emergency departments) for the diseases and flus that these shots are intended to address. These programs also benefit employers through reductions in lost work time. The Yukon offers a number of public immunization programs, including free flu vaccinations, which have proven their value.

Limited health resources get directed to the most pressing areas, which is usually in the area of health care delivery (e.g. primary and acute care). Health promotion and active living receive only a small portion of the health care pie. In the case of the Yukon, the health promotion budget of \$2.3 million represents less than two percent of the \$141 million spent on health and continuing care. The majority of this funding (68%) is financed from Territorial Health Access Funding (THAF), which will expire in 2009/10. The YHCRC views health promotion as an area that deserves further focus and investment. The YHCRC also acknowledges that changing personal behaviors through health promotions is a long-term investment with little in the way of any immediate reductions to health care costs.

Recommended Actions

- Expand public health promotion awareness and marketing campaigns and offer education programs in the areas where Yukoners are at the greatest health risk, and where evidence demonstrates that they are effective programs. These areas of greatest risk include the prevention of accidents and injury, excessive alcohol usage, tobacco cessation and obesity.
- As a deterrent to smoking, ensure that Yukon tobacco taxes are maintained at rates which are in line with the tobacco tax rates in other Canadian jurisdictions. Preferably these taxation rates, which were recently increased in March 2008, will in the future be kept at a level which keeps them in the top 10 percentile of the taxation rates charged in other Canadian jurisdictions.
- Liquor taxes and mark-up should also be kept at levels comparable to or above other Canadian jurisdictions, as there is a strong correlation in the price of alcohol and reduced consumption.

- Consideration should be given to implementing some or all of the other five alcohol strategies identified in the Centre for Addictions and Mental Health report on “Avoidable Costs of Alcohol Abuse in Canada”.
- Continue to offer the public free or low cost immunization and flu programs as disease prevention strategies. These programs (including their promotion) should be expanded where there is evidence that they will be beneficial in reducing the prevalence of a disease.
- Federal territory-specific health funding needs to be extended beyond 2009/10 to help fund ongoing health reform and health promotion initiatives, and to contribute to the extraordinary costs of medical travel. See also section 5 “Federal Funding to the North”.

2. Funding Arrangements

Transparent and long-term stable funding arrangements are required for effective and efficient management, planning, administration, and delivery within the health care system. Whether the funding is federal/territorial transfers or interagency agreements, adequate and responsive funding is the key to cost effective management of health care resources. Moreover, funding arrangements must be needs-based and reflective of both volume and price for both operations and capital needs.

Synopsis

All institutions in both the private and public sector require long-term certainty around funding levels in order to plan and manage their programs and services effectively. In the case of the Whitehorse General Hospital, the current funding arrangements are generally negotiated for a period of one to three years and reviewed on an annual basis. The problem with the current arrangements is that they are not fully responsive to the drivers of the health care costs in Yukon and are subject to annual approvals through the Yukon government's budget process and the Legislative Assembly. The lack of long-term funding assurances make it difficult for the Hospital's Board of Governors and their CEO to plan programs and services over a longer term basis and make adjustments to these plans to meet their obligations.

The YHCRC was asked, as part of its mandate, to examine other funding options/arrangements in place in other Canadian jurisdictions that might provide both the government and the agency being funded with a more stable and transparent funding allocation thus providing some predictability to both the funding agent and recipient.

The YHCRC's research ascertained that to address the growing cost of the expenditures in the acute care area, a number of Canadian provinces have been implementing "activity-based" funding models for the acute care facilities in their jurisdictions. The funding provided to the hospitals is made up of a combination of a fixed core or "block" funding plus funding for each procedure performed on an individual patient. These payments for the procedure are often associated with financial bonuses if the patient is treated more quickly and are able to free up an acute care bed sooner. This funding process is currently being used in British Columbia on a limited experimental basis and is being considered by other Canadian jurisdictions.

There are both proponents and dissenters concerning the efficacy of the financing model. Those in favour say that wait times will be reduced as

hospitals increase their productivity and compete for business. Other say that the model is not the answer to improving the health care system, without a change in the way services are delivered, such as rewarding the system for keeping people healthy through health promotion activities as opposed to only funding intervention or procedures.

While the jury is still out on whether this funding model will have the benefits expected, it is certain that the model in its current form, will not work in the Yukon because it is in part based on increased productivity through competition with other acute care providers. In a large city like Vancouver there are opportunities to specialize in a health delivery area and compete with another acute care institution for patients. In the Yukon that opportunity does not exist because there is no other acute care provider besides the Whitehorse General Hospital (WGH). As well, WGH does not provide the same level or number of tertiary (specialist services) that would be found in a large city hospital.

Accordingly, the YHCRC does not believe that this experimental activity-based funding model is an appropriate model to introduce at this time at WGH. However, the YHCRC considers that there is still a need to develop a longer term financing arrangement (minimum three to five years) that realistically addresses both the annual operating costs of the hospital as well as the necessary funding to finance a long-term capital plan. A longer term O&M and Capital funding plan will also benefit the government as it will provide WGH with a degree of certainty about the impact on its fiscal framework and accordingly can develop their own financial requirements around it.

The majority of WGH expenditures (58%) are associated with personnel costs, which are relatively predictable (except for pension costs). A fixed and variable labour formula can be derived based on the type of hospital services delivered. Supplies and contracted services, which form another 21% of the budget, have a level of predictability based on projected volumes and prices. Amortization and building expenses are relatively fixed (12%) and predictable except when it comes to energy charges. A funding formula could be developed to recognize the volume and price fluctuations of energy usage and prices.

The funding arrangement developed needs to provide for a core level of operational funding, but also needs to be responsive in its application to changes in both the volume of activities and those factors that affect the escalation of costs over the time frame that the agreement is in effect. In addition, the funding agreement needs to be flexible enough to reflect financial alteration when there is mutual agreement by the government and WGH to expand or reduce specific health services offered by WGH. Finally, the funding agreements should provide for funding incentives where management is able to reduce the volume of activities through the

introduction of innovative means or treatment interventions. In other words, financial rewards need to be developed to recognize reductions in the usage of acute care beds and emergency interventions, where it is through good management practices and is not at the expense of patient care or services.

Funding arrangements on their own are bound to fail unless there are strong and well-understood accountability arrangements in place between the Hospital Corporation and the Yukon Government. The issue of accountability arrangements will be addressed in *Pathway for Change #10* and the recommendations will complement the recommendations made in this section.

Recommended Actions

- Over the next year a mutually agreeable multi-year operation and capital funding arrangement(s) should be developed jointly by the Departments of Health and Social Services and Finance, with the Whitehorse General Hospital. This arrangement should provide the hospital with an annual funding allocation based on a combination of a core or “block” funding plus adjustment factors that will address annual shifts in volumes of interventions provided plus escalations for inflation and various cost escalators not within the control of WGH or the Department of Health. The funding model developed needs to be adaptable to allow for adjustment in service provision where mutually agreed upon. As well, it should provide for financial incentives for the introduction of innovative changes that reduce the use of acute care beds and emergency interventions. GOVERNMENT should approve the estimated funding annually on a multi-year basis and the multi-year agreements and annual updates should be reported in the legislature so that MLAs and the public are familiar with the long term funding commitments.

3. Health Programs and Services

Where *non-insured health programs and services*⁷ are offered to Yukoners that are reasonably comparable to the program and service levels provided elsewhere in Canada, these programs should be offered at user fees comparable to those paid in other Canadian jurisdictions. This logic reflects the reality that the Yukon, as part of the Canadian fiscal federation, receives federal funding to ensure the provision of comparable public programs and services to Yukoners at comparable levels of taxation. Consequently, Yukoners are not exempt from participating fairly in the provision of their health care services.

Overview

The Yukon Government provides Yukon residents with a number of health programs and services that are in addition to the health services it is required to provide under the *Canada Health Act*, as insured services. These programs that are generally referred to as non-insured services have developed over the years and are very important to eligible⁸ Yukon residents, as they pay for some very high cost supplementary health care services that may not be covered under an individual's private health insurance. This section will also explore the issue of health insurance premiums.

NON-INSURED HEALTH PROGRAMS AND SERVICES

The Yukon government programs available to Yukoners are briefly summarized below. A complete overview of the programs and financial assistance available to clients eligible under the program are provided at the following Website: www.hss.gov.yk.ca/programs.

Medical Treatment Travel Program:

- This is a program that provides financial assistance to eligible persons towards the cost of medically necessary transportation. First Nations and Federal employees, including the RCMP have

⁷ Other health care services offered by governments, which are not required to be provided under the Canada Health Act which is generally restricted to paying for medically necessary physician and acute care services..

⁸ Some of the health services referenced may exclude specific Yukon residents if they are covered by other universal non-insured health programs provided and paid for by the Federal Government.

their own medical treatment travel programs, as do some private companies. The program is government by the *Travel for Medical Treatment Act* and regulations.

Chronic Disease and Disability Benefits:

- Provides financial assistance for drugs, medical/surgical supplies and other medically necessary items.

Seniors Health Benefits – Pharmacare and Extended Health:

- The Pharmacare program will pay for the total cost of the lowest priced generics of all prescription drugs listed in the Yukon pharmacare formulary, for persons 65 years of age and over and their spouses 60 years of age and over, whose benefits are not covered by private insurance.
- The Extended Health Care program provides a range of services, including medical supplies and equipment, dental care, optical care and services to persons over 65 years of age and their spouses who are 60 years of age and over, whose benefits are not covered by private insurance.

Children’s Drug and Optical Program:

- The program is designed to assist eligible low-income families with the cost of prescription drugs and eye care for children under the age of 18.

Hearing Services:

- This program provides a complete range of audiology and hearing aid services to Yukon residents of all ages.

Continuing Care Services:

- This program provides Residential, Home Care and Regional Therapy services for the citizens of the Yukon.

While some of these programs provide for a premium, user co-payments, income testing or a deductible, many do not. For those programs that do require that the client contribute financially to the program, the financial burden placed on the individual is often well below what an individual would have to pay in another Canadian jurisdiction in order to receive a similar service. This financial discrepancy has arisen over many years since the rates or fees for these programs have not been reviewed or changed by the Yukon Government, in some cases, for decades.

The current rates or “user fees” do not reflect the current financial realities of the cost for these services or for that matter even the impact of inflation over the last 20 years. While this is commendable, it is no longer sustainable and the revenue components of each of the programs should be reviewed to ensure that the programs are consistent with what is offered in other jurisdictions and the commensurate premium, deductible or co-payment is in line with what is offered elsewhere in Canada.

There is a fundamental difference between a “user-fee” and a tax. A user fee is a fee for the use of a service. Abuse of the term has led some to believe that it’s a tax hike disguised by a euphemism.

When one chooses to use a government service and pays for it, this is a user fee, whether the fee payable actually covers the cost or otherwise is subsidized by government. However; if the money goes into a general pot for a mix of services which a person may or may not themselves use, then he’s paying a little of both—a user fee plus a tax. Taxes differ from user fees in that paying them isn’t a matter of choice and what one pays is not tied directly to what one is using. A tax generally has no direct relation to the service provided insofar as the amount charged is concerned.

In principle, true user fees make a lot of sense, especially if it is desirable to help people to understand that nothing from government is truly “free.” Indeed, the more government finances itself through user fees instead of taxes, the less it looks like government and the more it gets out of the redistribution business and begins to resemble private firms operating in free markets.

Instinctively, most people sense the basic fairness about true user fees. One pays for what one gets. Most people understand and support user fees for such things as toll roads for new, expensive highways, harbors, and even parks and recreational facilities.

The courts have commented on what distinguishes a user fee from a tax: there are generally considered to be three main criteria: 1) a user fee is designed to defray the costs of a regulatory activity (or government service), while a tax is designed to raise general revenue; 2) a true user fee must be proportionate to the necessary costs of the service, whereas a tax may not be; and 3) a user fee is voluntary whereas a tax is not. The part that is problematic for most people is that when it comes to health care, is that they may perceive that some health care services are not truly “voluntary” or discretionary such as pharmaceuticals or medical evacuations.

Many of the costs of these programs will also continue to grow at very high rates into the future because of the cost drivers and escalators

associated with the programs (e.g. drugs) and demographics (e.g. aging population) that were discussed earlier in this report. These are some of the components that are threatening the sustainability of the health care systems across Canada.

While the YHCRC did not conduct an exhaustive analysis of all the non-insured programs and their revenue components, it did examine the user charges/recoveries in a few large programs that were brought to the YHCRC's attention as being very out of line, compared to similar programs offered in other Canadian jurisdictions. The brief précis and analysis of each program is outlined below and supplemented with annexes where appropriate.

(a) Medical Treatment Travel Program

Synopsis

In most other Canadian jurisdictions medical travel assistance is not provided to residents needing to seek medical treatment that takes them away from their home community. Individuals generally must provide for their own medical travel costs if they need to visit a health care facility or physician outside of their home community.

The exception to this rule is the three northern territories, which each have a medical travel program. The programs were introduced by the respective territorial governments to recognize that in the North not all medical interventions are available to residents in their northern community. Additionally, the costs to travel to other locations to receive treatment would be prohibitive for many individuals. The cost of the Yukon medical travel program (including "medivacs") is approaching \$8 million in 2008/09 and has more than doubled in cost since 2001. The cost drivers for medical travel are the volumes of travelers and air travel/"medivacs" costs. There is no income testing, deductible or user charge for the Yukon program.

Relatively recently, the NWT introduced a user pay into their program that requires that an individual pay the first \$250 of their round trip medical travel cost outside the territory. The rate was set low enough so as to not discourage people from traveling outside to seek medical treatment, but at the same time recover a small portion of the total cost. If this same recovery were to be applied to the Yukon program for out of territory travel only (non medivac flights) the program would recover close to \$600,000 annually (2,300 flights x \$250). A doubling of the rate would recover well over one million dollars. While this is a small portion of the total cost of the program, it is not an insignificant amount that could be used to finance other health care programming.

If similar changes as were made in the GNWT are to be considered for the Yukon out of territory travel portion of the Medical Treatment Travel Program, the YHCRC is of the view that the rate of recovery should be set so as not to discourage use of the program. It should also recognize ability to pay. Therefore income testing may be appropriate with a scaling of the user charge so that higher income families pay a higher portion of the cost (e.g. \$600) while lower income families pay a more nominal amount (e.g. \$100). People on Social Assistance (SA) may require full subsidization through the SA program. The program would also need to accommodate clients who may need to travel multiple times in the course of the year for treatment and would find the cumulative user charges to be unmanageable. To deal with this issue a maximum annual user pay cap could be introduced into the program.

Recommended Actions

- The government should consider introducing a user charge for the Out of Territory Medical Travel (non-emergency) Program. A user charge should be set at a level that will not deter use of the program and should recognize ability to pay. Changes to the program would also need to acknowledge the increased financial burden that could be placed on clients who need to travel multiple times in the course of the year for treatment and would find the cumulative user charges to be unmanageable. In this case a maximum annual user pay ceiling or cap could be introduced.

(b) Chronic Disease and Disability Benefits

Synopsis

The Yukon Chronic Disease and Disability Program, as the name implies provides eligible Yukon residents with drugs and other medical supplies to manage health conditions marked by long duration or frequent occurrence. The drugs, goods, and services are not covered if they are available to the applicant through another federal program (e.g. First Nation non-insured health program), territorial program, or private insurance. The cost of this program has more than tripled in the past ten years going from just under one million dollars in 1998/99 to \$3.4 million in 2008/09 due to the increasing price of drugs and the increase in clientele, which now number around 1,900. The average annual cost per client is close to \$1,400.

While this program does have an individual income-tested maximum deductible of \$250/year and a family deductible of \$500/year, the deductibles are far below what a person in a similar drug program in another jurisdiction might pay.

A comparable program available in Saskatchewan applies a deductible that is based on an income test. A family living in Saskatchewan with a family income of \$50,000 would have to pay the first \$1,700 (deductible of 3.4% of family income) before the drug plan kicks in.

In British Columbia the deductible is a tiered system based on family net income with a maximum deductible of 3%, but in addition, a co-payment of 30% is required. Accordingly a family in B.C earning a family income of \$50,000 would have an annual deductible of \$1,500, and any drug cost over that threshold are reimbursed at 70% of the cost. As an example, if drug costs were \$3,000 annually the deductible would be \$1,500 and the remaining drug costs would be reimbursed up to \$1,050, leaving the user to pay \$1,950 of the total \$3,000 annual drug cost.

Other programs in Canada offer different combinations of premiums, deductibles, and co-payments. Most programs apply an income testing of some form or another. The exceptions being the three territories that all have extremely generous drug programs as is well illustrated by the high percentage of prescription drugs paid by the Yukon public system that is 68.7% versus the national average of 47.9%⁹.

The CIHI report on Drug Expenditure in Canada⁷, 1985 to 2007 - Appendix A will provide the reader with a comparison of all drug subsidy programs in Canada.

In the case of the Yukon, if the government were to adopt a program similar to the one in place in BC, and assuming an average family median income of \$30,000 (which is 50% below the reported Statistics Canada 2006 census value average of \$60,106), and with typical annual drug costs of \$1,500 then the cost per client would be roughly \$1,180/annum versus the current cost of \$250 per annum. Extrapolating this very conservative estimate to the 1,141 clients in the program would result in a recovery of around \$1.4 million versus the current recovery, which is in the \$300,000 range. The net revenue increase would be \$1.1 million. This illustration is just an example of one possibility and other combinations and permutations of charges will produce higher or lower recoveries.

Recommended Actions

- The government should consider introducing changes to the Chronic Disease and Disability Program that would result in a deductible and co-payment along similar lines to the drug programs that currently exist in the provinces. The re-developed program should include a

⁹ Drug Expenditures in Canada 1985 to 2007 - pg. 26 -Canadian Institute for Health Information 2008 http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_80_E&cw_topic=80 .

deductible that recognizes a family's ability to pay and be accompanied with a reasonable co-payment for drug costs that is in line with what is provided in other Canadian jurisdictions. The inclusion of a maximum annual co-payment or cap on costs is also recommended.

(c) Seniors Health Benefits – Pharmacare and Extended Health

Synopsis

The Pharmacare and Extended Health Benefits Program is available to eligible individuals over 65 and their spouses who are over 60. First Nations are eligible under their own federal non-insured drug and extended health program. The number of clients (subscribers) is around 2,250 which is about one-half of the Yukon population who are over 60 and about 65% of all potentially eligible individuals (3,308 non FN over 60 are eligible for a federal drug program) in this age demographic. The number of clients has grown from 1,345 in 2000/01 to an estimated clientele of 2,250 in 2008/09. This is a 70% increase over the period. The number of persons over the age of 60 is growing at a rate of about four to five percent annually, as the demographics of Yukon shift to a more elderly population. Using only a medium population growth scenario this age group will increase to over 6,000 persons by 2017¹⁰.

The programs spend about \$3.35 million annually on prescription costs, with an average cost of about \$61.00 for approximately each of 55,000 prescriptions. The average annual cost per client of drugs alone is around \$1,800/yr.

The program also provides seniors with extended health benefits including free hearing aids, medical surgical supplies, eyeglasses, and dental care up to established maximum reimbursements for each of these services.

Not unlike the Chronic Disease Program, the benefits available to seniors under this program are far richer than those programs offered to seniors in most other Canadian jurisdictions. This program does not require a premium, deductible, or any co-payment for any senior over 65 and spouses aged 60 and over. All other Canadian jurisdictions that have a senior program (with the exception of the other two territories) generally have a deductible and/or a co-payment requirement. Most programs are income tested to ensure that lower income families can afford them. In

¹⁰ Yukon Bureau of Statistics – Population Projection to 2017 –Medium Growth Projections– December 2007

addition, most jurisdictions require that all applicants be at least 65 years of age before they are eligible. See appendix 2.1 for a comparison of seniors programs nationally.

These senior programs in the provinces are also generally more generous than programs offered to non-seniors. For example, B.C.'s tiered deductible is a lower percentage and kicks in at a higher family income level. The Saskatchewan plan requires that each senior pay up to \$15 per prescription and has an adjustable rate for seniors receiving government income supplements.

For illustrative purposes the British Columbia senior's drug plan is applied using a senior family with an average family median income of \$30,000 and annual drug costs of \$1,500. Under the BC plan there would be no deductible as the income test begins at \$33,000, but the client would pay 25% of the drug cost, which equals \$375/annum (maximum payable at that income level) compared to the current Yukon cost to the same senior family of zero dollars. Extrapolating this very conservative estimate to the 1,800 clients in the program would result in a recovery of around \$675,000 versus the current recovery, which is zero dollars.

Depending on the model selected the actual recovery would likely be much higher. There are many users of this program in Yukon, who have incomes well in excess of the \$30,000 that was used for illustrative purposes and applied across the board; accordingly deductibles would apply, as would higher co-payments. This is just an example and of course other models will produce higher or lower recoveries.

The point made again, is that the Yukon's program is exceedingly generous compared to other jurisdictions and does not test a user's ability to pay a portion of the costs.

Recommended Actions

- The government should consider introducing changes to the Senior's Pharmacare and Extended Health Benefits Program that would result in a deductible and co-payment along similar lines to the senior's drug and extended care programs that currently exist in the provinces. The re-developed program should include a deductible that recognizes a family's ability to pay, and be accompanied with a reasonable co-payment for drug costs that is in line with what is provided in other Canadian jurisdictions.
- The inclusion of a maximum annual co-payment or cap on costs is also recommended.

- Eligibility should be restricted to seniors who are over 65 and not be based on marriage for a lower eligibility.

(d) Children’s Drug and Optical Program

Synopsis

The Children’s Drug and Optical program provides both drugs and eye care to children under the age of 19, living in low-income families. The program requires that the families may be responsible for paying a portion of the cost every year. The maximum deductible is \$250 per child and \$500 per family. The deductible, which is calculated on a sliding income scale, may be waived depending on the family’s income and number of people in the family. Once enrolled, children are eligible for prescription drugs, one eye examination every two years, glasses every two years to a maximum of \$200, and contact lenses where recommended for medical reasons. Some medical supplies are also covered.

The program services a unique niche of individuals who might otherwise fall between the cracks (i.e. no other insurance coverage) if the family could not afford the drugs and optical required by their children. The cost of the program is relatively small with total prescription costs of less than \$16,000 per year and 143 individuals submitting claims in 2007. The average cost per client after the deductible is \$105.

The provinces and other territories do not appear to have similar universal programs specifically designed to address children’s needs. Their programs for children are captured in social assistance or within other drug programs available to their general population.

Recommended Actions

- It is not recommended that the government consider changes in this program at this time. It serves a unique and small client base and the program already includes a reasonable maximum deductible per family.

(e) Hearing Services

Synopsis

Hearing services provides Yukoners with a full range of hearing assessments, screenings, and hearing aid dispensing. The cost of the program is about \$665,054 a year. About 1,000 adult and children assessments are conducted in the course of a year at no charge. Hearing aids are sold at a wholesale price, so there is no cost to the government for

hearing aids, except where they fall under another extended care program or are funded by social assistance.

In most other Canadian jurisdictions, hearing assessments and dispensing (outside a hospital) is done by the private sector who generally charge for the service, or provide free assessment services thus financing their business through the mark-up on hearing aid sales. In some provinces, under their various assistive provincial devices programs, eligible residents may be reimbursed for part of the cost of hearing aids purchased from the private sector vendor.

In the Yukon there is only one private sector provider of hearing services. Many individuals who have supplementary insurance programs or are not prepared to wait for the government service access this private service.

There is an option for the government to charge for the assessment service and a mark-up on hearing aids, however the revenue stream would be relatively minimal. At \$50 per assessment the revenues would be around \$50,000. It is not known what an appropriate dispensing mark-up would be for these products, but assuming a 20% markup on a hearing aid wholesale price of \$500 would only yield a “profit” of \$20,000 based on 200 hearing aids being dispensed per year. Doubling the mark-up would raise twice that amount. At the present time the government hearing service is filling an important service void for both adults and especially for children because of the lack of private sector providers.

Recommended Actions

- It is not recommended that the government introduce user charges or other fees for this program at this time. The program serves a relatively small client base and charging for the service would yield minimal net increased revenues after administrative and system costs are considered. However, the government should review the program every few years to ensure it is not creating financial barriers for the private sector entry into this service area.

(f) Continuing Care Services

Synopsis

The continuing care program offers an array of services to both seniors as well as other Yukoners who need support services; either in their homes, or in government owned long-term care residences. The focus of the YHCRC’s work was on the three residences that the government operates and the rates charged to those residents for housing and food services received and not on the other long-term care services. The analysis

focuses only on non-First Nation residents, since DIA pays the full cost of care for First Nations residing in the facility.

The Yukon operates three long-term care facilities. Two are located in Whitehorse and one is located in Dawson. The total bed capacity is 152. The costs to operate a bed in one of the three long-term care facilities ranges from \$361 per day at Copper Ridge to \$221 per day at McDonald Lodge in Dawson. The current daily rates charged to the individual residents living in one of the facilities, are far below the operating costs, as is illustrated in the following table.

Table D1 - Residential Continuing Care Rates

Facility	Resident Rate/Bed Day	Monthly Resident Rate/Bed (30 days)	Monthly Operating Costs/Bed (30 days)	Monthly Deficit/ Bed (30 days)
Copper Ridge	\$21.00	\$630	\$10,830	(\$10,230)
Macaulay Lodge	\$18.00	\$540	\$8,610	(\$8,070)
McDonald Lodge	\$18.00	\$540	\$6,630	(\$6,090)

The rates charged to residents living in these long-term care facilities have not been changed in over 15 years for Copper Ridge/Thomson Center and for well over 15 years for the other facilities. Using the Bank of Canada Inflation Calculator it is estimated that if inflation had been applied to the rates during the intervening 15 year period, the rates charged at Copper Ridge should be closer to \$28 per day in today’s dollars, representing a 34% increase in rates.

In comparison to other Canadian facilities the daily bed rates are also exceedingly low. The low-end rates for other provincial and territorial public facilities are listed in *appendix 2.2*, and they range from a high of \$120.25 per day in New Brunswick to \$28.77 in British Columbia. The average provincial rate after eliminating the rates above \$100 is about 29.50 per day.

Most of the provinces base their rates on income tests and some also use asset tests to establish the maximum monthly rate charged to residents. For a room with multiple occupants (two or more) the maximum rates range from a low of \$39.62 in Alberta to as high as \$182.05 in New

Brunswick. The average rate after eliminating the ones over \$100 for a standard room (sharing) is roughly \$55 per day. Much higher rates are charged for semi-private and private rooms.

In the Yukon there is room to increase the daily rates at long-term care facilities, to close to the provincial standard bed rates, while still leaving a reasonable level of disposable monthly income for residents, with which they can purchase other personal care items. This disposable income or “comfort allowance” is what is left for the resident to spend on other items after paying for accommodation and food per diem.

While many pricing scenarios can be considered, *appendix 2.3*, presents one possible long-term care facility accommodation and food charge that could be phased in over a five-year period. The rates used in this model are increased to \$24.00 in all facilities immediately and rise to \$32.00 by year five. Monthly resident cost would go from the current \$630 per month to \$973 by year five. After that point in time an inflation adjustment could be applied annually to keep the rates up to a reasonable level. If this scenario were to be adopted, by year five the increased revenue flow would be about \$573,000 annually. Over the five years just under \$2 million in additional revenues would be earned.

Other possible scenarios, which would make the fee structure more in line with the provinces, would require a lower and upper end fee that would be charged based on an income test to assess a resident’s ability to pay. In implementing new rates, consideration could be made to grandfathering the current residents into the existing rate structure until they leave the facility.

Increasing rates would have several benefits. It would reduce the current level of subsidy provided to residents and allow the additional income to be put towards other health and LTC costs. Higher rates may also create an incentive for the not-for-profit sector (e.g. NGO’s, service clubs), or private extended care facilities to open in the Yukon. In the provinces the not-for-profit and private sector operate numerous long-term continuing care facilities under government regulations. The current low rates in Yukon, may be a barrier to entry into this field by these organizations, but the demographics clearly demonstrate that there will be increasing pressure to supply more long-term care beds over the next 10 years. Supplying the number of beds will be a challenge that the government may not be able to tackle on its own in a timely manner. Introducing NGO’s or the private sector into this service sector brings with it, its own challenges. Challenges that the government would have to be prepared address include standards of care legislation and monitoring of facility services.

At present the lowest income resident of any residential facility, who is eligible for Old Age Security, could receive a total maximum benefit of \$1,244.25 per month in Old Age Security (OAS), Guaranteed Income Supplement (GIS) and Yukon Income Supplement (YIS)¹¹ if they have no other income source.

Using the highest daily rate modeled in the scenario, (\$973 per month by year five), based on the current OAS/GIS/YIS, escalated by two percent over the next five years, would result in a monthly resident income of \$1374.00, leaving a comfort allowance of \$401 after paying the increased daily rate. This comfort allowance is far in excess of what most other jurisdictions¹² allow, generally in the \$100 to \$200 range.

Recommended Actions

- The daily accommodation rates charged residents living in the government's continuing care long-term care facilities should be reviewed by government with a view of adjusting them upwards to more closely reflect the rates charged in the provinces. In establishing new rates consideration should be given to gradually increasing the rates over an extended time period, and possibly grandfathering existing residents in at the existing rates until they leave the facility.

INSURED HEALTH SERVICES

Health Insurance Premiums

Synopsis

Each province and territory has considerable flexibility in determining how its share of the cost of its health insurance plan and other non-insured health services will be financed. Financing can be through the payment of premiums (as is the case in Alberta¹³ and British Columbia and Ontario), payroll taxes (NWT), sales taxes, other provincial or territorial revenues and fees, or by a combination of methods. Health insurance premiums are permitted as long as residents are not denied coverage for medically

¹¹ HRDC – OAS Payment Rates: www.hrsdc.gc.ca/en/isp/oas/oasrates.shtml

¹² Canadian Health Care Association – Policy Brief – Stitching the Patchwork Quilt Together – Facility Based Long Term Care – Realities and Recommendations – Appendix C - 2004 – ISSN 1481-3165: www.cha.ca/index.php?option=com_content&view=article&id=120:cha-policy-brief-on-facility-based-long-term-care&catid=78:continuumofcare&Itemid=73)

¹³ Alberta has announced plans to eliminate their health premium.

necessary hospital and physician services because of an inability to pay such premiums. All provinces that levy premiums have also instituted premium assistance schemes that are based on income whereby, those who cannot afford to pay premiums may apply for assistance through their provincial health insurance plan. The Government of Ontario reintroduced their Health Premium in 2004, specifically to address the sustainability of their health care system.

Prior to April 1st 1987 the Yukon Government collected health insurance premiums from its residents. With the widening gap between health expenditures and the government's revenue base, the YHCRC felt that it was important to explore other revenue options for the government to consider. The YHCRC acknowledged that introducing health premiums would not be a popular measure, just like any form of tax or new levy. However, Yukoners need to be made aware of this revenue option and the potential revenue stream it might produce to help finance increasing health care costs.

The Department of Health provided an estimate of the potential revenue that could be raised through the introduction of a premium. For their calculation they used the *British Columbia (B.C.) Health Care Premium Policy*, which applies different monthly rates depending on the household size. The B.C. rates go from \$54.00 per month for a single individual to a maximum of \$108.00 per month for a family of three or more. Based on this model the premiums raised in the Yukon would be about \$1.1 million per month or \$13 million annually. This is not an insignificant amount that could be used to support health care in the Yukon. Rates at half the B.C. charge would yield half the revenues. Accommodations or subsidies would also have to be made for low-income individuals families, unable to pay the cost of the premium. In B.C., rates are charged on a sliding scale up to an individual income of \$28,000, at which point the full premium charge is made. Ontario's rates are based as a percentage of income up to a maximum of \$75 per month or \$900 per year per individual.

There may be additional administrative costs associated with the introduction of a health premium. The Department of Health and Social Services would have startup costs for an office and computer system, as well as costs to administer and collect the fee, if the program were to be administered as a stand-alone premium. The Departments estimate that they would need two to three employees to administer the premium.

There is a way to eliminate most of the administration cost, if the premium were to be collected through the income tax system, as is done in Ontario. Using the income tax system also makes it simpler to assess a client's ability to pay as income thresholds can be established and automatically applied during the annual tax assessment process.

Employers may also have costs if they are paying the premium on behalf of employees and/or collecting the premium and remitting it on the employee's behalf.

If the Yukon government were to pay the cost of the premium for its employees on a 10/90 percent basis, as had been the sharing arrangement in previous collective agreements, the cost to the Yukon government as an employer would be around \$4.5 million¹⁴ per year, reducing the net government cash in-flow to \$8.5million per year.

Recommended Actions

- The government should consider the introduction of health care premiums to assist in financing the increasing cost of existing health care services in Yukon and to fund the expansion of any new health care services.

¹⁴ Estimated by the Public Service Commission – July 2nd, 2008.

4. Health Care Delivery Models

Yukon government must select health care delivery models that will improve patient outcomes and provide an appropriate range of services at the same or lower cost as the present health care delivery model. Alternative and creative delivery models are needed to maximize the cost effective/efficient deployment of scarce and sometimes shrinking health human resources if the Yukon Health Care system is to be sustained at current levels.

The shortage of health care professionals in Canada combined with the increasing health care costs is forcing the system to rethink how, with an eye on ensuring improved patient outcomes, health care is delivered in Canada. The YHCRC examined some of the best practices in other jurisdictions that were raised by presenters and contained in the literature reviewed, to see if any of these delivery models may have application in Yukon. As well the YHCRC examined some health care delivery issues specific to Yukon. The YHCRC's observations and recommended actions in this area are presented in this section.

(a) Continuing Care

Synopsis

Given the forecast growth in the senior's population both in Yukon and across Canada, it is known that these population increases will place an additional strain on the health care system, including an increased usage of health care facilities.

Often times seniors end up at a hospital because they lacked the appropriate care up to that point and then deteriorate quickly and end up in a situation that requires a more acute intervention. Upon the patient's recovery finding appropriate home care or residential accommodations may be a challenge, sometimes resulting in the individual remaining in a hospital at a huge cost to the system and at a level of care that may not be appropriate for the individual.

Most jurisdictions, including the Yukon, recognize that having a senior languish in an acute care facility, if the level of care it provides is not required, is not good patient care and for that reason most jurisdictions offer home care, community care support programs, and supported assisted living as a lower cost option. These options provide for the opportunity to keep seniors healthier and out of acute care and residential long-term care facilities. To ensure the most efficient use of resources and to ensure the sustainability of the system, lower cost care options need

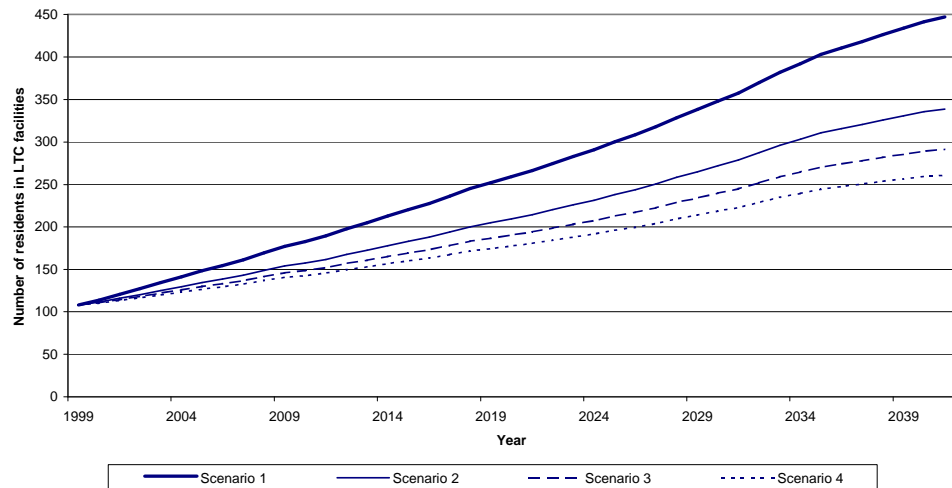
to be utilized first and care needs to be pushed to the lowest and most appropriate point in the continuum.

The Yukon government has been investing in home care and respite care and over the past twelve years has opened an average of seven beds per year. Beds have increased from 61 beds in 1994 to 152 beds in 2007. Over the same period the continuing care client caseload has more than doubled, increasing from a total caseload of 300 clients to over 700 clients. Models developed for projected bed utilization show that bed requirements will grow from the current 152 bed level to a bed requirement as high as 200 to 250 beds by 2019 and 450 beds by 2039 – see Graph D1. While these are just projections, there is no doubt that the demand for long-term beds will continue to grow.

Although the number of residential long-term care beds has increased in recent years, WGH has also seen an increase in seniors who access the acute care beds at WGH for extended periods. The cost of an acute care bed is \$1,400 versus the cost of a bed in a residential facility that is closer to \$420 per day or the homecare option at a fraction of that cost.

It is clear that the demands on the Continuing Care sector will continue to grow into the next decade and beyond. Governments will need to continue to invest into this health care delivery area that is proven to be a cost effective delivery model. Planning for this eventuality must begin well in advance of the bed requirements as the introduction of expanded programs, the construction of facilities, and staffing may need up to five years lead-time.

Graph D1 - Yukon Long Term Care Bed Utilization Projections



Recommended Actions

- Where projections indicate a future demand, the government should continue to invest in expanded home care, community support programs, and supported/assisted living. Intervention and care at this level is proven to keep individuals out of the acute care and facility-based long-term care system and in doing so provides a better level of appropriate services at a lower cost.
- The government should develop a comprehensive long range plan to increase residential long-term beds at Thomson Centre or a new facility(ies) to ensure that plans are in place for future expansion needs. Raising the residential long-term bed rates, as suggested elsewhere in this report may also have the benefit of leveling the playing field. This scenario would allow private or not-for-profit suppliers of long-term beds to enter the market; thereby alleviating some future pressures on government for lower level care beds.

(b) Collaborative Care Models

Synopsis

The pressures on the Canadian Health Care system are forcing the re-examination of how health care is delivered. One model, which is being explored in almost every Canadian jurisdiction, is the collaborative care model. Put simply this delivery model is designed as a way for the various caregivers in the health care system (doctors, nurses, and other health care practitioners) to work more closely as a team (collaborate) on a patient's health needs with the sole objective of ensuring that the patient gets the best team care approach in addressing their health care needs thus resulting in improving their health outcomes. The documented potential benefit of a collaborative care model includes: improved care quality; better access; increased continuity of care; and best use of resources.

The collaborative care model is already used in the Yukon on a limited basis. Specifically, nearly all physicians in most Yukon communities are using the model to manage diabetes. The feedback from clients and caregivers indicates that this model has worked well for managing this chronic disease and has the potential of being used to manage other chronic diseases such as: congestive heart failure; chronic kidney disease; hypertension; chronic vascular disease; chronic obstructive pulmonary disease; and depression.

The use of the collaborative practice model can also be used more broadly in primary care settings if there is a willingness of all the health care professionals to work together in a primary care environment. There are numerous examples across Canada where a primary care model of care

that incorporates a physician, a registered nurse and/or a nurse practitioner, and other appropriate professional caregivers who form part of a multi-disciplinary team. The model, when put into effect in a primary care setting, can help avoid inappropriate emergency room visits, improve patient access, and reduce physician workloads.

Health Canada, through the *Health Transition Fund*, has sponsored numerous provincial/territorial trials to look at various collaborative care models. The findings of the studies were published in March 2007 and are contained at Health Canada's websites¹⁵. The documented studies of the models in practice point out that the biggest obstacle and challenge to the multi-disciplinary model is the providers' willingness to overcome their reluctance to enter into the model and accept the change. This collaboration is essential in order to progress in a primary health care practice. Patient satisfaction with this model is generally very high according to the reports. There are also documented challenges with the model related to: liability; compensation; scope of practice authority; and the acceptance of change. But all the issues identified are surmountable, if there is a willingness to engage.

Even without moving specifically to a model of collaborative health care delivery, the YHCRC heard that there were opportunities to improve the communication and reduce the "silos" that exist between health care providers and institutions/organizations. Doing so would improve service integration and result in improved patient outcomes. Specific examples mentioned for opportunities to improve service integration, were in the areas of EMS and mental health, but other opportunities exist as well.

Recommended Actions

- The government should proactively encourage the expansion of collaborative (or team-based multidisciplinary) primary health care delivery model where it can be demonstrated that the model will work with chronic care patients and/or in clinical models, in an effort to ensure better and accelerated access to primary care in a more appropriate and more cost effective manner.

¹⁵ Health Canada: ¹⁵: www.hc-sc.gc.ca/hcs-sss/pubs/prim/2006-synth-collabor/index-eng.php ; http://www.hc-sc.gc.ca/hcs-sss/alt_formats/hpb-dgps/pdf/prim/2006-synth-collabor-eng.pdf

- The government should encourage all the Yukon public health care providers to develop a plan to improve communication and collaboration that leads to better service delivery integration where it is evident that existing service “silos” are creating barriers to service delivery.

(c) Physician Specialist

Synopsis

The mix of physician specialists is a very important element of the health care delivery in Yukon. Many of the physician specialists providing services in the Yukon do so on an itinerant basis, through visiting specialist’s clinics that they attend several times a year. This model works well for both the patients who may not have to travel to the south for medical treatment and for the specialist physician who is able to provide medical interventions over a relatively short (but intense) time frame. There is a point in time however where the need for a resident specialist is warranted due to the emergence of a sufficient caseload size. Over the past ten to fifteen years, the need for physician specialists have grown or increased in the area of gynecology and obstetrics, psychiatry, and general surgery because of population growth and changes in demographics.

The correct mix of physician specialists is critical from both a care perspective as well for cost effective delivery. It is not defensible to have a resident specialist physician on contract or fee for service, if the workload is not there. There is a breakeven point at which point the recruitment of a specialist can be justified because the workload and/or the cost of a resident physician is less than sending people outside for treatment. At this breakeven point, besides potentially being more cost effective, the patient care and patient access is generally better if the specialist physician is located in Yukon. More often than not, finding the right balance between cost and a stable cost effective service is highly dependent on specialist availability.

It is the role of the Physician Specialist Service Committee, which is made up of physicians and Department of Health staff, to determine the mix of specialists physicians required in the Yukon. The YHCRC heard that arriving at the appropriate mix is sometimes based on a decisions tree that is more qualitatively-based, as opposed to being quantitatively-based. The YHCRC learned from presenters that there is a desire to add more precision to the selection process used in determining the need for resident physicians, so that the Physician Specialist Service Committee has a sound and defensible rationale for making their decisions.

Recommended Actions

- Locally available specialist services, provided either through resident specialists or visiting specialists, as appropriate and possible, should be expanded where it can be demonstrated that they are likely to improve Yukoners access to these physician specialists' services and it is cost effective and feasible to do so.
- The Specialist Service Committee, (which currently assesses wait lists, volumes of services being provided in and out of the territory and medical travel trips/costs, and patterns of use in other jurisdictions) should be assisted in the development of quantitative and qualitative assessment tools that would improve how the Committee assesses which new specialties are required to improve Yukoners' access to care. The tools developed should lead to an evidenced-based process that assists the Committee in arriving at sound selection decisions based on access, cost effectiveness and medical appropriateness and feasibility.

5. Federal Funding to the North

Federal funding to the North must recognize the requirement for enhanced and ongoing investment in the Yukon health care system to ensure that reasonably comprehensive health care interventions are universally accessible by Yukoners, in the same way as they are for other Canadians. This investment should take the form of targeted health care investments and/or increased base funding where appropriate. This requirement is based on the reality of the Canadian North and the many health delivery challenges not faced by other jurisdictions on the same scale (e.g. small and dispersed population, large geographic distances, diseconomies of scale in health care delivery, immature health care system etc.).

Synopsis

The residents of Yukon are highly dependent on the federal government to assist in the financing of government programs and services that are similar to the services available to residents of southern Canada. The population of Yukon finances (contributes) about 17% of the funds required to provide government services and the remainder of the funding comes in the form of specific or general purpose transfers. The main federal transfer, Territorial Formula Financing (TFF), which amounts to \$564 million annually, recognizes in its workings, the higher cost of northern services, growth in population and general growth in program costs, relative to the growth of these factors in other provinces. However, the formula does not adjust for higher cost associated with diseconomies of scale or where cost increases in a program spending area disproportionately outpace average growth increases in other program spending areas.

The TFF also does not fully recognize the immaturity of the Yukon's Health Care system and the fact that although the Yukon is a small jurisdiction in terms of population, it must still meet the burgeoning needs and expectations of its citizenry; in the same way as the health care system serves other Canadians living in their province. These expectations are enshrined in the five principles outlined in the *Canada Health Act*.

As a result of the variation in the anticipated future growth of the TFF versus the expected increases in health care cost over the same periods the YHCRC has calculated that the cumulative health care funding gap will amount to about \$250 million by 2017 (see Graph A9).

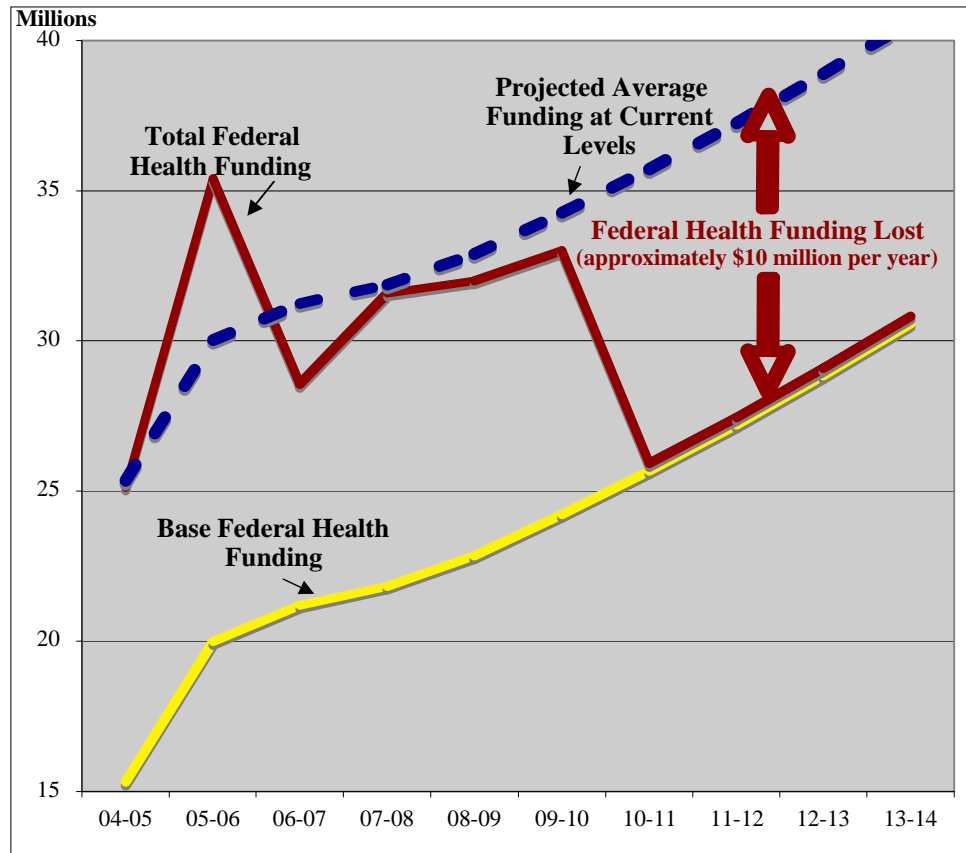
An earlier formula funding arrangement made some accommodation for these differences through a higher TFF expenditure base level at the start of the TFF arrangements, which began in 1985. However, as was

explained in the *Environment of Change* section, in 1996 the federal government of the day, as a cost saving measure, arbitrarily reduced that TFF gross expenditure base by five percent and froze the 1995/96 base to 1994/95 levels that resulted in a significant decrease in the funding grant of about seven percent at the time. Over the intervening period the cumulative value of the funding lost has grown to a billion dollars. Much of that lost funding could have been used to address and sustain the growth in health care expenditures if it was still available today.

In the late 1980's and early 1990's the federal government transferred millions of dollars of health care responsibilities to the Yukon Government (Community and Acute Care, FN Insured Health). The subsequent reductions in federal TFF funding in 1994/95 meant that the reduction imposed, saved the federal government money as they off-loaded their future financial obligations onto Yukoners. If the federal government had retained these health care services, they would have had to fund the eventual increases themselves, as growth rates in these transferred health programs grew at a faster rate than the growth in the escalator of the TFF.

In 2003 and in 2004 the federal government recognized some of the impact of the base reduction and the challenges facing the North in the area of health care delivery and as a consequence, provided some additional funding in the form of the 2003 Northern Health Supplement (\$20 million for Yukon over 3 years) and the 2004 Territorial Health Access Funding (THAF) which provides Yukon with \$21.6 million plus an additional \$8 million for medical travel over 5 years (*see appendix 1.5*). The THAF funding is set to expire in 2009/10. These funds have been used to provide innovative health care services, health promotion, reduce wait times, and improve patient access through technology. The loss of the THAF and other federal funds will further widen the health care funding gap and reduce funds available to health care funding by an additional \$10 million on an annualized basis (*see appendix 1.6*).

**Graph D2 – Federal Territorial Health Transfers
Funding Loss Projection**



While these funds are not considered to be “A” Base funds¹⁶, because they have been so significant in helping to enhance and improve health care services and service delivery, the loss to the Yukon Government will have a traumatic negative impact on the government’s fiscal framework and could necessitate service reductions in health or other government programs to fill the anticipated funding void.

While discussion are ongoing between the Yukon Government and the Federal Government, assurances need to be sought from the Federal Government, that at a minimum this funding will be reinstated and in the future added to the government’s “A Base” funding requirement. Owing to the expected increased pressures on the health care expenditures, with higher forecast growth in expenditures than in other program areas, the federal government should also be asked to review the decision to cut back the TFF expenditure base in 1994/95 and reconsider a partial or complete restoration of that base.

¹⁶ A-Base funds are funds permanently assigned to a Department and adjusted as required in order to offer the range of services they have been mandated to provide.

Recommended Actions

- Based on the demonstrated outcomes of how THAF funds have improved the effectiveness of the Yukon's health care delivery, the federal government should be asked to extend the existing THAF funding for special initiatives beyond 2009/10. At the end of the extension period the federal government should consider permanently entrenching this funding to the Yukon's Formula Funding expenditure base.
- The federal government should be asked to review the 1994/95 five percent cut to the Yukon funding base that has resulted in an "adequacy" funding gap. As an outcome of the funding reduction the Yukon government has had to divert a larger portion of the reduced TFF transfers resources to health care.

6. Institutional Governance Structures

Changes in institutional governance structures should only be considered if it is determined to be highly likely that the change will lead to both an improvement in the alignment in the delivery of health care services, and improved cost efficiency and effectiveness in the service delivery.

Synopsis

A way to improve the sustainability of a health care system, or any system for that matter, is to examine the delivery system for a better alignment of the service delivery. If it is demonstrated that realignment will lead to improvements in the efficiencies and effectiveness of that service, while at the same time not lessening the service delivery to the client base, changes should be considered. Businesses utilize this approach frequently through the consolidation of similar businesses.

In recent years governments have been examining this option in the health care area as they are faced with a dilemma of shrinking revenues and an increasing cost in health care services. The literature tells us that some of the experiments have been successful, but in some cases the revamped governance structures have really just been a way for governments to try to offload delivery services unto another organization, like a health board, who the government assumes might be able to exercise better control over cost and service delivery.

As was referenced in the *Environment of Change* Section, provincial governments who adopted the model are now pulling back and eliminating and/or consolidating health boards in order to reduce the overhead cost associated with the institutions or to seek opportunities to better amalgamate the alignment of special services. It was recognized by these governments that ultimately health boards do not have a “magic bullet” for dealing with growing health care costs and in the end the governments of the provinces must be the ones who make and are held accountable for making difficult health care financial and service decisions.

(a) Yukon Hospital Corporation – Watson Lake General Hospital

Synopsis

In the Yukon, there is only one board mandated to deliver health care services in the Yukon. The Yukon Hospital Corporation (YHC) currently has the responsibility for overseeing Yukon’s only acute care facility – Whitehorse General Hospital. The Yukon Government through the

Department of Health and Social services directly delivers the broad range of all the other acute and non-acute health services in the Yukon, ranging from long-term care services, to community health services (e.g. nursing stations and Watson Lake Cottage Hospital and children's dental) through to health promotion activities.

While the YHC legislation allows for the transfer and operation of other Yukon Health Services by YHC, to date that has not occurred. One reason why transfers have not taken place is because the Hospital Board has had its own financial challenges, governance issues, and program pressures that it has had to manage over the past 15 years.

The YHCRC heard suggestions about opportunities for service alignment from some of the groups presenting to the YHCRC. The Committee also heard about possible opportunities for co-location of health services. Co-location means that while the overall governance structure did not have to change, a better service to the client base can be achieved if the health services were co-located in the same facility or close proximity.

While there was not a consensus by presenters in the possible areas for either governance changes or co-locations, there were a couple of suggested changes identified that may meet the test of both an improvement in the efficiency and effectiveness of the delivery of the service, combined with a better alignment of the delivery for the client.

The Watson Lake Hospital (WLH), which is currently operated by the Department of Health and Social Services as part of its Community Health Services, was brought to the YHCRC's attention as a candidate for governance change. The WLH is currently classified as a cottage hospital, meaning that while it is not able to provide a full range of acute care services that you would find at WGH, it does provide some secondary care services and provides for overnight stays. Community physicians also offer their services within the facility. Nursing stations in all other Yukon communities do not achieve the same level of health care services as WLH. While they may offer 24 hour on call nurse practitioner services they do not have physicians available on call 24/7, meaning that an extended overnight stay would require a transfer of a patient to an acute care facility.

An October 12th, 2007 report by *Sierra Systems*, prepared at the request of the Department of Health and Social Services, reviewed the Yukon's Community Health Services and produced a report called *Community Health Services Review*. As part of that review they also examined the operation of the WLH. They made several important recommendations concerning the hospital operation and the need to broaden the nurse's scope of practice in the hospital. The recommendation arising from this study, which is most relevant to this review as it pertains to governance, is

that: *“Organizational infrastructure to support the maintenance of “hospital level” standards is difficult to maintain in a small institution. Consideration should be given to creating a formal relationship with the Whitehorse General Hospital and/or establishing the position of medical director for the Community Nursing Branch”*¹⁷.

This recommendation alone would justify the closer alignment of the WLH with WGH since WGH has in place the accredited structure to support hospital level standards. WGH also has a medical director who would be able to extend his/her oversight to WLH, as opposed to the Community Nursing branch hiring its own Medical Director. This change would ensure consistency in hospital level services between the two facilities. There are other obvious symmetries between the two facilities ranging from the staffing of acute care nurses and other health professionals, through to the purchasing of hospital goods and services that both organizations need to procure. An alignment of the facilities would also allow for the sharing of beds in a situation that WGH was full to capacity.

Recommended Actions

- The government should examine if the transfer of Watson Lake Cottage Hospital to the control of Yukon Hospital Corporation will improve the alignment of responsibility for acute care service delivery in the Yukon and in doing so also improve the effectiveness and efficiency of these services.

(b) Other Services

Synopsis

Through the presentations made to the YHCRC and additional analysis, the Committee considered the possibility of aligning other government run health care services with WGH. The analysis and discussion with presenters included consideration of the transfer of the Long Term Care residential facilities and other Community Nursing Stations to the Hospital Board.

The YHCRC noted that the Dawson City nursing station would be an obvious candidate for transfer under the administration of the Hospital Board, if it were to be transformed into an acute health care facility sometime in the future. The rationale would be for the same reasons that

¹⁷ Yukon Health and Social Services – Community Health Review-Sierra Systems (www.sierrasystems.com) - October 12, 2007.

were made for WLH with the proviso that 24/7 physician services would be required. In its current institutional caregiver status, the Dawson City Nursing Station does not meet the appropriate selection criteria.

The YHCRC also examined the existing long-term care residential arrangements and were of the view that the current Continuing Care model which provides for a full range of continuing care services, including: home care; community support services; supportive assisted living; as well as the three long-term care facilities, is the best vehicle for the delivery of the existing array of continuing care services. The YHCRC concluded that the integrated service now available through this continuing care model provides the best service delivery for the continuing care clientele. There were no obvious synergies gained by considering a transfer of the residential portion of the service to WGH under the governance of the Yukon Hospital Corporation, nor were there any evident savings in personnel or other costs through a consolidation of some or all of the service.

The YHCRC concluded that based on the information considered the case could not be made to justify the transfer of either institutions or other continuing care services, because it was not readily obvious that a transfer would improve both the alignment in the delivery of health care services while at the same time improving the cost efficiency and effectiveness in the service delivery. But that does not mean it will always be the case and the situation should be reviewed from time to time.

In examining the current service delivery models, opportunities for shared services were identified. While the current long-term care facility operations do not give rise to any immediate opportunities, if in the future a new long-term care facility is built or if the Thomson Centre is re-opened as a long-term care facility, then this may create new service delivery sharing opportunities. In this regard it was noted that when new prospects for service sharing are explored, that decisions to share services should be based both on the financial fundamentals, as well as taking into consideration the needs of the long-term care residents and the most appropriate service delivery model for those residents. In the past when such sharing arrangements were considered, the proposals were often deficient in either one or both of these required elements.

Recommended Actions

- In the future, the government should consider the transfer of other services and facilities to Yukon Hospital Corporation if it can be demonstrated that the transfer will lead to both an improvement in the alignment in the delivery of health care services, and improved cost efficiency and effectiveness in the service delivery. Regular reviews should be conducted to ensure that both the alignment in the delivery

of health care services and improved cost efficiency and effectiveness in the service delivery is achieved.

- The opportunity to share institutional services should be considered where it is both financially prudent to do so and the most appropriate service for residents of the facilities is assured.

(c) Co-location Opportunities

Synopsis

Co-location was another topic that came up during the YHCRC deliberations as it pertains to opportunities for service improvement and cost saving. While not a governance issue per se, co-location does fit with the concept of service alignment and efficiencies as referenced in this *Pathway for Change*.

The YHCRC heard that WGH has a large campus available for future expansion. At present many health services offered by the Department of Health and Social Services, are scattered at locations throughout the city of Whitehorse. The YHCRC noted from the presentations made, that the co-location of some of these services, potentially at WGH as an example, might make sense for both the client and the professionals working in these health sectors. The concept of co-location at WGH is further supported by the shortage of other large tracts of appropriately zoned land in the city, which are available for future infrastructure development.

Example of possible co-locations mentioned included the Whitehorse Health Centre; Community Health Services (mental health services, communicable disease, environmental health, children’s dental), and hearing services. In relation to collocation opportunities at WGH, some of the community health services are already located on the WGH campus in older facilities. However, it was observed by some presenters that there might be better ways to align and integrate these existing services with those services already offered in the hospital through joint program planning in a newer on campus facility. There may also be co-location opportunities for other health services not specifically considered. If the hospital proceeds with the planned expansion of the visiting staff residence and administrative offices, this may be an ideal time to consider other co-location opportunities as this facility is being planned and programming is developed. See additional discussion under Pathway # 8 – “Financing Opportunities”.

When a new long-term care facility is planned for the future construction, the hospital campus might also serve as a good location if sufficient space allows for it. A campus location for a new long-term care facility may

also open the door for shared service opportunities, such as laundry and food services, if considered at the initial program-planning phase.

The YHCRC noted that the consideration of co-location or shared service opportunities requires long term planning horizons and joint planning to make them an effective reality.

Recommended Actions

- The opportunities for the co-location of health services on the should be considered as part of the ongoing program and infrastructure requirements and planning processes of both the WGH and the Department of Health and Social Services if it improves service integration and helps to reduce health service delivery costs.

7. Health Human Resources

Creative ways are needed to attract and retain physicians, nurses, and other health practitioners, in addition to the current recruitment and retention programs offered by the Yukon government. Health human resources will continue to be a scarce commodity over the next decade and consequently, staffing shortages mean that employers must do as much as they can to support and retain their current health care employees by offering attractive health work environments and good job satisfaction. As the workforce ages the cost of inaction on these fronts could be substantial to the health care system.

Synopsis

The *Environment of Change* and the *Markers of Change* sections of this report, clearly make the case that health human resources will be a challenge faced by every jurisdiction in Canada over the next decade. Contributing to the challenge is an aging group of health care professionals moving to retirement, while at the same time the aging Canadian and Yukon population accessing health care services is also growing. The analysis reveals that replacement health care workers, at least in the relatively near term, will not be sufficient to meet the growing demand for doctors, nurses, radiology professionals, pharmacists and the numerous of other health care professionals who support the Canadian health care system.

In the Yukon the shortage of health care workers will be even more challenging in the future owing to its relatively remote location and the fact that it is not able to produce the required number of highly educated and highly skilled health care workers in its own post secondary education system. Yukoners will have to rely on importing many of their health care professionals from other provinces and territories. The reality is that Yukon will compete with these jurisdictions to get the health professionals to the Yukon and will also compete with the same jurisdictions to retain them.

The YHCRC heard that one of the highest priorities of Health Services Program over the next few years will be to attract and maintain the Yukon health care work force. Using federal funding, they have implemented a Health Human Resource Strategy, based on five broad initiatives:

- encouraging young people to choose a health professional education program when making decisions about their future,
- helping students in health profession education programs with the cost of their education through bursary programs,

- supporting graduates on first entering the health care work force in Yukon through such things as incentives to establish physician practices and nurse mentorship,
- supporting our existing employees by providing additional educational and training opportunities, and
- improving the quality of the workplace to improve retention.

This plan is commendable and the YHCRC was advised that the bursaries are currently supporting seven medical students, one family medicine resident, nine nursing students, and seven students in a range of programs including physiotherapy, licensed practical nursing, nutritional sciences, occupational therapy, pharmacy, and dental therapy.

The Yukon is well advanced in many of their recruitment and retention initiatives already, as evidenced by their bursary programs, continuing nursing education programs, family physicians incentive programs, practicum opportunities, and other incentive programs.

The YHCRC learned through the presentations and reviews of the literature that it is not just dollars and cents that entice professional health workers to come to or remain in the Yukon. Equally important to health professionals is being able to exercise their full scope of practice; working in an innovative and collaborative environment; cross training and promotional and opportunities to function in a workplace where there is recognition of the need for a respectful and fulfilling quality work life.

The current literature points to the fact that younger health professionals have different work habits than their parents. The balance between work and home life may be more important to them than it was for their parents, who often do not establish appropriate boundaries between their work and home life. As a result opportunities for part-time work or job sharing will become increasingly important to younger health professional grads.

The appropriate mix of health care professionals working within their approved scope of practice was also identified as a way to better utilize available human resources. Often times the ability of a health professional to operate to their full scope of practice is limited by job descriptions and outdated legislation, which restricts professional competencies. In some Canadian jurisdictions the scope of practice of some health care practitioners is being addressed. For example, in Alberta pharmacists are being allowed to prescribe certain medications, saving some physician visits. Nurse Practitioner legislation exists in all jurisdictions except Yukon. The lack of appropriate professional

legislation in Yukon, which also defines and supports a Nurse Practitioner, makes recruitment more difficult¹⁸.

The Continuing Care program provided an illustrative example of where a new staffing model was developed for the continuing care facilities, which changed the mix of the health care professionals serving the institution's residents. The model resulted in a greater use of Licensed Practical Nurses (LPNs) instead of Registered Nurses (RN). LPNs require a shorter training period than an RN and the Yukon has a record of being able to offer this training locally. This new staffing model was accompanied by the introduction of a program at the college to train LPNs. The facility also moved to convert auxiliary positions to full time to offer greater job certainty. The WGH indicated that they were also embarking on a review of their staffing model.

Finally, the YHCRC heard that there are currently barriers to sharing human resources between institutions because of employment issues including pension portability. The current inflexibility in pension plans is one of the roadblocks to a more formal agreement with Yukon health service providers that would allow for the easier movement of staff across institutions, cross training, and promotional opportunities. Existing federal pension legislation also creates issues if a person who is retired wishes to return to work on a part-time basis. The YHCRC heard that the human resource policies of all Yukon institutions responsible for hiring health care professionals might present other barriers to sharing of staff and cross training.

The YHCRC has identified in the *Recommended Actions* sections broad opportunities to build upon the existing or planned best practices in the areas of scope of professional practice, education, quality work life and of recruitment and retention, so that the Yukon can continue to provide to their residents the most highly trained and skilled health professional workforce. The appropriate mix of health care professionals in different care settings is discussed earlier in this paper under the topic of Collaborative Care models.

Recommended Actions

- The WGH should proceed with their planned review of acute care nursing mix to ensure that the most cost effective and appropriate utilization of resources and competencies, including workload is in effect at the facility.

¹⁸ Community Health and Services Review –Sierra Systems – October 12, 2007 – pg 9

- All Yukon health care facilities should review their scope of practice of their employees on a regular basis to ensure that the various health professions are able to operate within their appropriate and approved scope of practice and that their job descriptions appropriately reflect the approved scope of practice.
- The government should ensure that professional legislation allows all health professionals to work to their full scope of competencies. The review of legislation/regulations should include the examination and assessment of current trends in other jurisdictions pertaining to the practice of health care professionals and consider their applicability in Yukon. Specifically the government should continue its work currently underway to consider introducing Nurse Practitioner legislation in order to define and support Nurse Practitioners working in the Yukon. In general any scope of practice changes being contemplated need to be done in consultation with the appropriate health care practitioners who may be affected by such a change.
- The Government should continue to support and expand where possible the five broad initiatives under the Health Human Resources recruitment, retention and professional development strategies. Consideration of a recruitment and retention plan that grows to include a broader range of employers should be considered to promote the attraction of health care professionals more generally. Consideration should be given to build on and expand current investments in, and actions to accommodate the integration of new health care grads into the workforce. The ability to continue these programs is tied in part to the continuation of federal funding programs to support these initiatives (*see also Pathway #5 – Federal Funding to the North*).
- Human resource policies of all Yukon institutions responsible for hiring health care professionals should be examined to ensure that barriers to sharing employees for skills development and cross training do not exist. For example, the Yukon Government and WGH should examine their pension plans and the recent federal pension reforms announced in the last federal budget to assess if these announced changes will offer increased flexibility for retired health care workers to return to work on a part-time basis without incurring pension penalties for doing so. Portability of pension plans from WGH to the Yukon Government should also be explored to allow for health care professionals to more easily transfer their skills from one institution to another while at the same time being able to maintain their pension plan.
- Continue to pursue opportunities for formal agreements with southern hospitals regarding the assessment/training of internationally trained professionals.

- The Department of Education in cooperation with the Yukon College, the Whitehorse General Hospital and the Department of Health and Social Services should on an ongoing basis, assess the needs and demands for professional health care training in the various health care sectors with the view of determining if it is practical and cost effective to offer that training in the Yukon at Yukon College, possibly in association with a southern educational institution. An area of immediate opportunity may be to provide local training opportunities to upgrade Registered Nurses to Nurse Practitioners.

8. Cost Drivers

All partners in health care delivery must search for opportunities to continually reduce the costs of acquiring goods and services known to be significant cost drivers of the Yukon's health care system.

Synopsis

The growth in costs in all sectors of the health care system are increasing and impacting the sustainability of the system. As was presented earlier, some costs (cost drivers) can be controlled to some extent, while others (cost escalators) realistically are not controllable unless services are artificially restricted. Some of biggest drivers in the health care system are in the human resource sector, new technology, and drugs. Other service components contribute to the increasing health care costs and although there may be relatively small returns, it is important to seek out every opportunity to gain efficiencies and lower costs.

This section of the YHCRC's review focuses on ways to reduce the price paid for products and services that are "inputs" into the health care system and/or finding alternative (lower cost ways) to offer the service.

There are many areas where the declaration contained in this *Pathway* may have application, but there are several obvious areas that warrant further examination and the YHCRC undertook to examine these areas more closely.

(a) Medivac Services Procurement

Synopsis

One identified opportunity to reduce the cost of health care services in Yukon is with the Yukon's medivac service. In 2008 this service provided about 453 emergency "medivacs" both inside and outside the Yukon at an average cost of \$9,609 per "medivac" for a total contract price of \$4.3 million. In comparison, in 2003 the cost was \$6,985/medivac, and based on 373 "medivacs" it cost the government \$2.6M in that year.

The growth in both the individual "medivac" flight cost as well as the increase in the volume of flights has increased the overall cost of the program by 38% over the five years, which is an average annual growth of 7.5%. Out of territory "medivac" costs on their own, have gone from an average cost of \$12,692/medivac to \$16,206/medivac per return out of territory "medivac" flight over the same time frame. Costs in 2008/09 are expected to rise to \$17,455 per return out of territory "medivac" flight.

The current contract with the local air carrier has been negotiated on an annual sole source basis for the last several years. The negotiations commence once it has been ascertained that there are no other local carriers who are able to provide this very specialized transportation service. While this contract has been publicly tendered to outside carriers in the past, in recent years the contract has not been tendered outside the Yukon. While it is important to support local businesses it is also essential to assess if Yukoners are getting the best value for their taxpayers' dollar.

At just over \$4.3 million the cost of “medivacs” is now becoming a significant cost to the health care system and is expected to grow as the population ages. Yukoners deserve to know if they are getting the best deal that they can. It is known that costs associated with “medivacs” in some other Canadian jurisdictions are not as high as those experienced in Yukon. There may be a variety of reasons for the lower costs, including the other carrier’s ability to offer other services and spread their fixed costs over a larger volume of flights or different service levels. Although the Committee received comparative “medivac” or air ambulance costing information, which suggests lower overall costs in other jurisdictions, it was difficult to make precise cost comparisons with Yukon’s “medivac” service. Accordingly the Committee has not attempted to project potential savings because without testing the market through an open tender it is not known exactly what savings might be achieved based on the service requirements identified.

Recommended Actions

- The government should consider the public tendering of the air “medivac” program including allowing competition from providers not currently located in the Yukon.

(b) Drug Procurements

Synopsis

The cost of pharmaceuticals is another expenditure area that requires closer scrutiny. In 2008 the Yukon Government spent just over \$5.8 million on procuring the prescription drugs for its three main drug and extended care programs. Of this amount, \$690,616 or 12% of the total were the dispensing fees associated with the cost of filling the prescriptions. Over the last 10 years the cost of these drugs programs have increased markedly. As discussed previously the YHCRC’s research into cost drivers and cost escalators, indicates that in the future, drugs cost will grow at a higher rate than other health care expenditures and consequently will take an increasing share of the health care pie.

In the Yukon, drugs purchased for the pharmaceutical programs are made by the government through individual drug stores. The price paid by the government is based on a 1995 agreement with the pharmacist that expired in 1997 and has not been renewed. This agreement calculates a distributor wholesale mark-up of 14% plus an additional pharmaceutical retail mark-up of 30% on this acquisition price, plus a professional dispensing fee of \$8.75 per prescription. While the current professional fee charged is below the national average, the mark-up allowed is one of the highest in the country. As drug prices increase the mark-up increases proportionally. With the introduction of new very high priced boutique and genetic drugs, a markup of 30% on a \$1,000.00 drug would result in a \$300 mark-up charge that the dispensing agency (drug store) would receive. The additional work and dispensing cost associated with dispensing a \$1,000.00 drug versus a \$50.00 drug one can argue are marginal at best.

To control the growth in drug costs other provinces have introduced various policies that dictate what their government will pay pharmacists and drug manufacturers for their purchase. Some jurisdictions have allowed increases in the dispensing fees but decreased significantly the permitted mark-up on the product. *Appendix 2.4* is a summary of the reimbursement costs for prescription drugs across Canada and this table clearly illustrates that the Yukon's wholesale and pharmacy mark-ups are appreciably higher than any other jurisdiction. For example B.C.'s markup is only seven percent on the actual acquisition cost (AAC)¹⁹, whereas, the comparable Yukon price would be 14% on the acquisition price plus another 30% retail mark-up on top of that.

An illustrative example of the differences may be helpful. If one assumes the actual acquisition cost for a drug is \$100, the following table shows what the government of Yukon and B.C. would pay for the same drug. The difference is \$41.35 or 36% on a \$100 acquisition. Put another way the cost to the Government of B.C. for filling its prescription is 73.6% of the Yukon equivalent cost.

¹⁹ Note to readers related to the illustrative example: It is not known exactly what is included in the British Columbia AAC. The AAC could already include a distributors markup. Many drugs are not available directly from the manufacturer and have to be acquired through a distributor. Yukon only applies the distributor markup of up to 14% if the drug is purchased through a distributor.

Table D2: Drug Programs

Jurisdiction	Yukon Drug Public Purchase	British Columbia Public Drug Purchase	Cost Difference
Actual Acquisition Cost (AAC)	\$100.00	\$100.00	\$0
Wholesale Mark-up	\$14.00	\$0.00	\$14.00
Pharmacy Mark-up	34.20	\$7.00	\$27.20
Dispensing Fee	8.75	8.60	\$0.15
Total Cost of Prescription to Government	\$156.95	115.60	\$41.35

If you apply this same cost differential across the total Yukon drug program cost of \$5.8 million, theoretically the governments drug cost could be decreased by up to \$1.6 million, bringing the cost down to \$4.2 million (\$5.8M x 73.6%) if the same procurement plan was implemented. In the Yukon, it may not be realistic to expect the pharmacies to be able to offer the government the same level of discount that is offered in other jurisdictions because the drug plans are smaller in volume than other provincial programs, but clearly the comparison of reimbursements in other jurisdictions illustrates that the expectation for a better pharmaceutical deal is a realistic goal for the government to pursue either through negotiations or legislation.

Another approach to the drug pricing issue would be to put out to tender all the drug program purchases for the government. This would include the purchase made in all three of the Yukon drug programs plus the drug purchases made for both the hospital and long-term care facilities. The bulk tender approach would mean that only one organization would distribute all drugs in the Yukon. A bulk tender could mean that a large outside pharmaceutical supplier could win the tender and provide all drugs through a distribution point(s) it would set up in Yukon. It is not known if any savings would ultimately be achieved through a bulk tender, but the approach would test the pharmaceutical market and require that local

suppliers compete on a national basis for the government's business. A public tender approach is used for most other government procurements, but this would be a first time in the areas of pharmaceuticals.

One of the risks associated with this approach, is if an out of territory supplier won the contract, they may only want to provide a drug dispensing service to the government and not the public in general. While they would have to have a local distribution point to provide clients of programs with their drugs, they may not have a storefront operation that would service the public at large. At the same time the loss of this government business by local pharmacists might have a serious impact on their future financial viability and ability to sustain the same level of pharmaceutical services to the general public.

Drug pricing and drug procurement is a complex area with many possible permutations and combinations to be considered. While price and reimbursement arrangements are an important element, the issue of formularies and use of generic drugs must also be considered into the equation. It is not within the scope or mandate of the YHCRC to focus on just one area such as pharmaceuticals. It will be up to government and their professional staff to do the in-depth analysis and decide what approach works best and is in the public interest.

A recent internal audit conducted by the government on the Pharmacare and Extended Health Benefits Program²⁰ provides additional guidance to the government, as might the *Report on the Pharmaceutical Task Force*²¹, which recently reported to the Government in BC. In the end what is critical is to ensure that clients of the programs have access to the drugs they require at a cost that is reasonable to the government and provides a fair level of compensation to the pharmacists. If an acceptable pharmaceutical pricing scheme cannot be achieved through negotiations, which is a preferred route, legislative options for establishing prices have been successfully applied in other Canadian jurisdictions.

²⁰ Report on the Audit of the Pharmacare and Extended Health Benefits Programs – December 2006 – Government of Yukon Audit Services Branch.

²¹ Report of the Pharmaceutical Task Force, Province of BC – April 2008
<http://www.health.gov.bc.ca/library/publications/year/2008/PharmaceuticalTaskForceReport.pdf>

Recommended Actions

- The government should closely examine its options related to the reimbursement costs for prescription drugs (including bulk tendering) and initiate a negotiation process with representatives of the community pharmacists to achieve a new price and reimbursement arrangement. If that is not successful, legislated pricing should be considered.

(c) Financing Opportunities

Synopsis

As discussed in the recommendations section - Pathway # 6, there are identified co-location opportunities that the Government and the Whitehorse General Hospitals may wish to consider in the future. Accompanying any decision to build new infrastructure will be the need to consider how those capital projects will be funded.

The traditional method for financing government projects is through accessing available cash or by borrowing to finance the debt. Both of these methods are valid financing mechanisms, but in recent years public private partnerships have provided a third method to finance capital projects.

A public private partnership, or P3, is a legally binding contract between government and industry for the provision of assets and the delivery of services that allocates responsibilities and business risks among the partners. The government or public corporation remains actively involved throughout the project's life cycle. But the private sector is responsible for the commercial functions such as project design, construction, finance, and operations.

In Canada, P3 has demonstrated itself to be an effective financing and service delivery mechanism where the project selected meets specific assessment criteria that form part of a business case that considers all alternatives. One Canadian P3 project that has often been held out as being a positive working example of a P3, is the Confederation Bridge in PEI. There are many other provincial examples of P3 projects with positive results, ranging from the building of student residence buildings through to the construction of highways and bridges. However, the use of P3 can bring with it controversy, particularly when it is associated with the construction of public institutions such as hospitals, continuing care facilities, jails and educational facilities.

The Yukon has in place an appropriate public policy to deal with P3s. It is contained in the *Government Administration Manual (GAM) Policy 1.19*.

The policy states that in order to ensure effectiveness in meeting the government's objectives, accountability and transparency, and continued access to the service by the general public, that all P3 projects must be approved based on five sound overarching principles (including value for money) and will require performance standards to be in place to assess the outcome of the project. A project can only proceed as a P3 if after an assessment it emerges as the best way for delivering the project. The Yukon Government's P3 policy assesses the efficacy of the P3 method of financing against the more traditional options of borrowing or funding from available cash flow.

There may be opportunities in the health sector that could prove to be appropriate candidates for a P3. As referenced earlier there might be the need to replace hospital campus buildings. If there are commercial aspects to these buildings, such as the opportunity for commercial leases and/or residences, such a capital project of this scope might fit well within the P3 criteria.

The hospital does not currently have a formal P3 policy. The *Government Administration Manual (GAM) Policy 1.19* states that the policy applies to all government corporations defined in the Act. Although the hospital corporation is not included in this Act and therefore not required to comply with the policy, it might be well served by adopting a similar policy to that being used by the government if it is considering P3 expansion opportunities.

Recommended Actions

- The government and/or the Hospital Corporation may wish to consider the use of P3 for future health construction projects that adhere to the GAM policy 1.19, which establishes a clear process for an organization to use in identifying, evaluating, selecting and entering into a public-private partnership. Such a policy needs to include a comparison to traditional financing models in order to ensure the most effective financing tool is employed.

9. New or Enhanced Services, Procedures, and Technologies

New or enhanced services, procedures, and technologies should be utilized where a business case demonstrates that these will drive cost savings in the future, and/or significantly improve patient access and outcomes in a cost-effective way relative to other possible uses of that funding for health.

Synopsis

It is known that new health technologies, enhanced services and procedures will contribute to the growth of health care costs in the future. At the same time the investment in new technologies or new procedures is critical in order to provide the necessary tools to health practitioners that are known to improve patient access and outcomes. The challenge is to invest in the appropriate technologies that are demonstrated to be cost effective, relative to where else those same funds could be invested in the health care system. Making this determination is not always an easy task, especially in a North American society, which has been trained to believe that they need the newest and the fastest in health care technologies. Oftentimes old technologies or methods will achieve the same outcomes at a lower cost, but may just lack in the speed or precision in how results are arrived at.

For these reasons the YHCRC concluded that it is imperative that each case for new technologies or services be critically examined to ensure that it is appropriate for the situation and that it is assessed against other uses for the same limited dollars.

The Yukon Government has proceeded in introducing new technologies in several areas that help achieve access and potentially improve outcomes. A recent announcement was the introduction of an 811-telephone number that allows an individual to call in by phone to seek medical advice from a trained health care professional. This technology provides the client with immediate advice and potentially saves the individual the time of accessing emergency care in a facility, if appropriate advice can be offered by phone. The system also has the potential of reducing emergency room and after hour community nursing station visits, which have increased dramatically over the past number of years.

The Yukon also has several telehealth projects underway that are now available to all Yukon communities and are being used to provide: psychiatric visits; mental health counseling; alcohol and drug counseling; rehabilitation therapy; family visits both in and outside of territory health facilities; and health education. The telehealth model has the potential to

expand into other areas as well. Telehealth is growing in acceptance as a model of care provider. It increases the capacity to provide care at the community level and helps avoid client and caregiver travel, both in and outside the Yukon.

There are other opportunities for use of new technologies. For example the use of MRIs is increasingly being seen as the accepted standard in care, as the price of this technology decreases making it more affordable for a smaller acute care facility to purchase and operate. Digital teleradiology and electronic patient health records are two other technology areas that are demonstrating their value to improving patient outcomes.

All these technologies are expensive and must be carefully examined and analyzed in depth to ensure that the health care system is getting value for the money expended. In some cases although there is a large upfront cost to purchase the technology. In addition to the more immediate health care benefits, there are financial benefits and payoffs downstream.

Recommended Actions

- The 811 line should be assessed after one year to see if the new service has been cost effective and if it should be modified in any way to better meet client needs.
- Other telehealth opportunities should be sought out and its use expanded if it can be demonstrated that the application will be cost effective in improving access to care and improving health outcomes.
- New technologies such as MRI; digital tele-radiology; electronic health records; expansion of the Hospital Meditech system at WGH; and public health information systems should be considered where it can be demonstrated that they will be a more efficient and effective utilization of scarce financial and human resources, while at the same time responding to clinical need and improving access to care and patient outcomes. A complete business case needs to be considered in each and every situation and assessed against all other technology options, and alternative use of the resources in other areas. New technology should not be implemented simply in response to public demands if the business case is not clearly demonstrated.

10. Accountability

Enhanced performance and accountability agreements with health care delivery providers need to be employed. The accountability agreements need to make use of quantifiable performance indicators and performance targets, developed as part of a strategic planning process, to ensure that the programs and services offered are accompanied by measurable performance outcomes that the Minister and public can reasonably assess.

Synopsis

There has been considerable interest in the Yukon recently around the issue of accountability as well as the closely associated issue concerning the governance of major crown corporations, including WGH. Both the Auditor General of Canada (AG) and the Yukon Legislature's Public Accounts Committee have recommended that the government review many of the aspects of the governance arrangements with its six major crown corporations including:

- legislative framework and mandate,
- governance structure,
- accountability relationships between boards, government, and the public,
- appointment process for the corporation boards,
- training of board members, and
- enhanced planning and reporting.

A study commissioned by the Department of Finance on the issue of corporate governance, followed up on these six recommendations and examined the issue of corporate governance and researched the best practices for corporate governance in both the public and private sector. The report prepared by Deborah McNevin in 2006, entitled *Emerging Issues in Public Corporate Governance* identified the best practices for corporate governance in the private sector that are equally relevant to the public sector. McNevin also examined the areas of weakness in corporate governance with the government's corporations and made recommendations to improve corporate governance practices.

Over the last year the Hospital Corporation has taken steps to improve its accountability and corporate governance. Many of the best practices as recommended in the McNevin report, some of which had previously been initiated, have now been adopted or updated and are currently being instituted by the Hospital Corporation Board. For example,

recommendations such as: setting strategic directions and establishing a few key priorities; using the AG as the Hospital Corporation Auditor for consistency; and public reporting are now in place or well underway.

One accountability area that has not seemingly been addressed is the recommended practice of a shareholders' letter of expectation or mandate letter. This is a letter that is drafted by the Minister in consultation with the Chair of the Board and outlines the Minister's expectations of the Board and Board Chair in the following areas:

- formalize roles/responsibilities of Chair, Board and Minister,
- provide indication of three to four strategic priorities,
- ensure general reporting and performance expectations for the Chair and Board,
- require the Board to appear before Legislature, and
- include consultation requirements, as appropriate.

The letter can also be used to outline broad financial matters (e.g. budgets, financial agreement plans).

This is a critical document, which provides the Board with the broad direction within which it needs to operate on an annual basis. As well as indicating the Minister's expectations of the Board, the Minister's and the government obligations in relation to the stated performance expectations are also a key component of the document.

The absence of such a document means that the Board may be operating without a clear knowledge of what the government expects of the Board (i.e. its mandate). It is difficult and unreasonable of a government to be critical of an organization's performance if the major shareholder (the government) has not set the broad direction and agreed to performance targets for that organization.

For the same reasons noted above, the Department of Health and Social Services has created an accountability agreement for their Minister through the Deputy Minister's 'Letter of Undertaking' and through a new Performance Development Plan. Following the Premier's direction, the Department has been undergoing a strategic planning process. It is close to finalizing a new strategic plan that will strengthen its capacity to manage for results by developing an integrated performance measurement approach to departmental planning. The strategic plan will identify defined initiatives that will help achieve its business goals and define the Department's vision for the next 5-10 years, along with its goals and strategies and their corresponding performance targets. It will be linked to the newly developed Performance Development Plans for senior

managers, which cascade down from the Deputy Minister's Performance Development Plan that is reflective of the Government's overarching priorities.

Linked to this planning process, the Department has initiated a review of its governance structure, which is intended to reinforce stewardship; formalize a sound decision-making process; and provide the framework necessary to effectively implement its new strategy. These measures will clarify the roles and responsibilities within the Department and help ensure that the Department is well- managed to meet the needs of Yukoners.

The overall intent is to ensure the Department's goals and objectives are reflected in its planned activities and that accountability measures are in place to monitor and evaluate its performance. Annual reports or updates will complete the accountability 'loop' by providing information about actual achievements and performance relative to the goals and targets set out in the plans.

Recommended Actions

- To improve accountability, the Minister of Health and Social Services, in consultation with the Board Chair, should be providing the Chair and Board of the Hospital Corporation with an annual letter of expectation that provides the Hospital Board with a written mandate and articulates the Minister's expectation for the board, as well as the Minister's obligations to the Hospital Corporation.
- The Department of Health and Social Services should continue to develop an accountability plan on an annual basis for the Government and Minister that identifies the Department's strategic direction and planned actions to achieve that direction. The plan needs to include the identification of measurable indicators that can be used by the government to assess performance and outcomes.

Additional Materials

This page left blank intentionally.

References

Web References

www.cihi.ca

www.chha.ca/documents/Hearing_Aid_Subsidies_Across_Canada.pdf

www.bankofcanada.ca/en/rates/inflation_calc.html

www.health.gov.bc.ca/msp/infoben/premium.html

www.canada-health-insurance.com

www.cihi.ca/cihiweb/en/downloads/list_of_publications_and_products_new.pdf

Publication References

A Framework for Reform, Report of the Premier's Advisory Council on Health Care, December 2001, Government of Alberta

A Sustainable Health System for Alberta, Report of the M.L.A. Task Force on Health Care Funding and Revenue Generation, October 2002, Government of Alberta, ISBN 0-7785-2694-1

Access to Health Care Services in Canada, January to December 2005, Statistics Canada, Catalogue no. 82-575-XIE

Advice and Recommendations of the Advisory Committee on Capital Investment in Long Term Care, The Advisory Committee on Capital Investment in Long Term Care, July 2000, Government of Nova Scotia

Arithmetic Failure and the Myth of the Unsustainability of Universal Health Insurance, François Béland PhD., July 2007 Canadian Medical Association Journal

Avoidable Cost of Alcohol Abuse in Canada 2002, March 2008, Centre For Addiction And Mental Health

Building the Foundation of a Strong Public Health System for Ontarians, 2005 Annual Report of the Chief Medical Officer of Health to the Ontario Legislative Assembly, Ministry of Health and Long-Term Care, Government of Ontario

Canada Health Act, Annual Reports, Various Years, Health Canada

Canada's Health Care System, 2005, Health Canada

Canada's Health Care System and the Sustainability Paradox, Irfan Dhalla MD, July 2007, CMAJ

Canadian Addiction Survey (CAS), A National Survey of Canadians' Use of Alcohol and Other Drugs, Prevalence of Use and Related Harms, March 2005, Health Canada

Canadian Perception of the Health Care System, Stuart N. Soroka, February 2007, Health Council of Canada

Caring for Medicare Sustaining a Quality System, Commission on Medicare, Commissioner Kenneth J. Fyke, April 2001, Province of Saskatchewan

Challenging Health Care System Sustainability: Understanding Health System Performance of Leading Countries, A Follow-Up to the Understanding Health Care Cost Drivers and Escalators Report, March 2004, The Conference Board of Canada

Changing Nova Scotia's Healthcare System: Creating Sustainability Through Transformation, Final Report, December 2007, Department of Health, Province of Nova Scotia

Choosing Canada's Health Care Future Lessons of the 1990s and the Challenges Ahead, James G. Frank, Vice-President & Chief Economist, April 27, 2001, The Conference Board of Canada

Commission on the Future of Health Care in Canada, Building on Values: The Future of Health Care in Canada – Final Report, Commissioner: Roy J. Romanow, ISBN 0-662-33043-9, including discussion papers

Discussion Paper on a Provincial Strategy for End-of-Life Care in British Columbia, October 2002, British Columbia, Ministry of Health Services

Drug Expenditure in Canada, Canadian Institute for Health Information, Various Years, Ottawa

Drug Expenditures in Canada, 1985 to 2006, Canadian Institute for Health Information

Emerging Issues in Public Corporate Governance, January 2006, Deborah Mcniven

Getting our Money's Worth, February 2008, Gouvernement du Québec, ISBN 978-2-550-52156-3

Going Further: Building on a Framework for Reform Committee on Collaboration and Innovation, September 2002, Committee on Collaboration and Innovation, Government of Alberta

Health Care in Canada, 2007, October 2007, Canadian Institute for Health Information

Health Care Renewal in Canada: Measuring Up? February 2007, Health Council of Canada

Health Care Spending, Fiscal Sustainability, and Public Investment, Joe Ruggeri April 2006, Public Policy Paper 42, Province of Saskatchewan, ISBN# 0-7731-0564-6

Health Expenditures in Canada by Age and Sex, 1980-81 to 2000-01, Health Policy and Communications Branch, Health Canada

Health Human Resources Supply and Demand Analysis, Prince Edward Island Advisory Committee on Health Human Resources, November 16, 2001, DMR Consulting Inc.

Health Indicators, 2008, Canadian Institute for Health Information, ISBN 978-1-55465-270-9

Health Reform Implementation Team Final Report, January 2004, Alberta Health

Health Spending in Saskatchewan: Recent Trends, Future Options, Mr. Daniel Hickey, SIPP Government of Saskatchewan Senior Fellow, 2005-06, Saskatchewan Institute of Public Policy, University of Regina

Healthy Aging Through Healthy Living, Towards a comprehensive policy and planning framework for Seniors in B.C., a discussion paper, British Columbia Ministry of Health,

Healthy Aging Through Healthy Living: Towards a Comprehensive Policy and Planning Framework for Seniors in B.C., 2005, British Columbia Ministry of Health, ISBN 0-7726-5461-1

Healthy Futures: Securing New Brunswick's Health Care System, The Provincial Health Plan, 2004-2008, Government of New Brunswick

Hearing Aid Subsidies Across Canada, Jessica Perreault, Assistant Researcher, Canadian Hard of Hearing, www.chha.ca/documents/Hearing_Aid_Subsidies_Across_Canada.pdf

Highlights from the Regulated Nursing Workforce in Canada, 2006, Canadian Institute for Health Information

How Could Interdisciplinary Practice and Collaboration Enhance Health Outcomes for Nova Scotians?, An Assembly about Interdisciplinary/Interprofessional Practice and Collaboration in Nova Scotia, November 30, 2006, College of Registered Nurses of Nova Scotia

How Good is Canadian Health Care? 2007 Report, An International Comparison of Health Care Systems, Nadeem Esmail and Michael Walker, November 2007, Fraser Institute

How Sustainable is Medicare? A Closer Look at Aging, Technology and Other Cost Drivers in Canada's Health Care System, Marc Lee, 2007, Canadian Centre for Policy Alternatives

Influences on the Health Care Technology Cost-Driver, Steve Morgan, Ph.D. University of British Columbia, Jeremiah Hurley, Ph.D., August, 2002, McMaster University, ISBN 0-662-32784-5

National Health Expenditure Trends, 1975-2007, Canadian Institute for Health Information

Newfoundland and Labrador Heart Health Program, Final Report, 2002, Government of Newfoundland and Labrador

Paying More, Getting Less 2007, Measuring the Sustainability of Government Health Spending in Canada, Brett Skinner and Mark Rovere, December 2007, Fraser Institute

Physicians in Canada: Fee-for-Service Utilization 2005–2006, 2008, Canadian Institute for Health Information

Physicians in Canada: The Status of Alternative Payment Programs 2005–2006, April 2008, Canadian Institute for Health Information, ISBN 978-1-55465-374-4

Prince Edward Island Advisory Committee on Health Human Resources Health Human Resources Supply and Demand Analysis Executive Summary, Anne Marie Atkinson and Sonya Hull, November 16, 2001, Government of Prince Edward Island

Prince Edward Island Physician Recruitment/Retention & Medical Education Strategy, April 2006, Prince Edward Island Department of Health

Province of Nova Scotia Action Plan, August 2006, Department of Health, Government of the Nova Scotia

Provinces in Transition, Tackling Canada's Toughest Policy and Management Challenges, 2008, Deloitte

Provincial Wellness Advisory Council Recommendations for a Provincial Wellness Strategy: Framework Document, 2003, St. John's, NL: Department of Health and Community Services, Government of Newfoundland and Labrador

Rekindling Reform, Health Care Renewal in Canada, 2003 – 2008, June 2008, Health Council of Canada

Report of the Pharmaceutical Task Force, to the Honourable George Abbott, Minister of Health, April 2008, Province of British Columbia

Report to Yukoners on Comparable Health and Health System Indicators, 2004, Government of Yukon

Residential Care Facilities, November 2007, Statistics Canada, Catalogue no. 83-237-X, 2005/2006

Safe and Sound: Optimizing Prescribing Behaviours A Policy Symposium Held on June 12–13, 2007, Summary of Main Themes and Insights, Health Council of Canada

Shaping Our Future 2006-2007, April 2006, Health and Social Services, Northwest Territories

Stepping into the Future, Early Childhood Development and Early Learning and Child Care Initiatives Progress Report, 2005 and 2006, Government of Newfoundland and Labrador

Strategic Plan 2001-2005 for the Prince Edward Island, Health and Social Services System, Department of Health and Social Services, Government of Prince Edward Island

Sustainability in Public Health Care: What Does It Mean? A Panel Discussion Report, July 2008, Lillian Bayne and Associates

The Burden of Proof, an Alberta Model for Assessing Publicly Funded Health Services, March 2003, Final Report of the Expert Advisory Panel to Review Publicly Funded Health Services

The Evolving Role of Canada's Fee-for-Service Family Physicians 1994 to 2002, August 2006, Canadian Institute for Health Information

The Federal Role: Interim Report of the Standing Senate Committee on Social Affairs, The Health of Canadians (The Kirby Report), Standing Senate Committee on Social Affairs, Science and Technology, Science and Technology, Vols. 1-6: The Senate, 2001-2002

The First Ministers' Accord on Health Care, May 2001, The Conference Board of Canada

The Fiscal Burden of the Young and the Elderly, Joe Ruggeri, Yang Zou & Yan Zhang, November 2005, Public Policy Paper 37, Province of Saskatchewan, ISBN#0-7731-0542-5, Report of the Task Force on the Funding of the Health System

The Future Cost of Health Care in Canada, 2000 to 2020, Glenn G. Brimacombe, Pedro Antunes & Jane McIntyre, Balancing Affordability and Sustainability, Conference Board of Canada

The Sustainability of Canada's Healthcare System: A Framework for Advancing the Debate, Neil Stuart and Jim Adams, Longwoods Review, Vol. 4, No 4, 2007

The Yukon: Pioneers in Home Care Information, Analysis in Brief, October 2007, Canadian Institute for Health Information

Toward Better Health Care For British Columbians, November 2004, British Columbia, Ministry of Health Services, ISBN 0-7726-5238-4

Towards 2020: Vision for Nursing, 2006, Canadian Nurse Association, ISBN 151119-818-5

Transforming New Brunswick's Health-Care System: The Provincial Health Plan 2008-2012, 2008, Province of New Brunswick, ISBN 978-1-55471-085-0

Understanding Health Care Cost Drivers and Escalators, March 2004, The Conference Board of Canada

Unleashing Innovation in Health Systems: Alberta's Symposium on Health, August 2005, The Conference Board of Canada

Vision For Change, The Canadian Nurses Association Offers Practical Solutions, New Thinking and Innovation in the Health System, 2008, Canadian Nurses Association

Where Our Health Dollars Go, 2007, Canadian Institute for Health Information, ISBN 978-1-55465-050-7

Working Together, Moving the vision Forward, Interdisciplinary Practice (IDP) Initiative, 2008, College of Registered Nurses of Nova Scotia

Yukon Comparable Health Indicators Report, 2004, Yukon Government

Yukon Health Status Report, 2003, Yukon Government

Yukon: Pioneer in Home Care Information, Analysis in Brief, 2007, Canadian Institute for Health Information

Appendix 1

1.1 Legislative/Legal History of Health

adapted from Conference Board of Canada

1867 British North America (BNA) Act

- Divided rights and powers between the federal and provincial governments. Section 92 of the Act states that provinces have the exclusive right to make laws in relation to the establishment, maintenance and management of hospitals.
- The federal government, however, maintains specific responsibility for the indigenous community, the military, quality of food and drugs and spending powers.

1982 Constitution Act

- Provinces maintained the exclusive rights to administer and deliver health care services by deciding where their hospitals will be located, how many physicians will be required, and how much money they will spend on their health care systems.

1957 The Hospital Insurance and Diagnostic Services Act

- Passed to provide hospital insurance coverage for Canadian Citizens.
- By 1961, the Act was operating in all provinces, covering 99 per cent of Canada's population.
- The financing arrangement in the Act provided for a federal contribution of approximately 50 per cent towards the cost of hospital eligible services.

1966 The Medical Care (Medicare) Act

- Appeared as a result of recommendations made by Justice Emmett Hall, chair of The Royal Commission on Health Services, to increase federal leadership and financial support for a broader basket of services.
- The Act provided coverage for physicians' services and additional services provided by dentists and chiropractors.
- Federal contributions were given when the principles of comprehensiveness, universality, portability and public administration were met.
- The federal government contributed to each province half of the average per capita cost of all provinces multiplied by the number of insured persons in that province.

1977 The Established Program Financing (EPF)

- Act This Act developed a block fund for hospitals, medical care and post-secondary education.

1984 Canada Health Act

- Introduced to replace the Hospital Insurance Act and the Medical Care Act.
- The Canada Health Act establishes the criteria and conditions related to insured health care services that the provinces and territories must meet in order to receive the full federal cash transfer contribution under the current transfer mechanism (the Canada Health and Social Transfer and now the CHS).

1.2 Canada Health Act

On April 1, 1984, the Parliament of Canada passed the *Canada Health Act*. This Act reiterated the principles of the two previous federal acts – the Hospitalization Insurance Act of 1957 and the Medical Care Act of 1966. The *Canada Health Act* sets out five criteria to which the provincial plans must conform to receive the federal government’s financial participation – public administration, comprehensiveness, universality, portability and accessibility. The federal government pays the full amount of its cash contribution when the health insurance plan of a province or territory is in compliance with the five criteria defined in the *Canada Health Act*: The provinces and territories have the constitutional authority to legislate, regulate, administer and deliver health services locally. Provinces and territories have created legislation to regulate their own health systems.

The five Canada Health Act principles include:

Public Administration:

- requires provincial and territorial health care insurance plans to be managed by a public agency on a not-for-profit basis.

Comprehensiveness:

- must insure all medically necessary services provided by hospitals, medical practitioners and dentists working within a hospital setting.

Universality:

- public health care insurance must be provided to all Canadians.

Accessibility:

- provide all insured persons reasonable access to medically necessary hospital and physician services without financial or other barriers.

Portability:

- all Canadians must be covered under public health care insurance, even when they travel within Canada and internationally or move from one province to another.

1.3 Federal Provincial Territorial Transfers

The following is a short summary of the major events in the history of federal-provincial-territorial health transfers. This summary only shows transfers provided to all jurisdictions and excludes special funds provided to the territories (e.g. THAF):

2007

- Canada Health Transfer (CHT) restructured to provide equal per capita effective 2014-15
- \$2.4 billion through three third-party trusts.

2004

- \$41.3 billion in additional funding, including \$35.3 billion to the CHT and an annual 6% escalator, \$5.5 billion in Wait Times Reduction funding, and \$500 million in support of medical equipment.
- CHST was restructured - Canada Health Transfer and the Canada Social Transfer.
- \$2 billion to 2004 CHST supplement for health.

2003

- Two-year extension to 2007-08 of the five-year legislative framework put in place in September 2000 with an additional \$1.8 billion.
- \$2.5 billion CHST supplement, and restructuring of the CHST to create a separate Canada Health Transfer and a Canada Social Transfer effective April 1, 2004.

2000

- \$21.1 billion of additional CHST cash, including \$2.2 billion for early childhood development over five years.
- \$2.5 billion increase for the CHST to help provinces and territories fund post-secondary education and health care.

1999

- CHST funding of \$11.5 billion over five years, specifically for health care. Changes were made to the allocation formula to move to equal per capita CHST by 2001-02.

1998

- \$12.5 billion cash floor beginning in 1997-98 and extending to 2002-03.

1996

- Five-year CHST funding arrangement (1998-99 to 2002-03) and a cash floor of \$11 billion per year.
- For 1996-97 and 1997-98, total CHST maintained at \$26.9 billion and \$25.1 billion respectively. Thereafter the transfer was set to grow at GDP-2%; GDP-1.5% and GDP-1% for next three years.

1995

- EPF and CAP programs replaced by a Canada Health and Social Transfer.
- EPF growth was set at GNP-3.
- CHST was set at \$26.9 billion for 1996-97 and \$25.1 billion for 1997-98. CHST for 1996-97 was allocated among provinces in the same proportion as combined EPF and CAP entitlements for 1995-96.

1994

- EPF transfers in 1996-97 no higher than in 1993-94.

1991

- Extended EPF freeze introduced in 1990-91, for three more years to 1994-95.

1990

- EPF per capita transfer was frozen for 1990-91 and 1991-92 for all provinces.

1989

- EPF growth further reduced to GNP-3% beginning in 1990-91.

1986

- EPF growth was reduced from GNP to GNP-2% indefinitely.

1984

- The Canada Health Act was enacted.
- EPF funding conditional on Canada Health Act and provisions for withholding funding were introduced.

1983

- The post-secondary education portion of EPF was limited to 6% and 5% growth for 1983-84 and 1984-85 under the "6&5" anti-inflation program.

1982

- GNP per capita escalator applied to the total EPF, rather than EPF cash.

1977

- Established Programs Financing (EPF) was introduced.

1.4 Factors That Determine Health

Income and Social Status

- Health status improves at each step up the income and social hierarchy

Social Support Networks

- Support from families, friends and communities is associated with better health

Education

Health status improves with level of education.

Employment and Working Conditions

- Unemployment, underemployment, stressful or unsafe work are associated with poorer health.

Social Environments

- Values and norms influence health and well-being. Social stability, respect for diversity, and freedom from violence contribute to a society with reduced health risks.

Physical Environments

- Physical factors in the natural environment - air, water quality - and those in the human environment - housing, work safety - are key influences on health.

Personal Health Practices and Coping Skills

- Healthy lifestyle practices, as well as people's knowledge, behaviors and coping skills for positively dealing with life, are key influences on health.

Healthy Child Development

- The effect of prenatal and early childhood experiences on subsequent health, well-being, coping skills, and competence, is very powerful.

Biology and Genetic Endowment

- The basic biology and organic make-up of the human body are a fundamental determinant of health.

Health Services

- Health services, particularly those designed to maintain and promote health, to prevent disease, and to restore health and function contribute to population health.

Gender

- Men and women experience different types of diseases at different ages. Also, many health issues are a function of gender-based social status or roles.

Culture

- Some persons or groups may face additional health risks due to a socio-economic environment.

Adapted from the Public Health Agency of Canada website, 2008

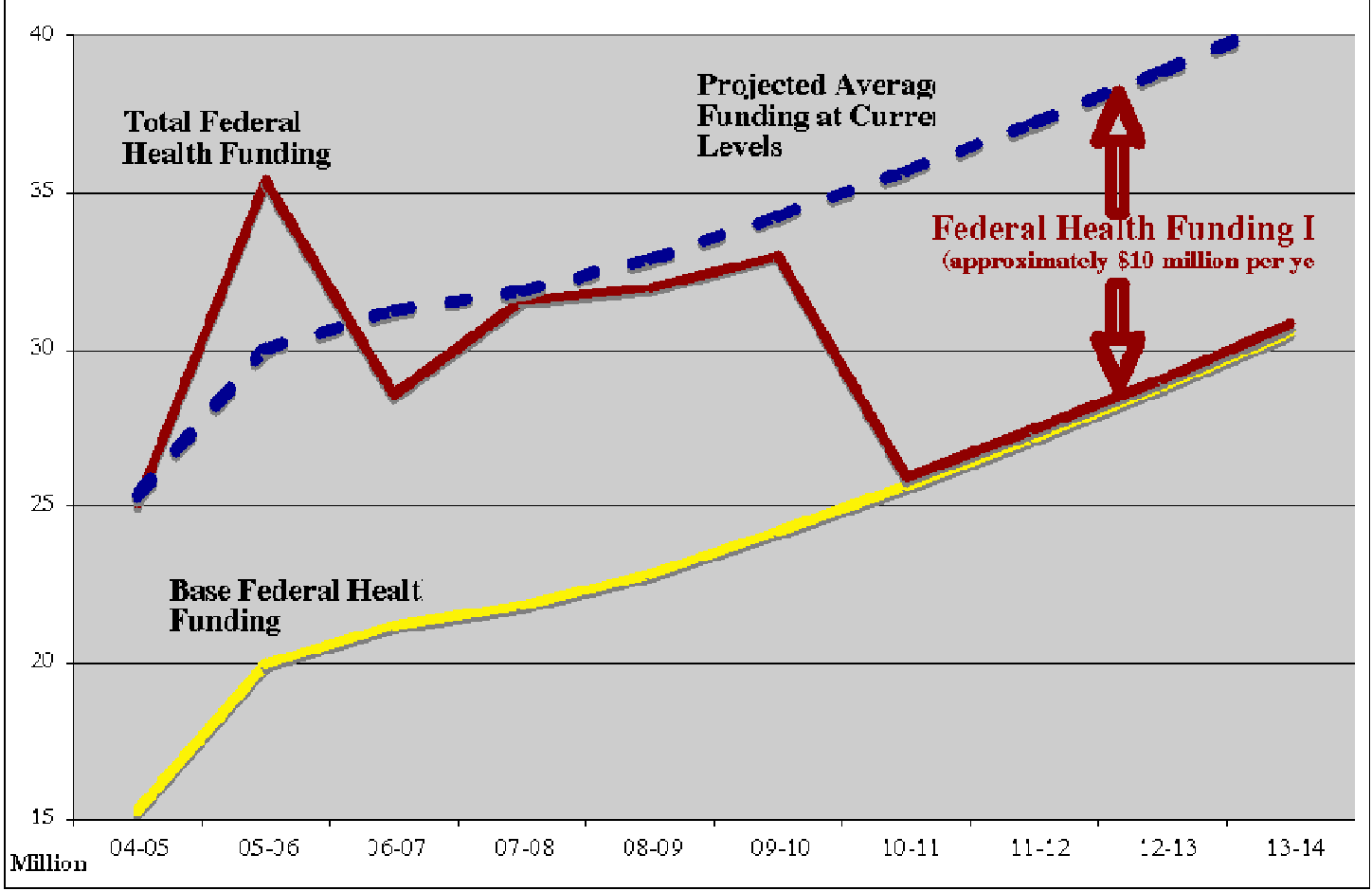
Funding for Health - Yukon

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
	(millions)									
Federal Transfers										
Canadian Health Transfer (CHT) includes the HRT	15.32	19.00	21.20	21.83	22.85	24.22	25.67	27.21	28.84	30.57
Health Trust Funds										
Budget 2003										
CHST Supplement Trust	0.94	0.46								
Medical Equipment	0.47	0.46								
January 2004										
\$2 Billion trust	1.00	1.02								
Immunization	0.13	0.14	0.14							
October 2005										
Wait Times Reduction	0.61	0.62	1.20	1.21	0.61	0.24	0.25	0.25	0.25	0.25
March 2007										
Patient Wait Time Guarantee Trust				1.40	1.40	1.40				
April 2007										
HPV Immunization Trust				0.95	0.95	0.94				
Contribution Agreement										
March 2008										
Patient Wait Time Guarantee Pilot Fund				0.07	0.07	0.07				
Northern Access Fund										
Medical Travel		1.60	1.60	1.60	1.60	1.60				
Health Access Fund - Innovative and adaptive strategies		4.33	4.33	4.33	4.33	4.33				
Operational Secretariat Fund (Approximate YK only)		0.10	0.10	0.10	0.10	0.10				
Northern Supplement Fund										
Northern Supplement Fund	6.67	6.67								
Total	25.12	35.39	28.57	31.58	32.00	33.00	25.92	27.46	29.09	30.82

*\$500 million in the CHT base in 2005-06 for home care and catastrophic drug coverage and escalated at 0% as of 2006-07.

**2005-06 CHT base includes existing CHT and HRT legislated levels for 2005-06, plus the \$2 billion increase to close the short-term Romanow gap and an additional \$500 million for home care and catastrophic drug coverage. The new CHT base in 2005-06 corresponds to 25% of estimated provincial-territorial costs for services currently covered under the Canada Health Act, as well as amounts in respect of home care and catastrophic drug coverage. An escalator of 0% was applied to the \$19 billion base starting in 2006-07.

**Extension of wait times funding starting in 2010-11 primarily for health human resources.



1.6 Federal Territorial Health Funding Lost

This page left blank intentionally.

Appendix 2

2.1 Seniors Public Drug Plans

	BC	AB	SK	MB	ON	PQ	NB
Eligible Clients	All	All seniors, including spouses and dependent children	All	All	All	All without private coverage	GIS recipients or eligible low-income
Premiums	none	none	none	none	none	up to \$494/adult, based on income and family size; \$0 for full GIS recipients or if income < \$11,460 (single) or \$18,570 (2 adults)	none
Deductable	<p>Born in 1939 or earlier:</p> <p>0 if income < \$33K</p> <p>1% of net income if between \$33K and \$50K</p> <p>2% of net income if income > \$50K</p> <p>*Other seniors - same as 'Universal' program:</p> <p>0 if income < \$15K</p> <p>2% of net income if between \$15K and \$30K</p> <p>3% of net income if income > \$30K</p>	none	<p>3.4% adjusted family income OR</p> <p>\$200/family if on Sask. Income Plan OR</p> <p>\$400/family if living in community with GIS</p>	<p>2.32% of family income if income < \$15K OR</p> <p>3.48% of family income if income > \$15K</p> <p>Incomes from \$40,000 to \$74,999: a new level of deductible at 4%</p> <p>Incomes from \$75,000 and over: a new level of deductible at 5%</p>	\$100/person unless low-income then \$0	\$10.25/Rx ; \$8.33/Rx if receiving at least 94% GIS	none

Co-Payment	Seniors: 25% to a family maximum then 100% coverage Non-seniors: 30% to a family maximum then 100% coverage	30% to max \$25/R _x	Individualized % of Rx cost, based on income and total drug costs SIP & GIS = 35% after deductible is reached	none	up to \$6.11/R _x (\$2 for low income seniors)	28.5%/R _x ; 25%/R _x if receiving at least 94% GIS	\$9.05/R _x for GIS recipients \$15/R _x for eligible low income
Max out of Pocket	Born in 1939 or earlier: 1.25% of net income if income < \$33K 2% if income between \$33K and \$50K 3% if income > \$50K *Other seniors - same as 'Universal' program: 2% of net income if income < \$15K 3% if income between \$15K and \$30K 4% if income > \$30K	no limit; However, the \$25 cap per prescription provides protection against catastrophic drug costs. The \$25,000 annual benefit maximum is routinely waived upon review of beneficiary's drug profile.	3.4% adjusted family income	see Deductible	no limit; however max payable dependent on number of R _x (i.e \$100 + \$6.11/R _x)	deductible + co-payment not to exceed: \$71.42/month/adult \$46.67/month if receiving less than 94% of GIS \$16.66/month if receiving at least 94% GIS i.e. max = annual contribution of \$857 + \$494 premium = \$1351	\$250 for GIS recipients; No Limit for eligible low-income

2.1 Public Drug Plans for Seniors *(continued)*

NS	PEI	NFLD/LBDR	YT	NWT	NIHB	VAC
All without private or federal coverage	All	GIS recipients	All (including spouses 60+) except registered First Nations	All (including spouses 60+) except registered First Nations and Métis	When provincial coverage not available	When provincial coverage not available
up to \$390/person, reduced if single income < \$24K or family income < \$28K; 0\$ for GIS recipients & for single seniors with an income < \$18K or married seniors with a combined income of < \$21K	none	none	none	none	none	none
none	none	none	none	none	none	none
33% / Rx; min \$3/Rx with \$30/Rx max	\$11 + professional fee/Rx (avg \$18.45/Rx)	pharmacy fee of \$5-9 + 10% of ingredient cost exceeds \$30.00	none	none	none	none
\$350 co-payment + \$390 premium = up to \$740/person	no limit	no limit	\$0	\$0	\$0	\$0

2.2 Long Term Care Programs

Province/Territory	Accommodation Minimum			Accommodation Maximum			Income Test	Asset Test	Covers Majority of Supplies	
	Daily	Monthly	Annual	Daily	Monthly	Annual				
Saskatchewan	\$28.77	\$875.00	\$10,500.00	\$54.48	\$1,657.00	\$19,884.02	Y	N	N	
British Columbia ⁸	\$27.60	\$828.00	\$9,936.00	\$66.30	\$1,989.00	\$23,868.00	Y	N	Y	
Alberta ⁹	Standard	\$39.62	\$1,205.11	\$14,461.32	\$39.62	\$1,205.11	\$14,461.32	N	N	Y
	Semi-Private	\$42.00	\$1,277.50	\$15,330.00	\$42.00	\$1,277.50	\$15,330.00	N	N	Y
	Private	\$48.30	\$1,469.12	\$17,629.44	\$48.30	\$1,469.12	\$17,629.44	N	N	Y
Yukon Territory	\$18.00	\$540.00	\$6,480.00	\$21.00	\$630.00	\$7,560.00	N	N	Y	
Northwest Territories	\$23.73	\$712.00	\$8,544.00	\$23.73	\$712.00	\$8,544.00	N	N	Y	
Nunavut Territory	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	N	N	Y	
Manitoba ⁷	\$27.10	\$824.29	\$9,891.50	\$63.70	\$1,937.54	\$23,250.50	Y	N	Y	
Ontario ⁵	Basic Accomodation (Standard)	\$31.67	n/a	n/a	\$48.69	\$1,480.99	\$17,771.87	Y	N	Y
	Semi-Private	n/a	n/a	n/a	\$56.69	\$1,724.32	\$20,691.87	N	N	Y
	Private	n/a	n/a	n/a	\$66.69	\$2,028.49	\$24,341.88	N	N	Y
Quebec ⁶	Standard	\$0.00	\$0.00	\$0.00	\$30.93	\$927.90	\$11,134.80	Y	Y	Y
	Semi-Private	\$0.00	\$0.00	\$0.00	\$41.61	\$1,248.30	\$14,979.60	Y	Y	Y
	Private	\$0.00	\$0.00	\$0.00	\$49.78	\$1,493.40	\$17,920.80	Y	Y	Y
New Brunswick ²	\$120.25	\$3,667.63	\$44,011.56	\$182.05	\$5,552.63	\$66,631.62	Y	Y	Y	
Nova Scotia ⁴	\$28.70	\$349.18	\$4,190.20	\$75.50	\$918.58	\$11,023.00	Y	N	Y	
P.E.I. ¹	9 Gov't Owned Nsg. Homes	\$117.00	\$3,510.00	\$42,120.00	\$119.50	\$3,585.00	\$43,020.00	Y	Y	Y
	9 Private Nsg. Homes (PNHs)	\$109.50	\$3,285.00	\$39,420.00	\$161.06	\$4,831.80	\$57,981.60	Y	Y	N
Newfoundland ³	\$0.00	\$0.00	\$0.00	\$92.05	\$2,800.00	\$33,600.05	Y	Y	Y	

¹ In Prince Edward Island, residents who apply for subsidization are income and asset tested. For the government owned Nursing Homes, the amounts stipulated are the self-pay rates and are paid if the resident has the financial means to do so. Income and asset tests do not apply to self-pay residents. The amounts stipulated for the Private Nursing Homes is the subsidized rate, i.e. the amount paid by government to the Private Nursing Homes for the cost of care of a resident who has been determined as needing financial assistance. If the resident is subsidized in a private home, then the operator can bill the government for most supplies if those supplies are deemed necessary by the government. Private Nursing Home operators set their own self pay rates.

² In New Brunswick, the per diem costs of \$132.02 represents the average costs of 60 Nursing Homes at March 2005. The per diem rate includes care and accommodation costs.

³ In Newfoundland, residents contribute a maximum of \$2,800 monthly based on their assessed ability to pay.

⁴ In Nova Scotia, this price reflects the per diem rates in the nursing homes, but not in residential care facilities or community-based options (personal care and supervision facilities), which are included in the overall bed count and budget figures. Effective January 1, 2005, the NS Department of Health pays all health care costs associated with long-term care. Residents pay only the accommodation cost ranging from \$28.70 to \$75.50 per day, based solely on their net income. Persons unable to pay this amount may apply for a rate reduction. No longer are residents required to use their assets to pay for long-term care. Long-term care residents continue to be responsible to pay for some personal needs including transportation and ambulance trips, Pharmacare co-pay, eye glasses, hearing aids, dental services, and clothing. All residents in long-term care have access to specialized equipment through a loan program. Depending on income, a person may be required to pay a fee for special needs.

⁵ In Ontario, these accommodation rates are effective March 31, 2005. The per diem rates in Ontario are multiplied by 30.4167 to obtain the monthly rates. Minimum rate short-stay accommodation only (less than 90 days); Maximum rates are for long-stay accommodation.

⁶ In Quebec, the accommodation rates are effective the 1st of January of each year. Data in this table covers rates effective January 1st, 2005.

⁷ In Manitoba, these accommodation rates are effective August 1, 2004 to July 31, 2005.

⁸ In British Columbia, these accommodation rates were effective January 1, 2004.

⁹ In Alberta: Seniors with annual incomes below \$21,000 who reside in long-term care may qualify for enhanced income assistance of up to \$371.25 per month through the Alberta Seniors Benefit to assist with their long-term care charges. This is in addition to the basic ASB assistance of up to \$240 per month.

2.3 Potential Additional Long Term Bed Revenue

Facility:	Total Beds	% FN Residents	# FN Beds	# Non FN Beds	Current Charge out Rate/day	Operating Per Day Bed Costs	DIA Revenues	Non FN Revenues	Total Annual Revenues	Annual Cost	Annual Facility Deficit	Annual Revenues as % of Cost
Copper Ridge	95	12%	11.6	83.4	\$ 21	\$ 361	\$ 1,527,156	\$ 639,338	\$ 2,166,494	\$ 12,517,675	\$ (10,351,181)	17%
Macaulay Lodge	45	17%	7.4	37.6	\$ 18	\$ 287	\$ 777,806	\$ 246,868	\$ 1,024,674	\$ 4,713,975	\$ (3,689,301)	22%
McDonald Lodge	11	19%	2.0	9.0	\$ 18	\$ 221	\$ 164,153	\$ 58,900	\$ 223,053	\$ 887,315	\$ (664,262)	25%
Total	151	14%	21.1	130.0		\$ 869	\$ 2,469,116	\$ 945,105	\$ 3,414,221	\$ 18,118,965	\$ (14,704,744)	19%
Potential Revenues												
	Sample New Daily Rates											
	Year 1	Year 2	Year 3	Year 4	Year 5							
	\$ 24.00	\$ 26.00	\$ 28.00	\$ 30.00	\$ 32.00							
Additional Revenues												
Copperidge	\$ 91,334	\$ 152,223	\$ 213,113	\$ 274,002	\$ 334,891							
McCaulay	\$ 82,289	\$ 109,719	\$ 137,149	\$ 164,579	\$ 192,008							
McDonald	\$ 19,633	\$ 26,178	\$ 32,722	\$ 39,267	\$ 45,811							
Additional Annual Revenue	\$ 193,257	\$ 288,120	\$ 382,984	\$ 477,847	\$ 572,711	\$ 1,914,918						
Incremental Annual Revenues	\$ 193,257	\$ 94,864	\$ 94,864	\$ 94,864	\$ 94,864							
Individual Daily Costs												
Current Annual Resident Cost	\$ 24.00	\$ 26.00	\$ 28.00	\$ 30.00	\$ 32.00							
Revised Annual Resident Cost	\$ 7,665	\$ 7,665	\$ 7,665	\$ 7,665	\$ 7,665							
Annual Difference	\$ (1,095)	\$ (1,825)	\$ (2,555)	\$ (3,285)	\$ (4,015)							
Monthly Difference	\$ (91)	\$ (152)	\$ (213)	\$ (274)	\$ (335)							
New Monthly Resident Cost	\$ 730	\$ 791	\$ 852	\$ 913	\$ 973							

2.4(a) Reimbursement Costs for Prescription Drugs (2008)

Province/Territory	Indirect Source Costs
Alberta	AAC + AIA (related to acquisition cost/ranges from 0.71 – 5.03)
British Columbia	AAC
Manitoba	AAC
New Brunswick	AAC (MAC)
Newfoundland	Formulary cost + wholesale mark-up of up to 15%
Nova Scotia	AAC
Ontario	ODB + 8% mark-up
Prince Edward Island	MAC + applicable mark-up /max 8-9%
Quebec	GSP (manufacturer agreement)+ mark-up of up to 6%
Saskatchewan	AAC (includes 6- 8.5% wholesale mark-up) + pharmacy mark-up (10-30% of drug cost to max of \$20)
Northwest Territories	Base-price + 30% mark-up
Yukon	AAC + 14% wholesale mark-up + pharmacy mark-up of 30%

AAC - Actual acquisition cost

AIA - Additional inventory cost

LAC - Lowest cost alternative

MAC - Maximum allowable cost

ODB - Ontario drug benefit

GSP - Guaranteed selling price

2.4(b) Professional Dispensing Fees (2008)

Province/Territory	Professional Fees
Alberta	Drugs \$0.00-\$74.99=\$10.72; \$75.00-\$149.99=\$15.53;over \$150.00=\$20.94.
British Columbia	Max.\$8.60 for regular prescriptions.
Manitoba	Usual customary fee, no cap. Max. \$6.95 for Social Assistance programs.
New Brunswick	Graduated dispensing fee, e. g., \$0.00-\$99.00=\$8.40; \$200-\$499.99=\$16.00.
Newfoundland	Max. \$7.15 for social services. Seniors pay professional fee + mark-up.
Nova Scotia	Max. \$10.42.
Ontario	Retail=\$7.00; Hospital pharmacies=\$7.00; \$4.28 - 5.10 specific dispensing physician clinics.
Prince Edward Island	Fee determined by pharmacist. Max. \$7.96 for financial assistance programs.
Quebec	\$8.12 per prescription; \$7.58 after 36,500 prescriptions dispensed annually.
Saskatchewan	Max. \$8.63.
Northwest Territories	Usual customary fee (No restrictions).
Yukon	Max.\$8.75.

Source: Guidebook on Government Prescription Drug Reimbursement Plans and Related Programs, Canadian Association for Pharmacy Distribution Management, April 2008.

2.4(c) Additional Notes from Eligibility and Cost Sharing Section (2008)

Province/Territory	Notes
Alberta	Premiums apply except for Seniors. Seniors have co-payment of 30% of total Rx to max of \$25 & annual max. of \$25,000.
British Columbia	Reference Drug Program: pay only up to the cost of a reference drug in a therapeutic category and patient pays the balance. Fair Pharmacare: Annual family maximum deductible established based on income levels. Family pays 25-30% of Rx costs until annual family deductible is met, then 100% coverage for remainder of year.
Manitoba	Deductible rates based on adjusted annual family income. (Line 150 CCRA notice) 2.69% for up to \$15,000 income, 4.02% for \$15,001-\$40,000, 4.63% for \$40,001- \$75,000 and 5.79% for greater than \$75,000.
New Brunswick	Seniors pay co-payment \$9.05-\$15.00 per prescription to max of \$250 per yr.
Newfoundland	Seniors pay co-payment equal to professional fee (range \$4.50-8.99). Access plan (Income based)- co- payment 20-70% of Rx cost.
Nova Scotia	Seniors-plan with annual premium \$424 plus co-pay 33% of Rx cost to max \$30/prescription and \$382 per year . Family program- co-pay 20% per prescription, deductible limits and co-payments based on family income and # members.
Ontario	Seniors-\$100 deductible, then \$6.11 per prescription. Trillium program: Deductible based on household net income and # members (paid quarterly).

Prince Edward Island	Seniors pay first \$11 of drug cost plus professional fee.
Quebec	Premiums vary \$0-557 depending on net family income. Co-payment 30% of drug costs to max of \$75.33 per month.
Saskatchewan	Seniors-semi-annual deductible of \$100, then 35% co-payment to max \$15. Seniors will be income tested based on eligibility for federal age credit. Non-seniors- may apply for Income based coverage/Special Support program- co-payment varies based on ratio in which drug exceeds 3.4% of adjusted family income.
Northwest Territories	No deductibles or co-payments.
Yukon	Seniors- no deductibles or co-payments. Chronic Disease program & Children's Drug program- \$250 annual deductible (may be waived based on income) Max \$500 per family.

Source: Guidebook on Government Prescription Drug Reimbursement Plans and Related Programs, Canadian Association for Pharmacy Distribution Management, April 2008.

This page left blank intentionally.

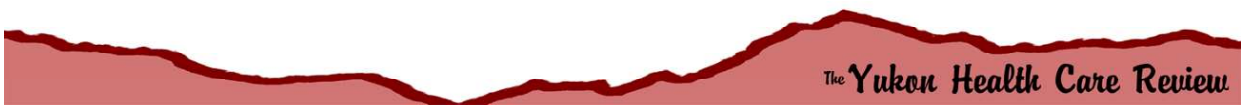
Appendix 3 – Potential Health Revenues

Potential Additional Health Care Revenues by Source over 10 Years

	Year 1	Year 2	Year 3	Year 4	Year 5
Medivac Rates	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000
Chronic Disease	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000
Pharmacare	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000
Long Term Bed Rates	\$193,257	\$288,120	\$382,984	\$477,847	\$572,711
Premiums (Net)	\$8,500,000	\$8,500,000	\$8,500,000	\$8,500,000	\$8,500,000
Drug Procurement	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000
	\$12,668,257	\$12,763,120	\$12,857,984	\$12,952,847	\$13,047,711

	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Total
	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$6,000,000
	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$1,100,000	\$11,000,000
	\$675,000	\$675,000	\$675,000	\$675,000	\$675,000	\$6,750,000
	\$572,711	\$572,711	\$572,711	\$572,711	\$572,711	\$4,778,473
	\$8,500,000	\$8,500,000	\$8,500,000	\$8,500,000	\$8,500,000	\$85,000,000
	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$1,600,000	\$16,000,000
	\$13,047,711	\$13,047,711	\$13,047,711	\$13,047,711	\$13,047,711	\$129,528,473

This page left blank intentionally.



Appendix 4 – External Presenters Response to Yukon Health Care Review Report

External presenters to the YHRC were offered the opportunity to read the Committee report prior to it being transmitted to the Yukon Government. If they wished to provide general or specific comments on the paper and recommendations they were informed that those comments could be appended to the report with their approval.

In response to that offer the following comments were received from the Yukon Registered Nurses Association (YRNA). The Yukon Medical Association (YMA) chose not to offer any written response at this time.

YRNA Response to Aspects of the Paper and Recommendations:

Collaborative Practice

YRNA was pleased to see recommendations for moving this forward. We would like to note that it has been demonstrated, in other areas of the country, to be an effective way to deliver care, particularly in the primary health care setting. There is no doubt that the willingness of professionals to participate is paramount. We have discussed this with professionals from a number of health disciplines in the Yukon, and fortunately, there are individuals from each of these disciplines who are interested in this model of practice.

Alcohol Abuse

The report suggests adopting some or all of the intervention strategies from the Centre for Addictions and Mental Health report. We need to reflect on which percentage of those abusing alcohol in the Yukon would actually benefit from these interventions and how that would translate into cost savings. It is critical that we identify a continuum of service that takes into account the sizeable marginalized population which would not be affected by strategies such as legal blood alcohol limits or zero tolerance for drivers under 21.

Non-insured Health Programs and Services

Given the uniqueness of our population, YRNA would urge caution that programs should be offered at “user fees comparable to those paid in other Canadian jurisdictions.” We don’t easily compare and there has to be a way of ensuring that everyone can afford the drugs and services they require. Those falling between the cracks could end up costing the system more.

Also, we would argue that there is a discrepancy in being able to receive drugs for free when an individual is an in-patient and having to pay for those same drugs when not an in-patient. We would like to see the Yukon Government work with other governments in Canada to establish a national pharmacare program.

Regarding a user charge for medical travel: It is possible that costs of medical travel could be lowered by ensuring that individuals are sent outside for appropriate reasons. Is there a way of building in incentives for this?

Private Facilities for Continuing Care

YRNA understands the crunch that will be coming with regards to an increasingly older population and urge the government to follow the recommendation from this committee in planning for this. We do not believe introducing private facilities is in the public's best interest. Examples from across the country show that there are enormous problems with these kinds of facilities, unless they are very high end for those who are able to afford the high prices. It must be remembered that while the articulated goals for private and public sector facilities may focus on patient care, the bottom line for private companies is making a profit.

The use of P3s also has to take into account that different principles and values are at play.

Scope of Practice and Nursing Staff Mix

Excellent suggestion to ensure that professionals are able to practice to the full extent of their scope. In this day and age, it will be necessary to keep on top of this as changes and further overlap in scopes is an ongoing reality.

A well-informed plan is key to introducing appropriate staffing mix and to ensure that care is not diluted but in fact enhanced and meets the need of each individual area. One size will not fit all. Any significant changes will require careful introduction in order to gain the understanding of all involved.

Involvement of the Public

Finally, decisions on changes in services, procedures and technologies should involve input from the public. This includes the introduction of new technology and the inclusion of more complimentary health services within the system. We suggest that there could be cost savings with the latter. Proposed changes to governance structure should also require the input of those who are going to be affected, namely the potential customers.

Thank you for the opportunity to, first of all, participate in the Yukon Health Care Review and then to review the report and provide further comments. If you have any questions or require clarification, don't hesitate to contact me.

Patricia McGarr
Executive Director
YRNA

Supplementary Tables and Graphs

Revenues

Table R1: Provincial and Territorial General Government Revenue - 2007

	Total	Percent
	(\$millions)	(%)
Total revenue	286,751	
Own source revenue	234,557	82%
Income taxes	91,152	32%
Consumption taxes	60,687	21%
Property and related taxes	9,859	3%
Other taxes	17,659	6%
Health and drug insurance premiums	3,326	1%
Contributions to social security plans	10,212	4%
Sales of goods and services	7,659	3%
Investment income	33,317	12%
Other revenue from own sources	684	0%
General purpose transfers	23,111	8%
Specific purpose transfers	29,083	10%

Source: Statistics Canada, FMS

Table R2: Yukon General Government Revenue - 2007

	Yukon	Percent
	(\$millions)	(%)
Total revenue	872	
Own source revenue	146	17%
Income taxes	51	6%
Consumption taxes	24	3%
Property and related taxes	3	0%
Other taxes	10	1%
Health and drug insurance premiums	0	0%
Contributions to social security plans	10	1%
Sales of goods and services	20	2%
Investment income	29	3%
Other revenue from own sources	0	0%
General purpose transfers	526	60%
Specific purpose transfers	200	23%

Source: Statistics Canada, FMS

Expenditures

**Table E1: Total and Per Capita Health Expenditure, Canada
Current Dollars - 1977 to 2007**

	Total	growth	Per Capita	growth
	(\$millions)	(%)	(\$millions)	(%)
1977	15,450	10%	651	9%
1978	17,107	11%	714	10%
1979	19,170	12%	792	11%
1980	22,298	16%	910	15%
1981	26,277	18%	1,059	16%
1982	30,759	17%	1,225	16%
1983	34,039	11%	1,342	10%
1984	36,743	8%	1,435	7%
1985	39,842	8%	1,542	7%
1986	43,337	9%	1,660	8%
1987	46,788	8%	1,769	7%
1988	50,959	9%	1,902	8%
1989	56,096	10%	2,056	8%
1990	61,023	9%	2,203	7%
1991	66,289	9%	2,365	7%
1992	69,749	5%	2,459	4%
1993	71,499	3%	2,493	1%
1994	73,022	2%	2,518	1%
1995	74,004	1%	2,526	0%
1996	74,643	1%	2,521	0%
1997	78,674	5%	2,631	4%
1998	83,953	7%	2,784	6%
1999	90,127	7%	2,964	6%
2000	98,259	9%	3,202	8%
2001	107,063	9%	3,451	8%
2002	115,139	8%	3,670	6%
2003	123,887	8%	3,912	7%
2004	131,812	6%	4,122	5%
2005	141,241	7%	4,373	6%
2006	150,269	6%	4,606	5%
2007	160,134	7%	4,867	6%

Source: National Health Expenditure Database, CIHI

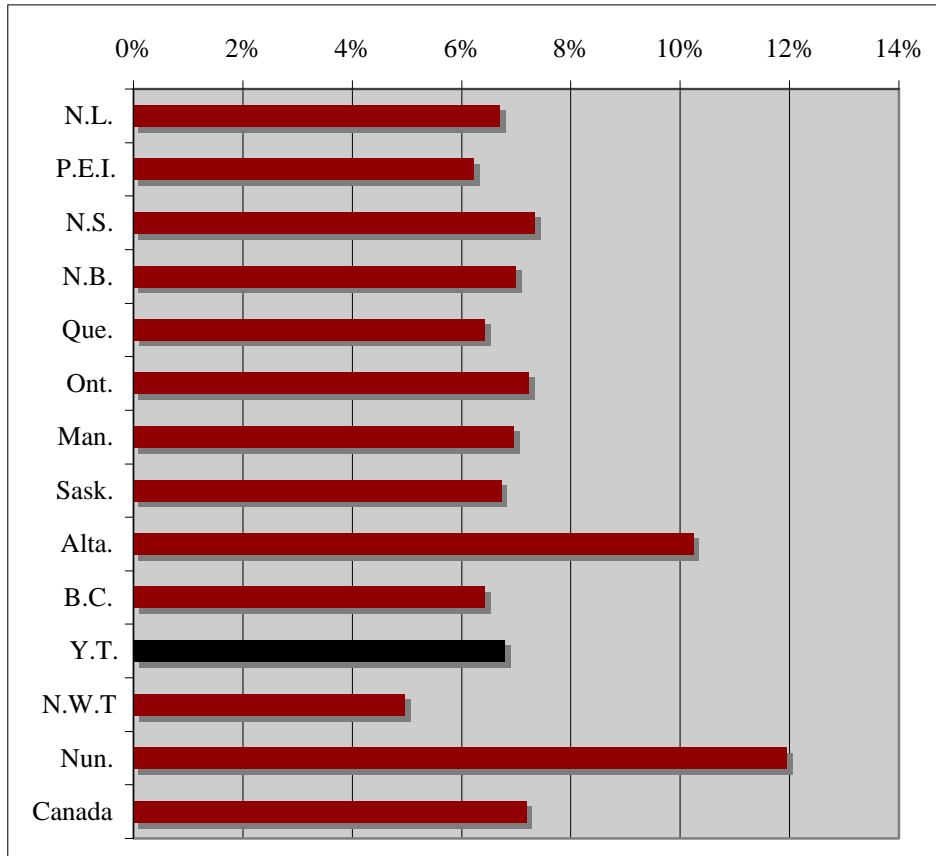
**Table E2: Total and Per Capita Health Expenditure, Provinces and Canada
Current Dollars – 2007**

	Total	10 Yr. Ave.	Per Capita	10 Yr. Ave
	(\$millions)	(%)	(\$)	(%)
N.L.	2,551	6.7%	5,011	7.6%
P.E.I.	652	6.2%	4,686	6.0%
N.S.	4,540	7.4%	4,850	7.3%
N.B.	3,803	7.0%	5,070	7.0%
Que.	33,632	6.4%	4,371	5.8%
Ont.	63,813	7.2%	4,975	5.8%
Man.	6,213	7.0%	5,250	6.6%
Sask.	5,091	6.7%	5,179	7.1%
Alta.	18,403	10.2%	5,390	8.2%
B.C.	20,542	6.4%	4,713	5.3%
Y.T.	221	6.8%	7,047	6.8%
N.W.T	335	6.6%	7,892	5.9%
Nun.	338	11.1%	10,903	9.2%
Canada	160,134	7.2%	4,867	6.2%

Source: National Health Expenditure Database, CIHI

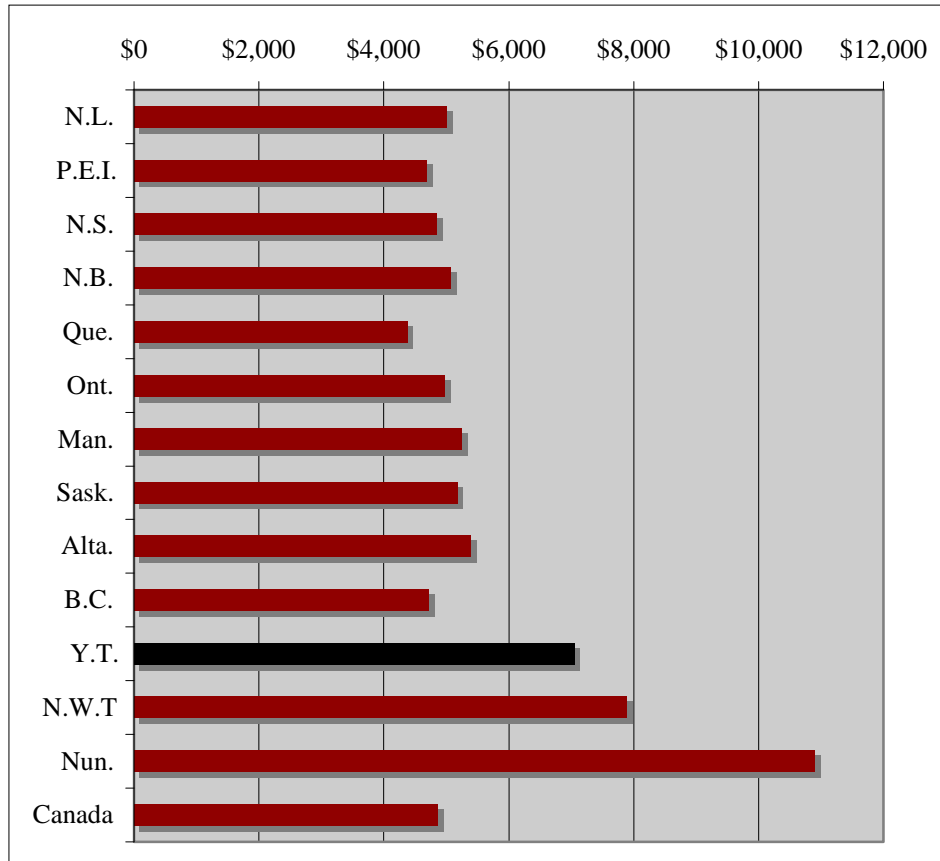
Note: NWT & NU Total a 7 year average

**Graph E1 Total Health Expenditure Growth, Provinces and Canada
10 Year Average - 1998 to 2007**



Source: National Health Expenditure Database, CIHI
Note: NWT & NU Total a 7 year average

Graph E2: Total Health Expenditure Growth, Provinces and Canada Per Capita - 1998 to 2007



Source: National Health Expenditure Database, CIHI

**Table E3: Private and Per Capita Health Expenditure, Provinces and Canada
Current Dollars – 2007**

	Total	10 Yr. Ave.	Per Capita	10 Yr. Ave
	(\$millions)	(%)	(\$)	(%)
N.L.	597	7.3%	1,173	8.2%
P.E.I.	186	5.4%	1,336	5.1%
N.S.	1,324	6.8%	1,414	6.7%
N.B.	1,145	8.2%	1,526	8.2%
Que.	9,513	6.6%	1,236	6.1%
Ont.	20,926	7.3%	1,631	5.9%
Man.	1,530	6.3%	1,293	5.9%
Sask.	1,129	5.6%	1,148	5.9%
Alta.	4,790	9.1%	1,403	7.1%
B.C.	5,860	7.4%	1,345	6.3%
Y.T.	42	8.8%	1,342	8.9%
N.W.T	41	10.8%	962	10.1%
Nun.	17	9.2%	548	7.4%
Canada	47,098	7.3%	1,432	6.2%

Source: National Health Expenditure Database, CIHI

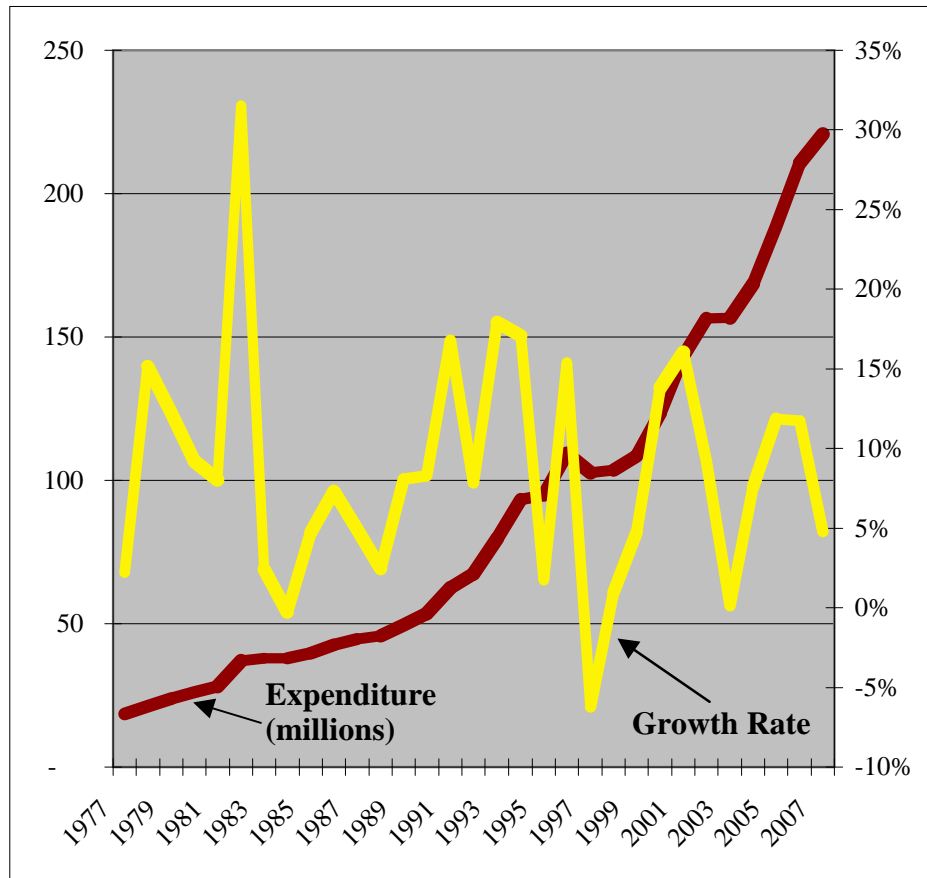
Note: NWT & NU Total a 7 year average

**Table E4: Public and Per Capita Health Expenditure, Provinces and Canada
Current Dollars – 2007**

	Total	10 Yr. Ave.	Per Capita	10 Yr. Ave.
	(\$millions)	(%)	(\$)	(%)
N.L.	1,954	6.6%	3,838	7.5%
P.E.I.	466	6.6%	3,351	6.4%
N.S.	3,216	7.6%	3,436	7.6%
N.B.	2,658	6.6%	3,544	6.6%
Que.	24,119	6.4%	3,135	5.8%
Ont.	42,888	7.2%	3,344	5.8%
Man.	4,683	7.2%	3,957	6.8%
Sask.	3,962	7.1%	4,031	7.5%
Alta.	13,613	10.7%	3,987	8.6%
B.C.	14,682	6.1%	3,369	5.0%
Y.T.	179	6.5%	5,705	6.5%
N.W.T	294	6.2%	6,931	5.5%
Nun.	321	11.2%	10,355	9.3%
Canada	113,035	7.2%	3,436	6.1%

*Source: National Health Expenditure Database, CIHI
NWT & NU Total a 7 year average*

**Graph E3: Total Health Expenditure and Growth Rate, Yukon
Current Dollars - 1977 to 2007**



Source: National Health Expenditure Database, CIHI

**Table E5: Total and Per Capita Health Expenditure, Canada
Current Dollars - 1977 to 2007**

	Total		Per Capita	
	(\$millions)	growth (%)	(\$millions)	growth (%)
1977	19	2%	810	1%
1978	21	15%	899	11%
1979	24	12%	998	11%
1980	26	9%	1,073	8%
1981	28	8%	1,178	10%
1982	37	32%	1,518	29%
1983	38	2%	1,611	6%
1984	38	0%	1,585	-2%
1985	40	5%	1,630	3%
1986	43	7%	1,740	7%
1987	45	5%	1,741	0%
1988	46	2%	1,721	-1%
1989	50	8%	1,827	6%
1990	54	8%	1,929	6%
1991	63	17%	2,165	12%
1992	68	8%	2,242	4%
1993	80	18%	2,622	17%
1994	93	17%	3,137	20%
1995	95	2%	3,115	-1%
1996	109	15%	3,486	12%
1997	103	-6%	3,227	-7%
1998	104	1%	3,326	3%
1999	109	5%	3,526	6%
2000	124	14%	4,061	15%
2001	143	16%	4,757	17%
2002	157	9%	5,192	9%
2003	157	0%	5,125	-1%
2004	169	8%	5,463	7%
2005	189	12%	6,060	11%
2006	211	12%	6,748	11%
2007	221	5%	7,047	4%

Source: National Health Expenditure Database, CIHI

**Table E6: Total Health Expenditure, Canada and Yukon
Constant Dollars (1997) - 1977 to 2007**

	Canada	growth	Yukon	growth
	(97 \$millions)	(%)	(97 \$millions)	(%)
1977	41,617	2.1%	45	-5.2%
1978	42,949	3.2%	48	6.7%
1979	44,215	2.9%	50	4.4%
1980	46,682	5.6%	50	0.4%
1981	48,792	4.5%	50	0.0%
1982	51,102	4.7%	60	19.7%
1983	53,093	3.9%	57	-4.0%
1984	55,050	3.7%	54	-5.4%
1985	57,473	4.4%	54	-0.2%
1986	60,277	4.9%	58	7.1%
1987	61,938	2.8%	59	2.0%
1988	64,637	4.4%	58	-1.9%
1989	67,578	4.5%	59	2.1%
1990	69,790	3.3%	61	2.5%
1991	72,608	4.0%	69	13.2%
1992	74,104	2.1%	72	4.6%
1993	74,709	0.8%	83	14.7%
1994	75,173	0.6%	94	13.7%
1995	75,450	0.4%	94	-0.3%
1996	75,683	0.3%	106	13.7%
1997	78,674	4.0%	103	-3.6%
1998	82,742	5.2%	103	0.8%
1999	87,268	5.5%	106	2.6%
2000	91,791	5.2%	116	9.3%
2001	97,952	6.7%	131	12.7%
2002	102,550	4.7%	140	6.8%
2003	107,654	5.0%	138	-1.4%
2004	112,245	4.3%	144	4.8%
2005	117,210	4.4%	157	9.1%
2006	121,933	4.0%	173	9.8%
2007	126,914	4.1%	177	2.2%

Source: National Health Expenditure Database, CIHI

Notes on expenditure by Use Tables to follow:

Percentage distribution of total health expenditure by health spending category.

- Institutional services include hospitals and residential care types of facilities.
- Professional services include expenditures on primary professional fees paid to physicians in private service, as well as for the services of privately practicing dentists, denturists, chiropractors and other health professionals.
- Drugs include expenditures on prescribed drugs and non-prescribed products purchased in retail stores. This category does not include drugs dispensed in hospitals and other institutions.
- Public health is that provided by governments and governmental agencies and includes expenditures for items such as food and drug safety, health inspections, health promotion, community mental health programs, public health nursing, measures to prevent the spread of communicable diseases and other related activities.
- Capital and other health includes expenditure on construction, machinery, equipment and some software of hospitals, clinics, first-aid stations and residential care facilities (capital); cost of providing health insurance programs by the government and private health insurance companies and all costs for the infrastructure to operate health departments (administration expenditures);
- Other health includes, at the aggregate level, expenditures on home care, medical transportation (ambulances), hearing aids, other appliances and prostheses, health research and miscellaneous health care.

**Table E7: Total Health Expenditure by Use, Canada
10 Year Average - 1977 to 2007**

	Institutional Services	Professional Services	Drugs	Public Health	Capital & Other	Total
	<i>(million)</i>					
1977	8,370	3,777	1,312	599	1,392	15,450
1978	9,234	4,280	1,446	615	1,532	17,107
1979	10,286	4,817	1,658	707	1,702	19,170
1980	11,874	5,549	1,885	845	2,145	22,298
1981	13,921	6,454	2,332	1,006	2,564	26,277
1982	16,478	7,461	2,639	1,150	3,032	30,759
1983	18,159	8,405	2,953	1,241	3,280	34,039
1984	19,260	9,210	3,314	1,377	3,582	36,743
1985	20,366	10,179	3,802	1,516	3,978	39,842
1986	21,725	11,199	4,417	1,570	4,427	43,337
1987	23,280	12,256	4,915	1,661	4,676	46,788
1988	25,139	13,336	5,522	1,787	5,176	50,959
1989	27,411	14,463	6,239	1,954	6,029	56,096
1990	29,615	15,743	6,931	2,139	6,596	61,023
1991	32,062	17,241	7,705	2,317	6,966	66,289
1992	33,459	17,845	8,519	2,540	7,387	69,749
1993	33,542	18,233	9,180	2,762	7,783	71,499
1994	33,095	18,885	9,438	3,060	8,544	73,022
1995	32,665	19,193	10,103	3,245	8,799	74,004
1996	32,528	19,589	10,358	3,372	8,796	74,643
1997	33,405	20,924	11,421	3,525	9,399	78,674
1998	35,180	21,855	12,541	4,427	9,950	83,953
1999	36,810	23,225	13,521	4,777	11,794	90,127
2000	39,822	24,748	15,092	5,428	13,169	98,259
2001	42,509	26,655	16,677	6,235	14,988	107,063
2002	45,576	28,240	18,459	6,525	16,340	115,139
2003	48,569	29,434	20,204	7,638	18,042	123,887
2004	52,113	31,478	21,852	7,739	18,630	131,812
2005	55,122	33,745	23,340	8,463	20,572	141,241
2006	58,751	36,065	25,101	8,962	21,390	150,269
2007	62,189	38,787	26,896	9,363	22,899	160,134

Source: National Health Expenditure Database, CIHI

**Table E8: Percent Health Expenditure by Use, Canada
10 Year Average - 1977 to 2007**

	Institutional Services	Professional Services	Drugs (%)	Public Health	Capital & Other	Total
1977	54%	24%	8%	4%	9%	100%
1978	54%	25%	8%	4%	9%	100%
1979	54%	25%	9%	4%	9%	100%
1980	53%	25%	8%	4%	10%	100%
1981	53%	25%	9%	4%	10%	100%
1982	54%	24%	9%	4%	10%	100%
1983	53%	25%	9%	4%	10%	100%
1984	52%	25%	9%	4%	10%	100%
1985	51%	26%	10%	4%	10%	100%
1986	50%	26%	10%	4%	10%	100%
1987	50%	26%	11%	4%	10%	100%
1988	49%	26%	11%	4%	10%	100%
1989	49%	26%	11%	3%	11%	100%
1990	49%	26%	11%	4%	11%	100%
1991	48%	26%	12%	3%	11%	100%
1992	48%	26%	12%	4%	11%	100%
1993	47%	26%	13%	4%	11%	100%
1994	45%	26%	13%	4%	12%	100%
1995	44%	26%	14%	4%	12%	100%
1996	44%	26%	14%	5%	12%	100%
1997	42%	27%	15%	4%	12%	100%
1998	42%	26%	15%	5%	12%	100%
1999	41%	26%	15%	5%	13%	100%
2000	41%	25%	15%	6%	13%	100%
2001	40%	25%	16%	6%	14%	100%
2002	40%	25%	16%	6%	14%	100%
2003	39%	24%	16%	6%	15%	100%
2004	40%	24%	17%	6%	14%	100%
2005	39%	24%	17%	6%	15%	100%
2006	39%	24%	17%	6%	14%	100%
2007	39%	24%	17%	6%	14%	100%

Source: National Health Expenditure Database, CIHI

**Table E9: Percentage Health Expenditure by Use, Canada
1977 and 2007**

	1997		2007		Growth
	(\$milions)	(%)	(\$milions)	(%)	(%)
Hospitals	24,786	32%	45,482	28%	83%
Other Institutions	8,619	11%	16,708	10%	94%
Physicians	11,324	14%	21,530	13%	90%
Dental Services	5,886	7%	11,343	7%	93%
Vision	2,189	3%	3,484	2%	59%
Other Prof	1,525	2%	2,430	2%	59%
Drugs	11,421	15%	26,896	17%	135%
Prescribed	8,544	11%	22,473	14%	163%
Non-Prescribed	2,878	4%	4,423	3%	54%
Capital	2,122	3%	7,344	5%	246%
Public Health	3,525	4%	9,363	6%	166%
Administration	2,516	3%	5,720	4%	127%
Research	1,090	1%	2,551	2%	134%
Other	3,672	5%	7,285	5%	98%
Total	78,674		160,133		

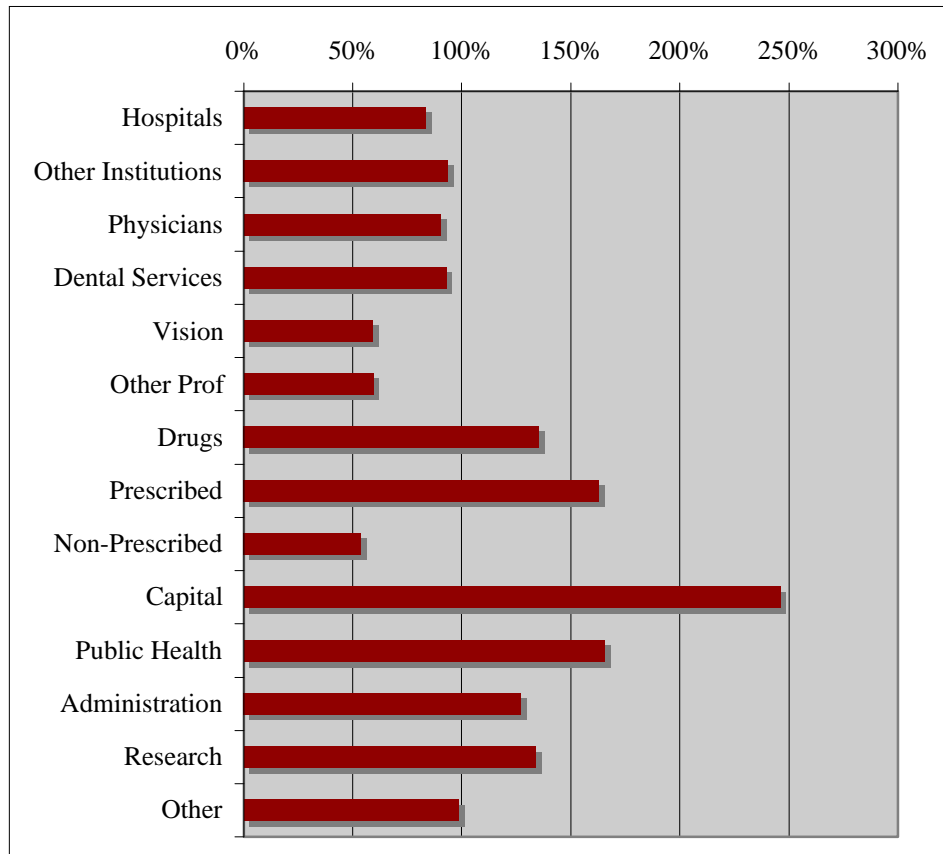
Source: National Health Expenditure Database, CIHI

**Table E10: Total Expenditures by Source
Current Dollars - 1977 to 2007**

	Total	Public	Private	Proportion Public
	<i>(\$millions)</i>	<i>(\$millions)</i>	<i>(\$millions)</i>	<i>(%)</i>
1977	15,450.00	11,844.60	3,605.40	77%
1978	17,106.80	13,040.50	4,066.30	76%
1979	19,169.70	14,552.30	4,617.40	76%
1980	22,298.40	16,841.80	5,456.50	76%
1981	26,276.70	19,942.60	6,334.10	76%
1982	30,759.10	23,446.80	7,312.30	76%
1983	34,038.60	26,080.00	7,958.60	77%
1984	36,743.10	27,956.90	8,786.30	76%
1985	39,841.70	30,094.90	9,746.90	76%
1986	43,337.30	32,528.60	10,808.70	75%
1987	46,788.20	35,054.70	11,733.50	75%
1988	50,959.20	38,162.80	12,796.40	75%
1989	56,095.50	41,911.10	14,184.30	75%
1990	61,022.60	45,445.50	15,577.10	74%
1991	66,289.10	49,382.20	16,906.90	74%
1992	69,749.20	51,637.30	18,112.00	74%
1993	71,498.90	51,920.80	19,578.10	73%
1994	73,022.20	52,535.50	20,486.80	72%
1995	74,004.40	52,719.10	21,285.30	71%
1996	74,642.80	52,823.00	21,819.70	71%
1997	78,673.70	55,239.90	23,433.80	70%
1998	83,953.00	59,237.50	24,715.50	71%
1999	90,127.10	63,208.70	26,918.40	70%
2000	98,258.80	69,271.80	28,986.90	70%
2001	107,063.30	75,018.90	32,044.40	70%
2002	115,139.00	80,195.10	34,944.00	70%
2003	123,887.20	86,988.50	36,898.70	70%
2004	131,812.10	92,600.40	39,211.70	70%
2005	141,241.20	99,073.30	42,167.90	70%
2006	150,269.20	105,713.60	44,555.60	70%
2007	160,133.50	113,035.20	47,098.30	71%

Source: National Health Expenditure Database, CIHI

Graph E4: Percentage Growth in Health Expenditure by Use, Canada 1977 to 2007



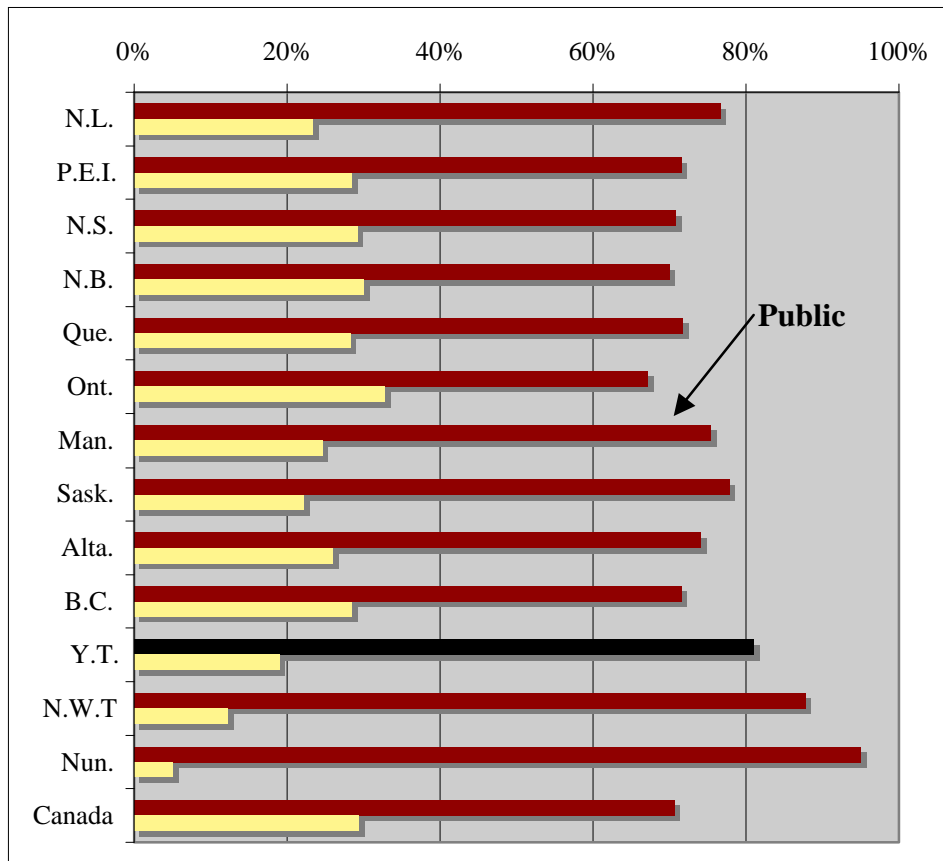
Source: National Health Expenditure Database, CIHI

**Table E11: Total Expenditures by Source, Yukon and Canada
Percent - Current Dollars – 2007**

	Yukon Public	Private	Canada Public	Private
	(%)	(%)	(%)	(%)
1977	75.7%	24.3%	76.7%	23.3%
1978	77.7%	22.3%	76.2%	23.8%
1979	77.1%	22.9%	75.9%	24.1%
1980	76.5%	23.5%	75.5%	24.5%
1981	78.1%	21.9%	75.9%	24.1%
1982	81.8%	18.2%	76.2%	23.8%
1983	82.5%	17.5%	76.6%	23.4%
1984	81.9%	18.1%	76.1%	23.9%
1985	82.9%	17.1%	75.5%	24.5%
1986	86.8%	13.2%	75.1%	24.9%
1987	87.4%	12.6%	74.9%	25.1%
1988	88.6%	11.4%	74.9%	25.1%
1989	89.3%	10.7%	74.7%	25.3%
1990	90.6%	9.4%	74.5%	25.5%
1991	90.3%	9.7%	74.5%	25.5%
1992	89.7%	10.3%	74.0%	26.0%
1993	86.7%	13.3%	72.6%	27.4%
1994	89.4%	10.6%	71.9%	28.1%
1995	89.0%	11.0%	71.2%	28.8%
1996	83.4%	16.6%	70.8%	29.2%
1997	83.3%	16.7%	70.2%	29.8%
1998	84.3%	15.7%	70.6%	29.4%
1999	84.6%	15.4%	70.1%	29.9%
2000	80.0%	20.0%	70.5%	29.5%
2001	80.9%	19.1%	70.1%	29.9%
2002	78.9%	21.1%	69.7%	30.3%
2003	79.5%	20.5%	70.2%	29.8%
2004	79.0%	21.0%	70.3%	29.7%
2005	80.6%	19.4%	70.1%	29.9%
2006	81.8%	18.2%	70.3%	29.7%
2007	81.0%	19.0%	70.6%	29.4%

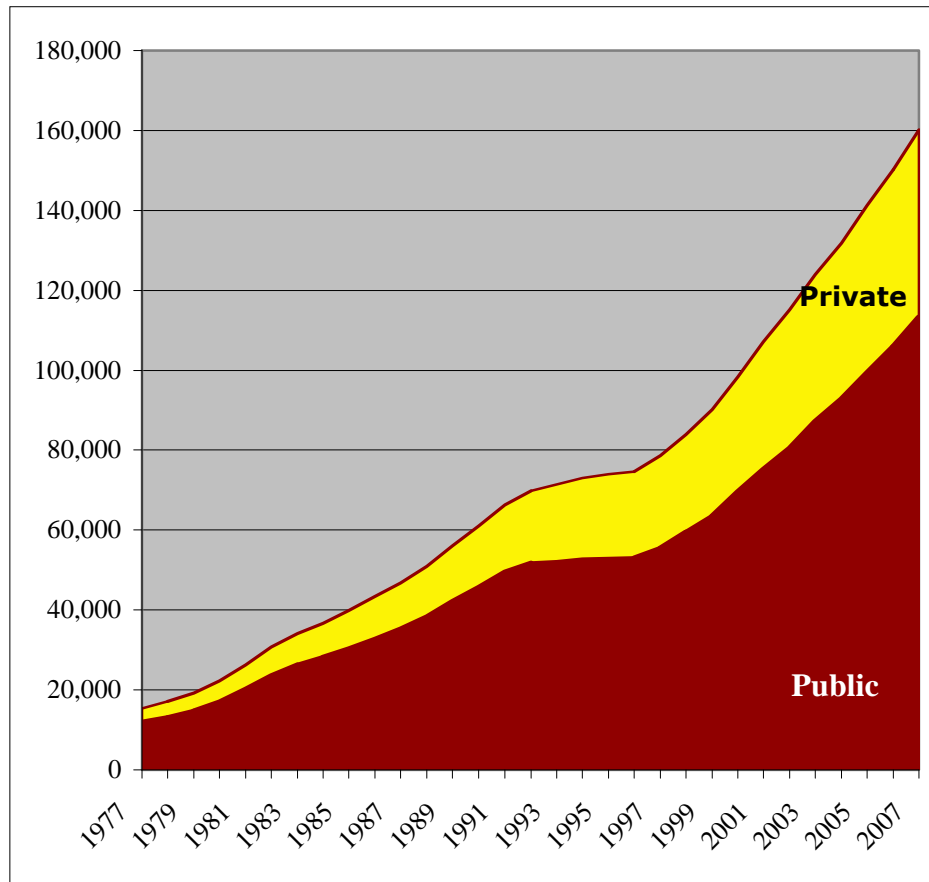
Source: National Health Expenditure Database, CIHI

Graph E5: Percent Public and Private Health Expenditures, Province and Territories
Percent - Current Dollars – 2007



Source: National Health Expenditure Database, CIHI

**Graph E6: Total Expenditures by Source, Canada
Current Dollars - 1977 to 2007**



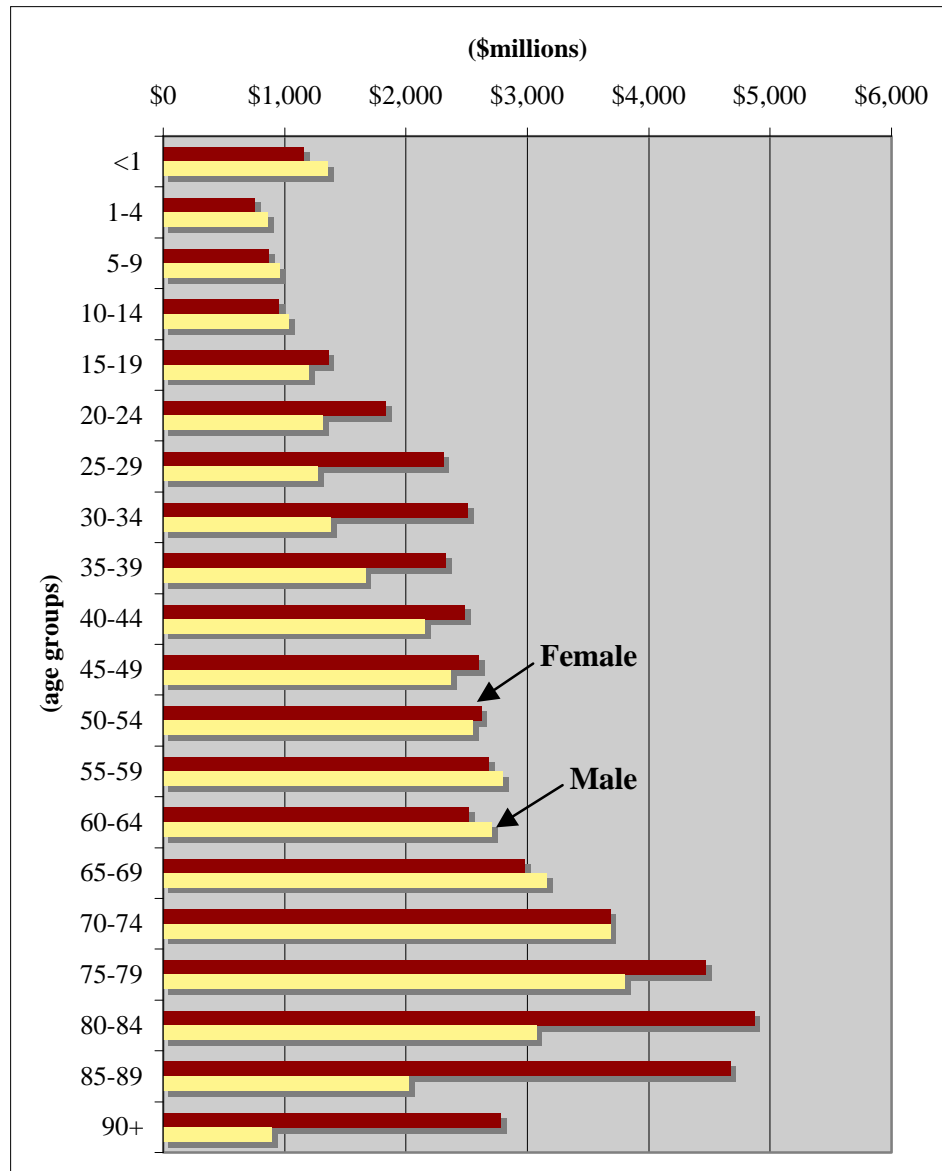
Source: National Health Expenditure Database, CIHI

**Table E12: Total P/T Expenditures by Age and Sex, Canada
Total Expenditures and Per Capita – 2005**

	Total		Per Capita	
	Female (\$millions)	Male (\$millions)	Female (\$)	Male (\$)
<1	1,159	1,356	7,437	7,038
1-4	752	864	1,185	1,128
5-9	870	957	970	945
10-14	957	1,036	946	932
15-19	1,361	1,203	1,193	1,299
20-24	1,835	1,320	1,405	1,673
25-29	2,311	1,274	1,631	2,129
30-34	2,510	1,383	1,748	2,275
35-39	2,333	1,663	1,688	1,983
40-44	2,485	2,154	1,688	1,818
45-49	2,601	2,372	1,898	1,981
50-54	2,619	2,551	2,245	2,252
55-59	2,683	2,798	2,724	2,638
60-64	2,519	2,712	3,452	3,266
65-69	2,977	3,164	5,142	4,806
70-74	3,684	3,688	7,067	6,646
75-79	4,473	3,799	9,564	9,188
80-84	4,871	3,076	12,699	12,688
85-89	4,673	2,024	20,731	21,661
90+	2,782	898	21,639	22,203

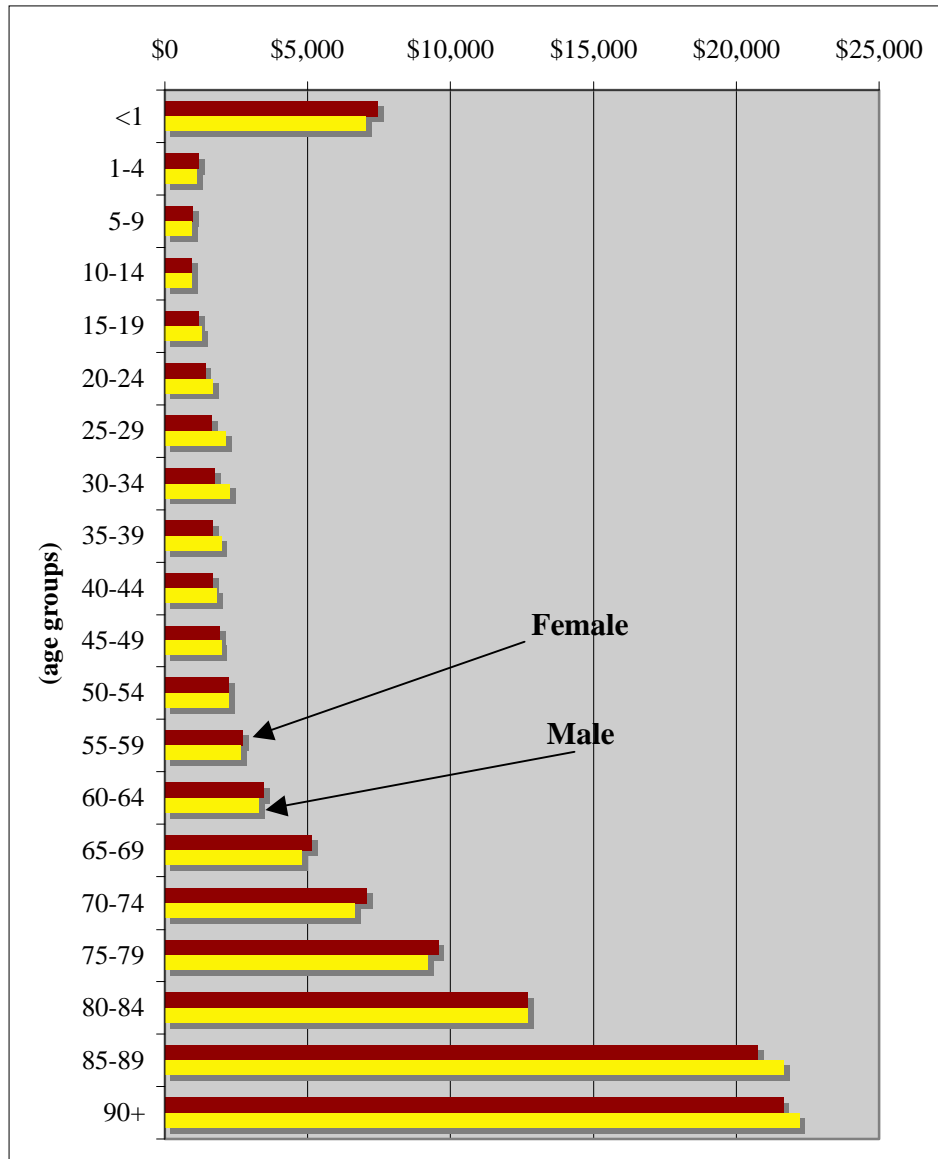
Source: National Health Expenditure Database, CIHI

**Graph E7: Total P/T Expenditures by Age and Sex, Canada
Total Expenditures – 2005**



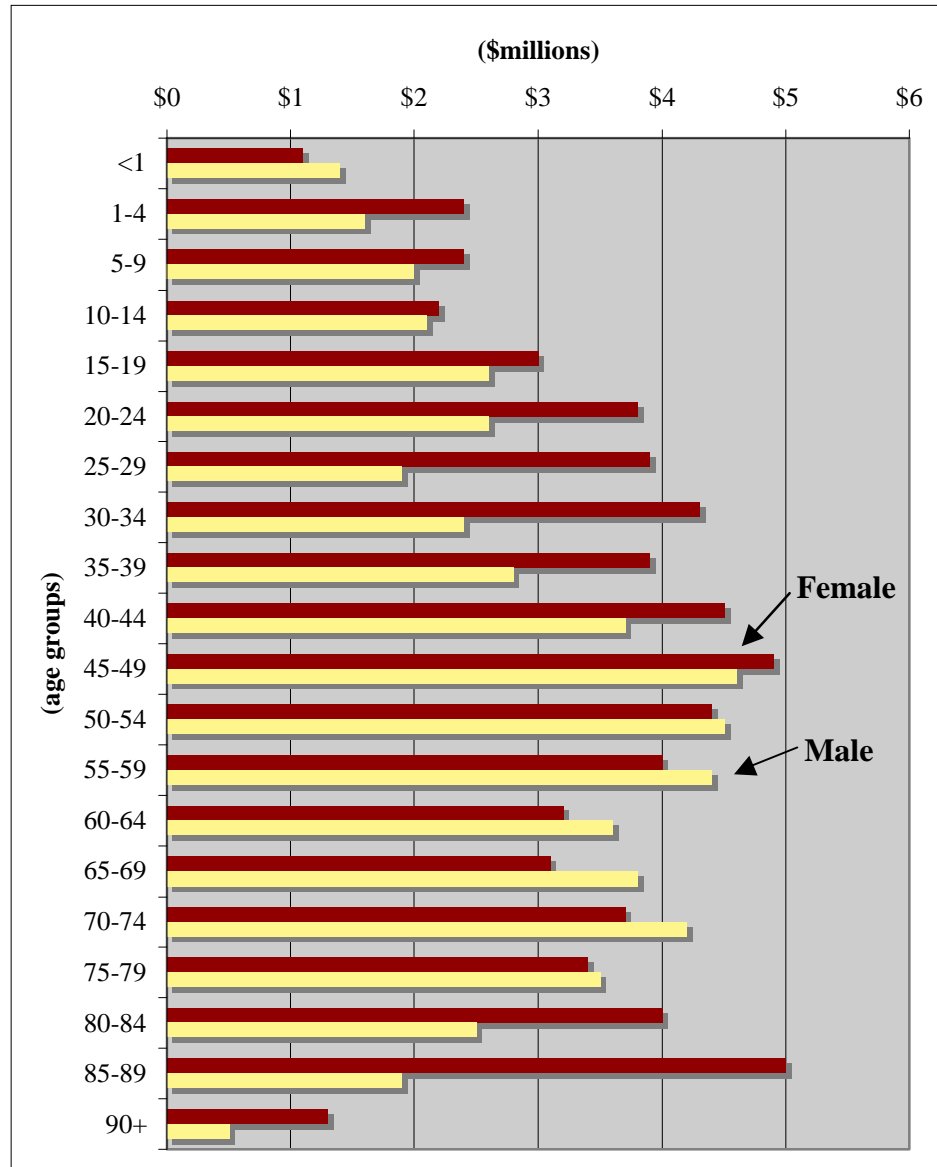
Source: National Health Expenditure Database, CIHI

Graph E8: Total P/T Expenditures by Age and Sex, Canada Per Capita – 2005



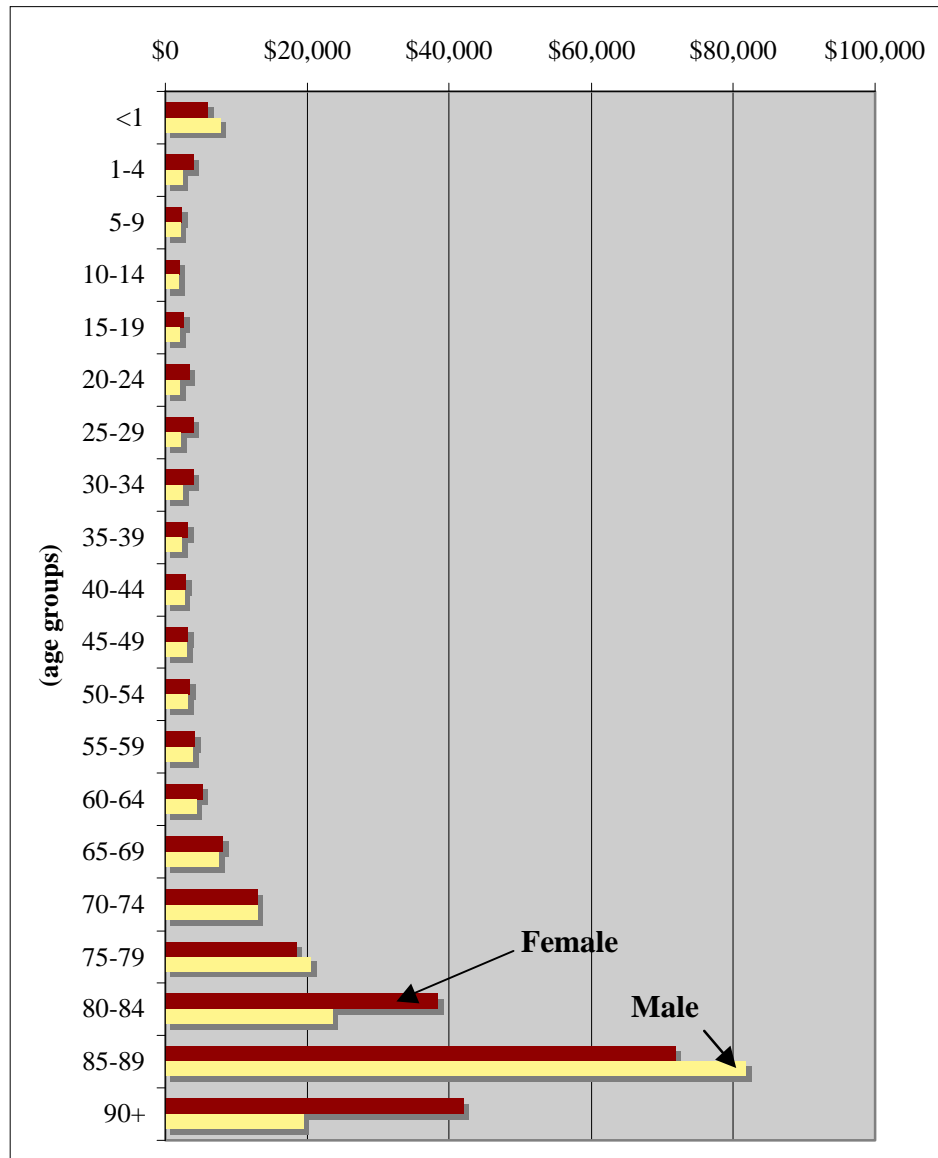
Source: National Health Expenditure Database, CIHI

**Graph E9: Total P/T Expenditures by Age and Sex, Yukon
Total Expenditures – 2005**



Source: National Health Expenditure Database, CIHI

Graph E10: Total P/T Expenditures by Age and Sex, Yukon Per Capita – 2005



Source: National Health Expenditure Database, CIHI

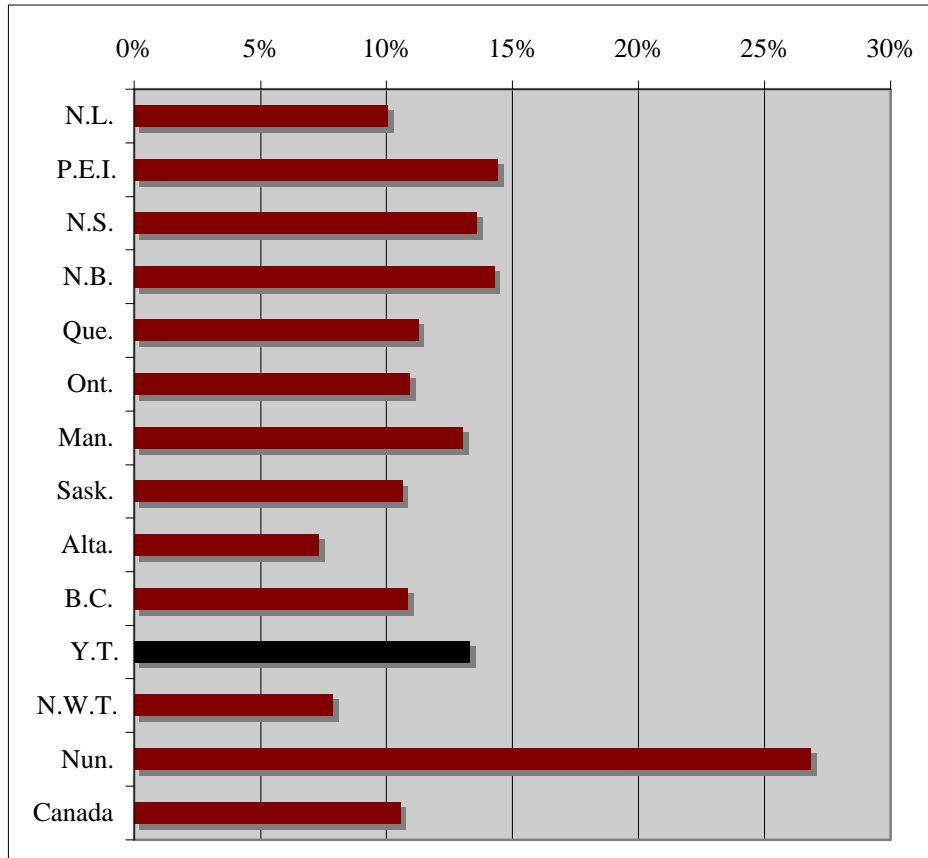
Sustainability

**Table S1: Total Health Expenditures as Percentage of GDP
Current Dollars - 2007 and 1987**

	2007p	1987	Change
	(%)	(%)	(%)
N.L.	10.0%	11.4%	(11.6)
P.E.I.	14.4%	11.7%	23.3
N.S.	13.6%	10.8%	25.5
N.B.	14.3%	10.3%	38.6
Que.	11.3%	8.8%	28.4
Ont.	10.9%	7.7%	41.1
Man.	13.0%	9.7%	34.2
Sask.	10.6%	9.7%	9.4
Alta.	7.3%	7.5%	(2.2)
B.C.	10.9%	8.5%	27.1
Y.T.	13.3%	5.1%	161.8
N.W.T.	7.9%	10.8%	(27.3)
Nun.	26.8%	---	---
Canada	10.6%	8.4%	26.2

Source: National Health Expenditure Database, CIHI

**Graph S1: Total Health Expenditures as Percentage of GDP
Current Dollars - 2007 and 1987**



Source: National Health Expenditure Database, CIHI

**Table S2: Total Health Expenditures as Percentage of GDP
Current Dollars - 1987 to 2007**

	Yukon (%)	Canada (%)	Difference (%)
1987	5.1%	8.4%	(39.2)
1988	4.8%	8.3%	(42.6)
1989	4.9%	8.5%	(43.1)
1990	5.1%	9.0%	(43.5)
1991	6.6%	9.7%	(32.3)
1992	6.2%	10.0%	(37.6)
1993	9.0%	9.8%	(8.2)
1994	10.2%	9.5%	8.1
1995	9.1%	9.1%	(0.8)
1996	9.7%	8.9%	8.7
1997	9.3%	8.9%	4.0
1998	9.5%	9.2%	3.8
1999	10.0%	9.2%	9.0
2000	10.4%	9.1%	13.8
2001	11.4%	9.7%	17.8
2002	12.5%	10.0%	24.9
2003	12.0%	10.2%	17.9
2004	12.0%	10.2%	17.6
2005	12.4%	10.3%	20.4
2006p	13.2%	10.4%	26.5
2007p	13.3%	10.6%	26.2

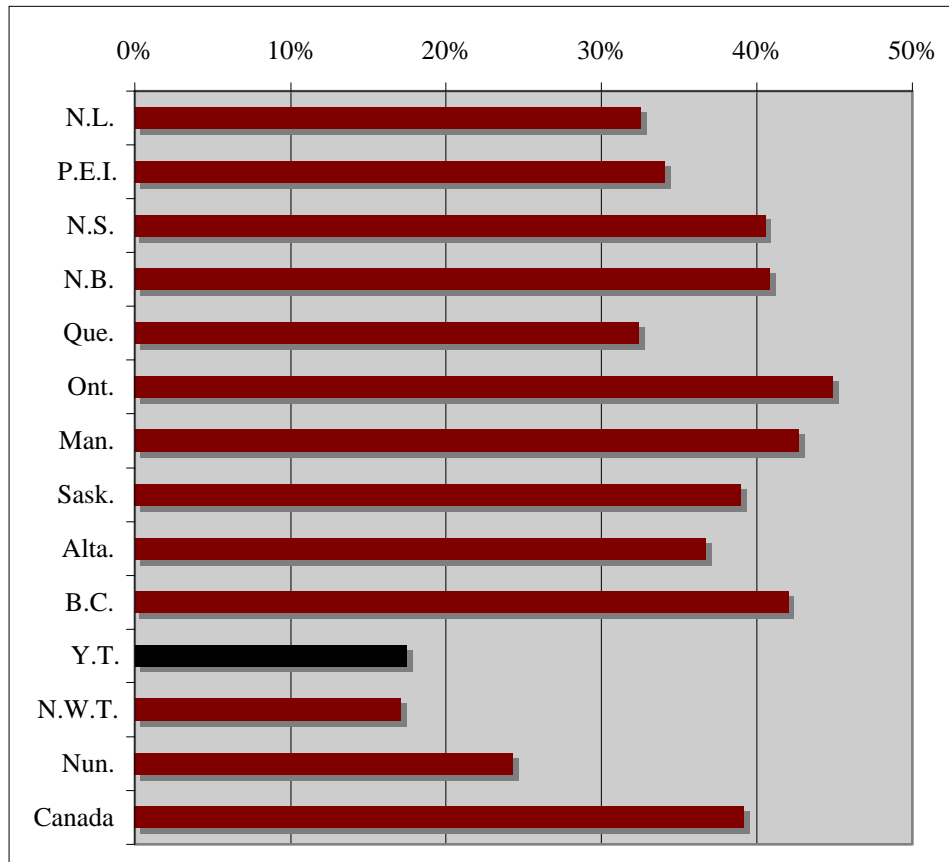
Source: National Health Expenditure Database, CIHI

**Table S3: Total Health Expenditures and GDP (Market)
Current Dollars - 1987 to 2007**

	Yukon Health		Yukon GDP	
	(millions)	(% growth)	(millions)	(% growth)
1987	45	5.1%	879	40.9%
1988	46	2.3%	959	9.1%
1989	50	8.2%	1,021	6.5%
1990	54	8.2%	1,056	3.4%
1991	63	16.8%	955	-9.6%
1992	68	7.9%	1,086	13.7%
1993	80	17.9%	882	-18.8%
1994	93	17.0%	910	3.2%
1995	95	1.8%	1,047	15.1%
1996	109	15.4%	1,128	7.7%
1997	103	-6.2%	1,107	-1.9%
1998	104	0.9%	1,087	-1.8%
1999	109	4.8%	1,085	-0.2%
2000	124	13.8%	1,190	9.7%
2001	143	16.0%	1,259	5.8%
2002	156	9.2%	1,254	-0.4%
2003	157	0.2%	1,302	3.8%
2004	169	7.6%	1,404	7.8%
2005	189	11.9%	1,521	8.3%
2006p	211	11.7%	1,596	4.9%
2007p	221	4.8%	1,657	3.8%
10 Year Ave.		6.8%		3.6%

Source: National Health Expenditure Database, CIHI

**Graph S2: Total P/T Health Expenditures as Percentage as Percent of Program Spending
Current Dollars - 2006 and 1987**



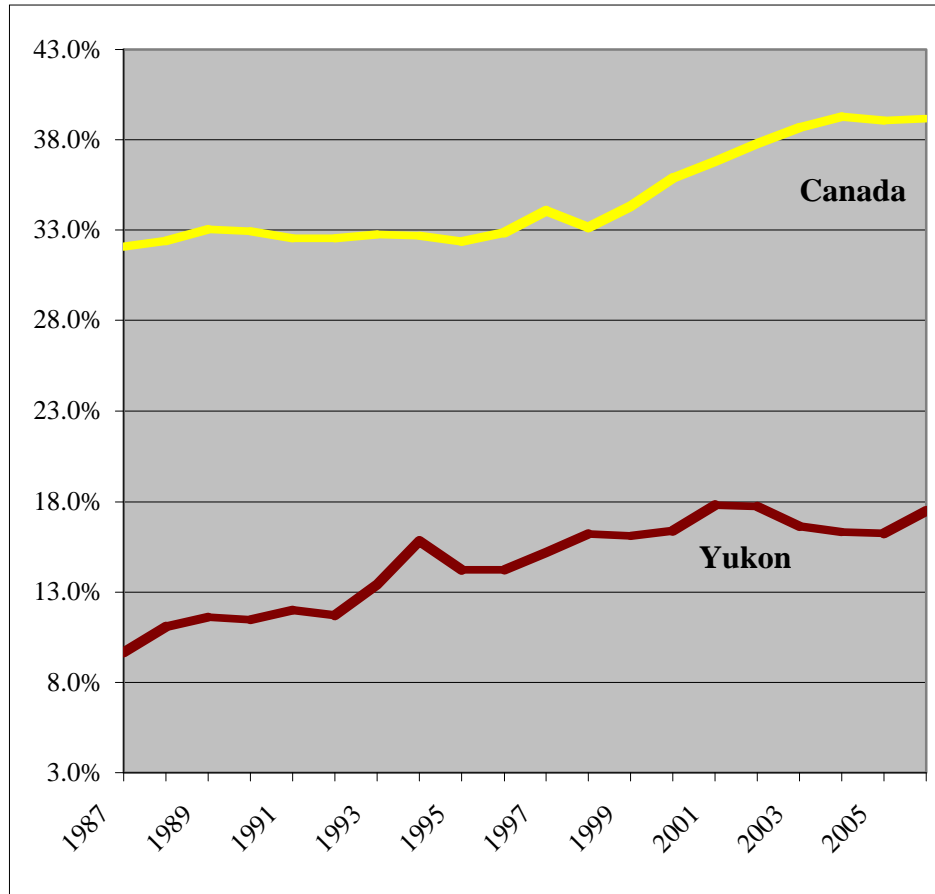
Source: National Health Expenditure Database, CIHI

**Table S4: Total P/T Expenditures as Percentage as Percent of Program Spending
Current Dollars - 1987 to 2006**

	Yukon (%)	Canada (%)	Difference (%)
1987	9.7%	32.1%	(69.8)
1988	11.1%	32.4%	(65.8)
1989	11.6%	33.0%	(64.8)
1990	11.5%	32.9%	(65.1)
1991	12.0%	32.5%	(63.1)
1992	11.7%	32.5%	(63.9)
1993	13.4%	32.7%	(59.0)
1994	15.8%	32.7%	(51.6)
1995	14.2%	32.4%	(56.0)
1996	14.2%	32.9%	(56.7)
1997	15.2%	34.1%	(55.4)
1998	16.2%	33.1%	(51.0)
1999	16.1%	34.3%	(53.1)
2000	16.4%	35.9%	(54.3)
2001	17.8%	36.8%	(51.6)
2002	17.7%	37.8%	(53.1)
2003	16.6%	38.7%	(57.0)
2004	16.3%	39.3%	(58.4)
2005	16.2%	39.1%	(58.4)
2006p	17.5%	39.2%	(55.4)
2007p	---	---	---

Source: National Health Expenditure Database, CIHI

**Graph S3: Total P/T Expenditures as Percentage as Percent of Program Spending
Current Dollars - 1987 to 2006**



Source: National Health Expenditure Database, CIHI

**Table S5: Yukon Total P/T Health Expenditures and Program Spending
Current Dollars - 1987 to 2006**

	Yukon Health		Total Program Spending	
	<i>(millions)</i>	<i>(% growth)</i>	<i>(millions)</i>	<i>(% growth)</i>
1987	45	5.1%	304	18.3%
1988	46	2.3%	302	-0.7%
1989	50	8.2%	312	3.5%
1990	54	8.2%	337	7.9%
1991	63	16.8%	380	13.0%
1992	68	7.9%	419	10.0%
1993	80	17.9%	433	3.5%
1994	93	17.0%	452	4.3%
1995	95	1.8%	483	6.9%
1996	109	15.4%	475	-1.5%
1997	103	-6.2%	458	-3.6%
1998	104	0.9%	457	-0.2%
1999	109	4.8%	487	6.6%
2000	124	13.8%	511	4.9%
2001	143	16.0%	545	6.5%
2002	156	9.2%	576	5.7%
2003	157	0.2%	624	8.4%
2004	169	7.6%	694	11.1%
2005	189	11.9%	770	11.0%
2006p	211	11.7%	839	9.0%
2007p	221	4.8%	--	--
10 Year Ave.(1986 to 2006)		7.7%		5.3%

Source: National Health Expenditure Database, CIHI

**Table S6: Total Revenues and Health Expenditures
Current Dollars (adjusted for calendar year) - 1987 to 2007**

	Total Health		PT Total Revenues	
	(millions)	(% growth)	(millions)	(% growth)
1987	46,788	8.0%	98,367	10.1%
1988	50,959	8.9%	108,683	10.5%
1989	56,096	10.1%	117,709	8.3%
1990	61,023	8.8%	124,919	6.1%
1991	66,289	8.6%	125,966	0.8%
1992	69,749	5.2%	129,081	2.5%
1993	71,499	2.5%	134,643	4.3%
1994	73,022	2.1%	141,614	5.2%
1995	74,004	1.3%	147,615	4.2%
1996	74,643	0.9%	149,558	1.3%
1997	78,674	5.4%	154,564	3.3%
1998	83,953	6.7%	165,826	7.3%
1999	90,127	7.4%	180,820	9.0%
2000	98,259	9.0%	196,394	8.6%
2001	107,063	9.0%	195,897	-0.3%
2002	115,139	7.5%	198,524	1.3%
2003	123,887	7.6%	206,482	4.0%
2004	131,812	6.4%	226,352	9.6%
2005	141,241	7.2%	247,683	9.4%
2006p	150,269	6.4%	266,084	7.4%
2007p	160,134	6.6%	277,181	4.2%
10 Year Ave.(1986 to 2006)		7.2%		5.8%

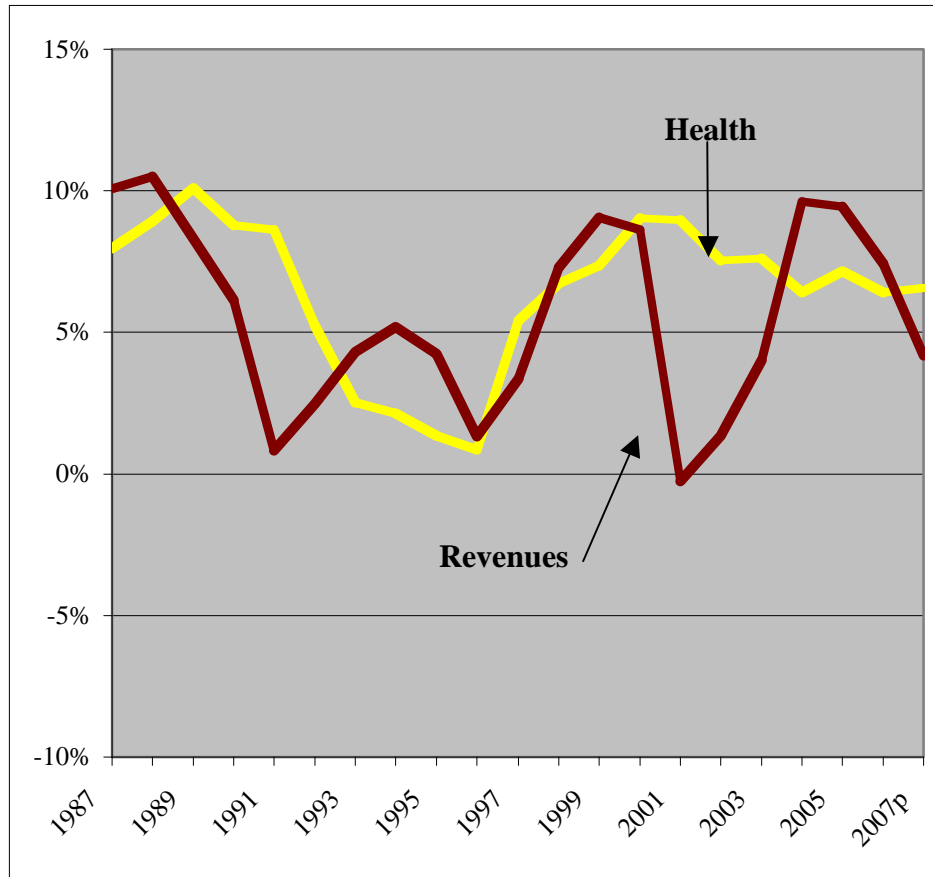
Source: CIHI, Federal Finance

**Table S7: Total Provincial and Territorial Revenues
Current Dollars (adjusted for calendar year) - 1987 to 2007**

	Yukon		All Provinces and Territories	
	(millions)	(% growth)	(millions)	(% growth)
1987	273	6.3%	98,367	10.1%
1988	296	8.4%	108,683	10.5%
1989	309	4.5%	117,709	8.3%
1990	327	6.0%	124,919	6.1%
1991	346	5.9%	125,966	0.8%
1992	355	2.4%	129,081	2.5%
1993	435	22.6%	134,643	4.3%
1994	477	9.7%	141,614	5.2%
1995	487	2.2%	147,615	4.2%
1996	454	-6.7%	149,558	1.3%
1997	452	-0.6%	154,564	3.3%
1998	478	5.7%	165,826	7.3%
1999	483	1.2%	180,820	9.0%
2000	535	10.7%	196,394	8.6%
2001	515	-3.7%	195,897	-0.3%
2002	538	4.4%	198,524	1.3%
2003	585	8.7%	206,482	4.0%
2004	644	10.1%	226,352	9.6%
2005	722	12.1%	247,683	9.4%
2006p	774	7.3%	266,084	7.4%
2007p	827	6.8%	277,181	4.2%
10 Year Ave.		5.7%		5.8%

Source: Federal Finance

**Graph S4: Total Provincial and Territorial Revenues and Health Expenditures
Current Dollars (adjusted for calendar year) - 1987 to 2007**



Source: CIHI, Federal Finance

Table S8: Own Provincial and Territorial Source Revenues
Current Dollars (adjusted for calendar year) - 1987 to 2007

	Yukon		All Provinces and Territories	
	(millions)	(% growth)	(millions)	(% growth)
1987	92	2.6%	76,575	11.6%
1988	106	15.2%	85,345	11.5%
1989	111	4.9%	93,247	9.3%
1990	106	-5.2%	99,020	6.2%
1991	107	1.2%	99,571	0.6%
1992	94	-12.3%	100,255	0.7%
1993	138	46.9%	106,104	5.8%
1994	168	21.6%	112,426	6.0%
1995	169	0.7%	117,896	4.9%
1996	160	-5.4%	123,619	4.9%
1997	154	-3.7%	130,796	5.8%
1998	124	-19.3%	140,126	7.1%
1999	143	15.6%	153,722	9.7%
2000	163	13.4%	167,271	8.8%
2001	138	-15.2%	163,572	-2.2%
2002	143	3.8%	164,692	0.7%
2003	142	-0.7%	169,816	3.1%
2004	150	5.8%	184,621	8.7%
2005	157	4.5%	202,172	9.5%
2006p	171	8.6%	217,662	7.7%
2007p	229	34.4%	224,259	3.0%
10 Year Ave.		4.3%		5.6%

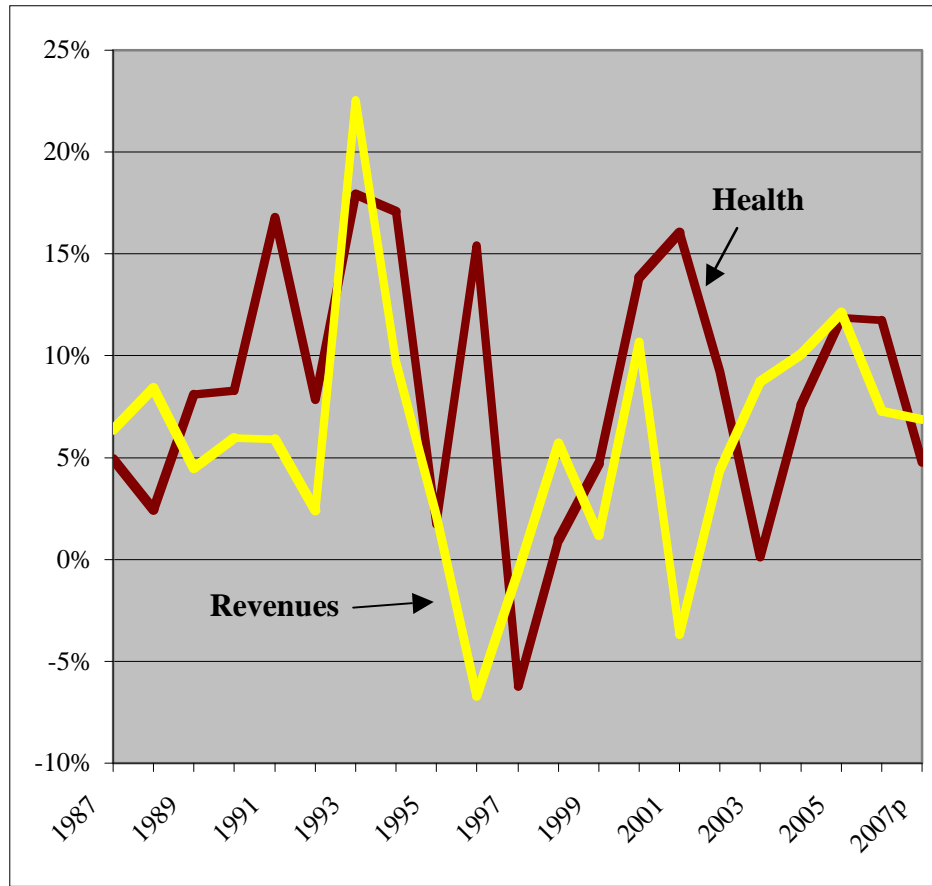
Source: Federal Finance

**Table S9: Federal Cash Transfers to Provinces and Territories
Current Dollars (adjusted for calendar year) - 1987 to 2007**

	Yukon		All Provinces and Territories	
	(millions)	(% growth)	(millions)	(% growth)
1987	180	8.4%	21,792	4.9%
1988	189	5.0%	23,338	7.1%
1989	197	4.3%	24,462	4.8%
1990	221	12.2%	25,899	5.9%
1991	239	8.1%	26,394	1.9%
1992	261	9.0%	28,825	9.2%
1993	297	13.8%	28,539	-1.0%
1994	309	4.1%	29,188	2.3%
1995	318	3.0%	29,720	1.8%
1996	295	-7.4%	25,939	-12.7%
1997	298	1.1%	23,768	-8.4%
1998	354	18.6%	25,700	8.1%
1999	340	-3.8%	27,098	5.4%
2000	372	9.5%	29,123	7.5%
2001	377	1.4%	32,324	11.0%
2002	395	4.6%	33,832	4.7%
2003	443	12.1%	36,666	8.4%
2004	493	11.4%	41,731	13.8%
2005	565	14.4%	45,511	9.1%
2006p	603	6.9%	48,423	6.4%
2007p	598	-1.0%	52,922	9.3%
10 Year Ave.		6.8%		6.8%

Source: Federal Finance

Graph S5: Health and Revenues Growth Rates
Current Dollars (adjusted for calendar year) - 1987 to 2007



Source: *Federal Finance*
National Health Expenditure Database, CIHI, Stats Canada

**Table S10: Yukon Health Funding Gap
2007 to 2017**

	Health Expenditures <i>(millions)</i>	Funding <i>(millions)</i>	Difference <i>(millions)</i>
2007	151.3	151.3	-
2008	163.0	159.9	(3.0)
2009	175.5	169.0	(6.5)
2010	189.0	178.7	(10.4)
2011	203.6	188.9	(14.7)
2012	219.3	199.6	(19.7)
2013	236.2	211.0	(25.2)
2014	254.4	223.0	(31.3)
2015	274.0	235.8	(38.2)
2016	295.1	249.2	(45.9)
2017	317.8	263.4	(54.4)
10 Year Total	2,479.2	2,229.9	(249.3)

Health Professionals

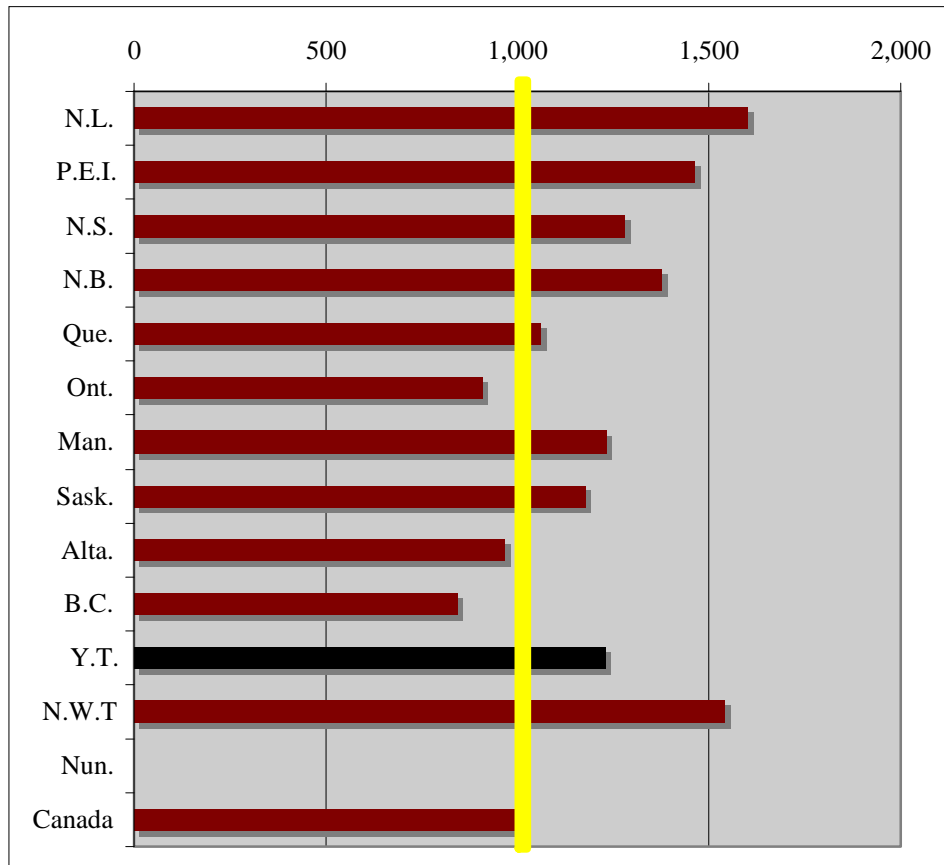
**Table HP1: Number of Nurses
Provinces and Territories - 2006**

	Total	RN	LPN	RPN
N.L.	8,154	5,515	2,639	–
P.E.I.	2,027	1,428	599	–
N.S.	11,964	8,790	3,174	–
N.B.	10,326	7,680	2,646	–
Que.	81,118	64,014	17,104	–
Ont.	115,145	90,061	25,084	–
Man.	14,510	10,902	2,652	956
Sask.	11,604	8,480	2,224	900
Alta.	32,639	25,881	5,614	1,144
B.C.	36,303	28,840	5,412	2,051
Y.T.	384	324	60	–
N.W.T.	1,125	1,033	92	–
Nun.	–	..	..	–
Canada	325,299	252,948	67,300	5,051

Source: CIHI

Note: Northwest Territories and Nunavut data are combined for 2006

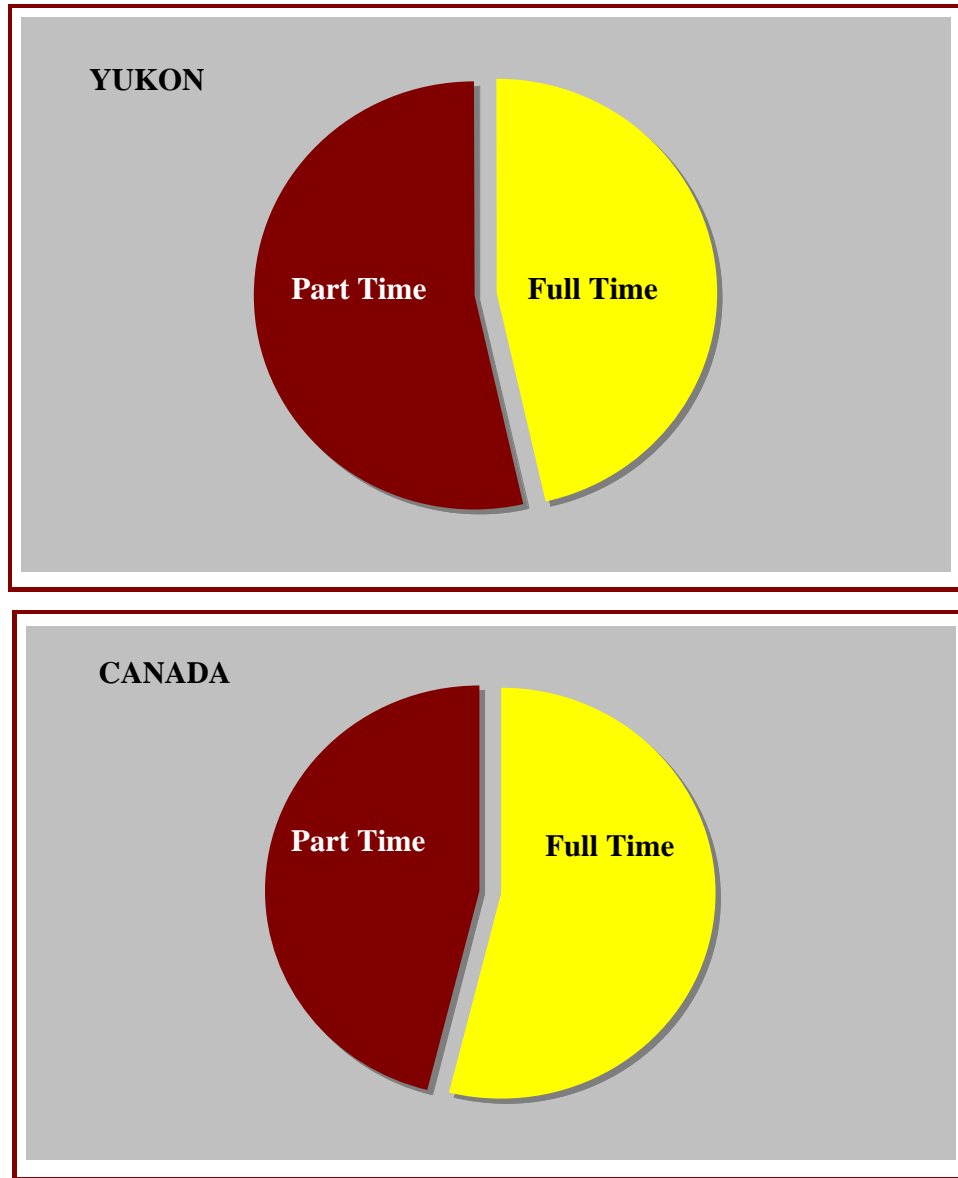
**Graph HP1: Number of Nurses per 100,000 Population
Provinces and Territories - 2006**



Source: CIHI, Statistics Canada

Note: Northwest Territories and Nunavut data are combined for 2006

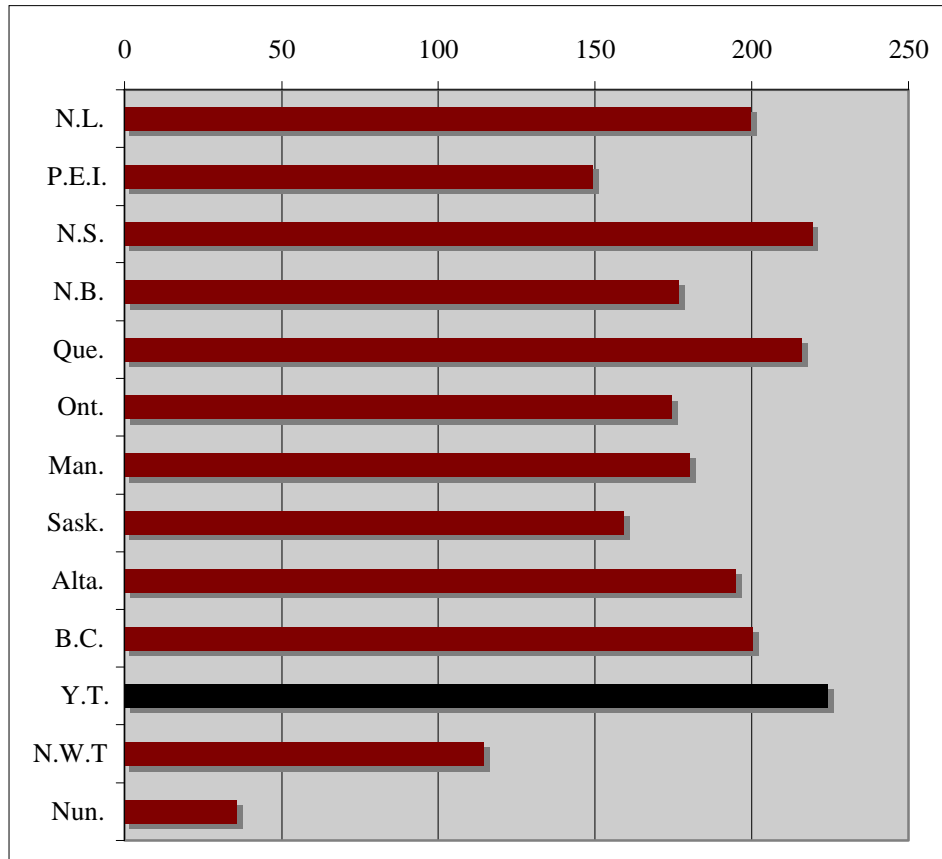
**Graph HP2: Number of Nurses, Full and Part Time
Canada and Yukon - 2006**



Source: CIHI

Note: Northwest Territories and Nunavut data are combined for 2006
p/t and casual also includes unknown

**Graph HP3: Number of Physicians per 100,000 Population
Provinces and Territories - 2006**



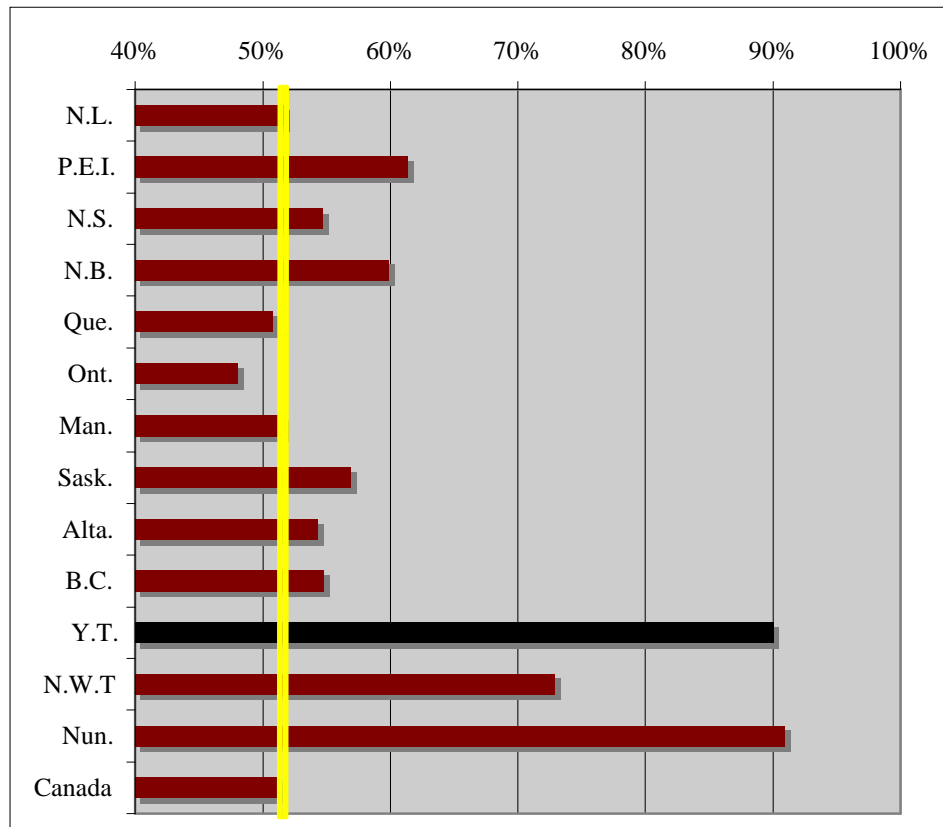
Source: CIHI, Statistics Canada

**Table HP2: Type of Physicians
Provinces and Territories - 2006**

	All	Family	Specialists	Ratio
N.L.	1,018	526	492	1.07
P.E.I.	207	127	80	1.59
N.S.	2,049	1,120	929	1.21
N.B.	1,325	793	532	1.49
Que.	16,533	8,390	8,143	1.03
Ont.	22,141	10,637	11,504	0.92
Man.	2,125	1,096	1,029	1.07
Sask.	1,571	894	677	1.32
Alta.	6,574	3,567	3,007	1.19
B.C.	8,635	4,731	3,904	1.21
Y.T.	70	63	7	9.00
N.W.T	48	35	13	2.69
Nun.	11	10	1	10.00
Canada	62,307	31,989	30,318	1.06

Source: CIHI

**Graph HP4: Percent Family Physician of Total
Provinces and Territories - 2006**



Source: CIHI

Access and Consumption

Table AC1: Waiting Times by Type
Canada, Number and Percent - 2005

	Less than 1 month (%)	1 to 3 months (%)	Longer than 3 months (%)
Specialist visits	46.0%	41.1%	12.9%
Non-emergency surgeries	40.3%	40.7%	19.1%
Diagnostic tests	56.4%	33.3%	10.2%

Source: Statistics Canada, Canadian Community Health Survey

Table AC2: Barriers to Accessing Specialized Services
Canada, Number and Percent - 2005

	Less than 1 month (%)	1 to 3 months (%)	Longer than 3 months (%)
Specialist visits	46.0%	41.1%	12.9%
Non-emergency surgeries	40.3%	40.7%	19.1%
Diagnostic tests	56.4%	33.3%	10.2%

Source: Statistics Canada, Canadian Community Health Survey

Table AC3: Waiting Times by Type
Canada, Number and Percent - 2005

	Waited too long (%)	Difficulty getting appointment (%)	Difficulty getting test (%)
Specialist visits	67.8%	32.2%	...
Non-emergency surgeries	65.6%	22.9%	...
Diagnostic tests	58.8%	36.2%	17.8%

Source: Statistics Canada, Canadian Community Health Survey

**Table AC4: Patient Satisfaction with Health Care Services
2005**

	Canada Number	Percent	Yukon Number	Percent
Received health care services in past 12 mo.	24,627,559	100%	24,423	100%
Quality rated excellent or good	20,990,542	85%	20,627	85%
Very or somewhat satisfied	20,927,364	85%	21,256	87%

Source: Canadian Community Health Survey (CCHS 1.1, 2.1 and 3.1)

**Table AC5: Patient Satisfaction with Hospital Care Services
2005**

	Canada Number	Percent	Yukon Number	Percent
Received hospital care in past 12 mo.	7,138,401	100%	9,664	100%
Quality rated excellent or good	5,851,097	82%	8,513	88%
Very or somewhat satisfied	5,768,618	81%	8,539	88%

Source: Canadian Community Health Survey (CCHS 1.1, 2.1 and 3.1)

**Table AC6: Injuries within the Past 12 Months
2005**

	Canada Number	Percent	Yukon Number	Percent
Total population >12 yr	27,131,964	100%	9,664	100%
Injuries sought medical attention	3,647,567	13%	8,513	16%
did not seek medical attention	2,210,688	8%	8,539	9%
No injuries	1,419,580	5%		6%
	22,855,048	84%		84%

Source: Statistics Canada, CANSIM

**Table A7: Median Waiting Times for Specialized Services
Age-standardized Median - 2005**

	Canada Number	Mediam	Yukon Number	Median
Specialist visits for a new illness or condition	2,762,154	4.0	2,115	3.0
Non-emergency surgeries	1,501,875	4.3	2,170	3.0
Selected diagnostic tests	2,072,724	3.0	2,007	2.0

Source: Statistics Canada, CANSIM

**Table AC8: Contact with Medical Doctors in the Past 12 Months
Number and Percent - 2005**

	Canada Number	Mediam	Yukon Number	Median
Total population > 12 yrs.	27,131,964	100%	27,188	100%
Contact with medical doctors	21,770,194	80%	21,195	78%
No contact with medical doctors	5,207,686	19%	5,953	22%

Source: Statistics Canada, CANSIM

**Table AC9: Patient Satisfaction with Physician Care Received
in the Past 12 Month
Age-standardized Median - 2005**

	Canada Number	Mediam	Yukon Number	Median
Received family doctor or other physician care	16,107,394	100%	14,483	100%
Rated as excellent or good	14,677,579	91%	12,831	89%
Very or somewhat satisfied	14,704,004	91%	13,101	91%

Source: Statistics Canada, CANSIM

Lifestyles and Behaviors

**Table LB1: Population by Age Group, Provinces and Canada
Proportion by Age Group - 2007**

	All ages	0 to 14	15 to 64	65 and older
	(% Change)			
N.L.	100.0%	15.1%	70.9%	13.9%
P.E.I.	100.0%	16.9%	68.6%	14.5%
N.S.	100.0%	15.5%	69.7%	14.8%
N.B.	100.0%	15.4%	70.1%	14.5%
Que.	100.0%	16.0%	69.7%	14.4%
Ont.	100.0%	17.5%	69.3%	13.2%
Man.	100.0%	19.2%	67.3%	13.6%
Sask.	100.0%	19.1%	66.1%	14.9%
Alta.	100.0%	18.7%	70.9%	10.4%
B.C.	100.0%	15.7%	70.2%	14.1%
Y.T.	100.0%	17.3%	74.8%	7.9%
N.W.T	100.0%	23.6%	71.2%	5.2%
Nun.	100.0%	33.2%	63.8%	3.1%
Canada	100.0%	17.0%	69.6%	13.4%

Source: Statistics Canada, CANSIM, 051-0001.

**Table LB2: Population by Age Group, Provinces and Canada
Numbers by Age Group - 2007**

	All ages	0 to 14	15 to 64	65 and older
	(thousands)			
N.L.	506	77	359	71
P.E.I.	139	24	95	20
N.S.	934	145	651	138
N.B.	750	116	526	109
Que.	7,701	1,231	5,364	1,106
Ont.	12,804	2,241	8,877	1,686
Man.	1,187	228	798	161
Sask.	997	190	659	148
Alta.	3,474	648	2,464	362
B.C.	4,380	690	3,073	618
Y.T.	31	5	23	2
N.W.T	43	10	30	2
Nun.	31	10	20	1
Canada	32,976	5,613	22,940	4,423

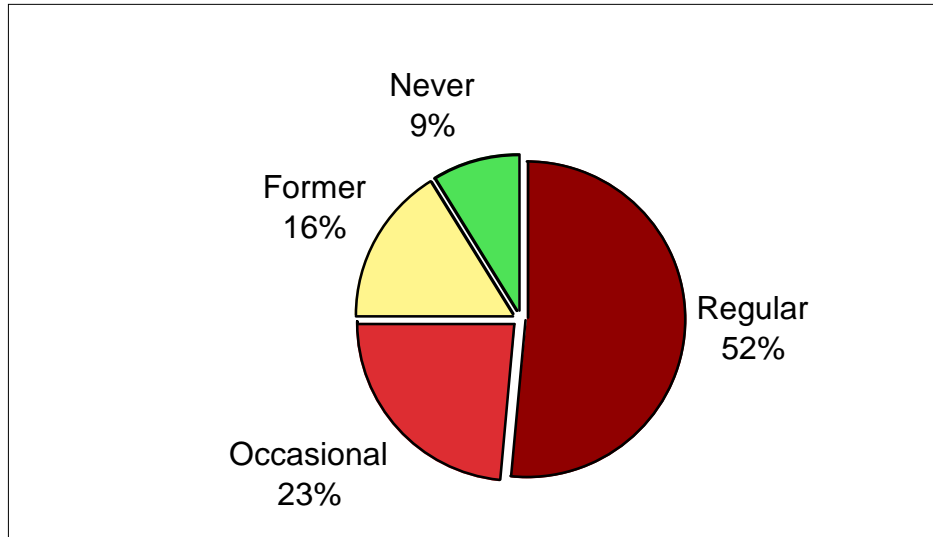
Source: Statistics Canada, CANSIM, 051-0001.

**Table LB3: Population by Age Group, Provinces and Canada
Annual Percent Change by Age Group - 2007**

	All ages	0 to 14	15 to 64	65 and older
	<i>(% Change)</i>			
N.L.	-0.7%	-2.1%	-1.0%	2.1%
P.E.I.	0.4%	-1.9%	0.8%	1.7%
N.S.	-0.1%	-2.1%	0.0%	1.7%
N.B.	0.1%	-2.1%	0.2%	1.9%
Que.	0.7%	-0.9%	0.6%	2.8%
Ont.	0.8%	-1.1%	1.0%	2.2%
Man.	0.7%	-0.4%	1.0%	0.6%
Sask.	0.9%	-0.2%	1.4%	0.5%
Alta.	3.1%	1.8%	3.5%	2.7%
B.C.	1.4%	-0.4%	1.6%	2.7%
Y.T.	-0.7%	-3.9%	-0.6%	5.5%
N.W.T	0.6%	-1.7%	0.9%	6.8%
Nun.	2.3%	0.5%	3.1%	7.3%
Canada	1.0%	-0.7%	1.2%	2.3%

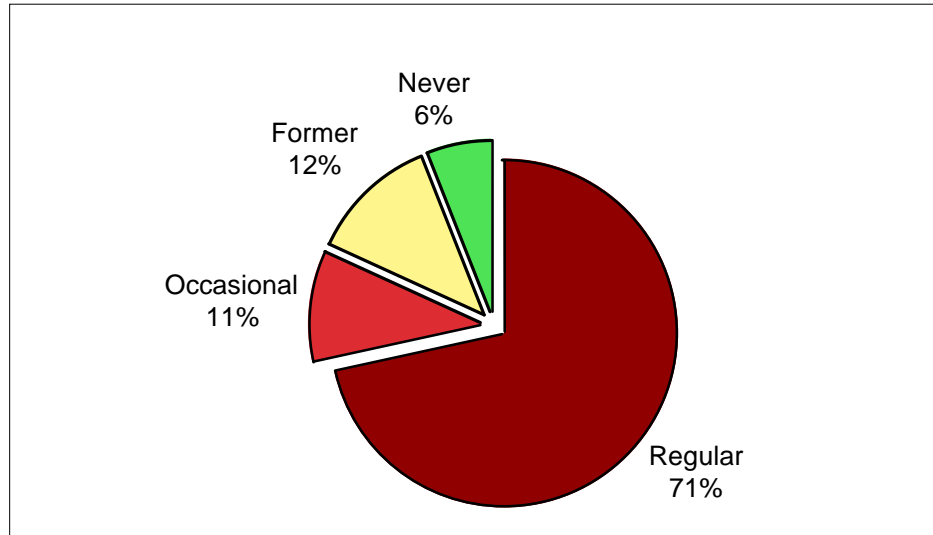
Source: Statistics Canada, CANSIM, 051-0001.

**Graph LB1: Type of Drinker – Female
Yukon, Percent - 2005**



Source: Yukon Health Indicators

**Graph LB2: Type of Drinker – Male
Yukon, Percent - 2005**



Source: Yukon Health Indicators

**Table LB3: Frequency of Drinking in the Past 12 Months
Canada and Yukon, Number and Percent - 2005**

	Canada		Yukon	
	(years)	(percent)	(years)	(percent)
Total drinking	21,124,435	100.0%	21,410	100.0%
Never 5 or more	10,649,058	50.4%	9,458	44.2%
5 or more <12/ye:	5,382,271	25.5%	5,858	27.4%
5 or more > 12/ye	4,609,379	21.8%	5,964	27.9%

Source: Statistics Canada, Canadian Community Health Survey

**Table LB4: Type of Smoker,
Canada and Yukon, Number and Percent - 2005**

	Canada		Yukon	
	(years)	(percent)	(years)	(percent)
Population >12 yr	27,131,964	100.0%	27,188	100.0%
Daily or occasional	5,874,689	21.7%	8,257	30.4%
Daily	4,479,985	16.5%	6,977	25.7%
Occasional	1,394,704	5.1%	1,281	4.7%
Former smoker	10,424,477	38.4%	9,497	34.9%
Never smoked	10,682,942	39.4%	9,419	34.6%

Source: Statistics Canada, Canadian Community Health Survey

**Table LB5: Self-reported Adult Body Mass Index (BMI)
Canada and Yukon, Number and Percent - 2005**

	Canada		Yukon	
	(years)	(percent)	(years)	(percent)
Underweight	658,291.0	2.7%	...	...
Normal weight	11,250,230.0	46.2%	11,617	48.2%
Overweight	8,132,642.0	33.4%	7,290	30.3%
Obese	3,764,664.0	15.5%	4,295	17.8%

Source: Statistics Canada, Canadian Community Health Survey

**Table LB6: Potential Years of Life Lost
Canada and Yukon, Number and Percent - 2005**

	Canada		Yukon	
	(years)	(per 100,000)	(years)	(per 100,000)
Unintentional injuries				
Total	182,390	612.2	558	1,860.6
Male	135,137	902.9	420	2,766.8
Female	47,253	318.7	138	930.1
Suicides				
Total	116088	389.6	180	600.7
Male	89610	598.7	180	1,185.8
Female	26478	178.6	-	-

Source: Statistics Canada, Canadian Community Health Survey

Population

**Table P1: Population Estimates and Demographic Growth
2003-2007**

	2003	2006	2007	Change from 2003
		(000)		
N.L.	518.4	509.9	506.3	-2.3%
P.E.I.	137.3	138.0	138.6	0.9%
N.S.	936.5	935.1	934.1	-0.3%
N.B.	751.2	749.2	749.8	-0.2%
Que.	7,494.7	7,651.0	7,700.8	2.7%
Ont.	12,262.6	12,705.3	12,803.9	4.4%
Man.	1,161.9	1,178.5	1,186.7	2.1%
Sask.	994.7	987.5	996.9	0.2%
Alta.	3,161.4	3,370.6	3,474.0	9.9%
B.C.	4,155.4	4,320.3	4,380.3	5.4%
Y.T.	30.6	31.2	31.0	1.3%
N.W.T	42.2	42.4	42.6	0.9%
Nun.	29.2	30.4	31.1	6.5%
Canada	31,676.1	32,649.5	32,976.0	4.1%

Note: Population as of July 1.

Source: Statistics Canada, CANSIM,

**Table P2: Population Projections and Demographic Growth
Canada - 2003-2007**

	2006	2011	2016	Change from 2003-06
	(000)		(%)	
All ages	32,547.20	33,909.70	35,266.80	8.4%
0 to 4	1,697.50	1,724.70	1,559.00	-8.2%
5 to 9	1,842.60	1,780.80	1,672.10	-9.3%
10 to 14	2,084.60	1,916.40	1,815.30	-12.9%
15 to 19	2,164.80	2,170.40	1,976.10	-8.7%
20 to 24	2,252.90	2,295.30	2,274.50	1.0%
25 to 29	2,226.10	2,330.20	2,335.90	4.9%
30 to 34	2,222.60	2,354.80	2,399.50	8.0%
35 to 39	2,351.10	2,327.10	2,397.70	2.0%
40 to 44	2,698.30	2,409.30	2,342.00	-13.2%
45 to 49	2,671.50	2,711.20	2,398.50	-10.2%
50 to 54	2,363.90	2,651.50	2,672.90	13.1%
55 to 59	2,082.50	2,327.40	2,596.90	24.7%
60 to 64	1,583.30	2,027.90	2,256.20	42.5%
65 to 69	1,227.30	1,513.10	1,925.40	56.9%
70 to 74	1,044.20	1,130.80	1,386.10	32.7%
75 to 79	878	907.6	979.9	11.6%
80 to 84	638.3	692.2	711.8	11.5%
85 to 89	342.8	422.2	454.8	32.7%
90 to 94	137.3	169.2	204.9	49.2%
95 to 99	33.1	42.4	52.4	58.3%
100 and over	4.7	5.4	6.8	44.7%

Medium growth: combines assumptions of fertility and immigration similar to recent years along with moderate growth in life expectancy.

Source: Statistics Canada, CANSIM