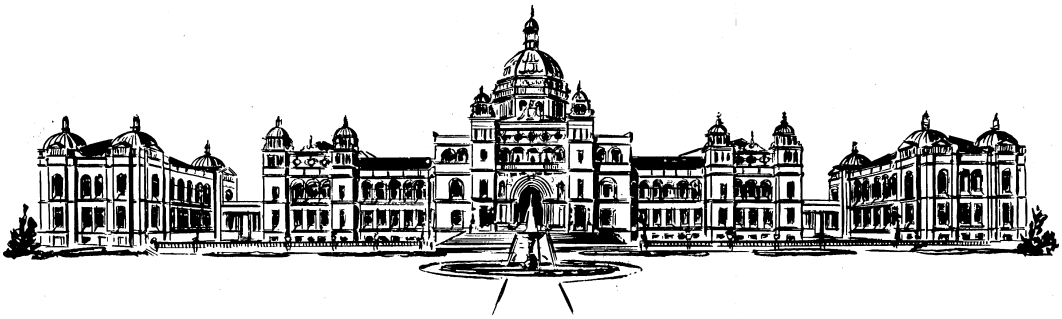
The Legislative Assembly of
British Columbia

PATIENTS FIRST:
Renewal and Reform of British Columbia's Health Care System

Select Standing Committee on Health
Report
2001



"We could prevent up to 60 to 70 per cent of all cancers… up to 90 per cent of all heart disease, up to 60 per cent of all strokes, up to 90 per cent of all cases of chronic lung disease, up to 90 per cent of all diabetes - all the things that are filling up our hospitals, and our doctor's offices and our graveyards… I am deeply concerned that the entire focus of the general public, the current government and the health care system as a whole is to pull drowning people out of the river. I implore you to ensure we devote adequate time and resources to making sure people don't fall into the river in the first place."

Dr. Andrew Larder, Medical Health Officer, East Kootenay Region

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December 10, 2001

To the Honourable,
The Legislative Assembly of the
Province of British Columbia
Victoria, British Columbia

Honourable Members:

I have the honour to present herewith *Patients First: Renewal and Reform of British Columbia's Health Care System,* the report of the Select Standing Committee on Health for the Second Session of the Thirty-Seventh Parliament.

The Report covers the work of the Committee with respect to the changes that are necessary to improve the provision of health services in British Columbia

Respectfully submitted on behalf of the Committee,

Val Roddick, MLA
Chair

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COMPOSITION OF THE COMMITTEE

MEMBERS

Val Roddick, MLA	Chair	*Delta South*
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Jeff Bray, MLA		*Victoria-Beacon Hill*
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CLERKS TO THE COMMITTEE

Craig James, Clerk Assistant and Clerk of Committees

Anne Stokes, Committee Clerk

COMMITTEE RESEARCH

Anne Mullens, Consultant to the Committee

Wynne MacAlpine, Committee Research Analyst

Pamela CBF Grant, Assistant Researcher

TERMS OF REFERENCE

On August 27, 2001, the Select Standing Committee on Health was empowered to examine, inquire into and make recommendations with respect to the changes that are necessary to improve the provision of health services in British Columbia, and to ensure that government expenditures on health care services are sustainable, and in particular to:

1. Conduct broad public consultations across British Columbia on proposals and recommendations regarding:

   a) the sustainability of the health care system in its current form and historical rate of spending;

   b) immediate and medium term solutions to better plan and manage public health care services, costs and funding pressures;

   c) measures to improve and renew the provision of health care services in British Columbia in order to ensure the long term sustainability, accessibility, quality and timeliness of health care services, as well as improve health outcomes and the overall health of British Columbians; and,

   d) other issues as may be determined by the Committee.

2. Prepare a report by December 15, 2001 on the results of those consultations. In addition to the powers previously conferred upon the Select Standing Committee on Health, the Committee shall be empowered:

   a) to appoint of their number, one or more subcommittees and to refer such subcommittees any of the matters referred to the Committee;

   b) to sit during a period in which the House is adjourned and during any sitting of the House;

   c) to adjourn from place to place as may be convenient;

   d) to retain such personnel as required to assist the Committee;

and shall report to the House as soon as possible, or following any adjournment or at the next following Session, as the case may be; to deposit the original of its reports with the Clerk of the Legislative Assembly during a period of adjournment and upon resumption of the sittings of the House, the Chair shall present all reports to the Legislative Assembly.

COMMITTEE PROCESS

On August 27, 2001, the Legislative Assembly of British Columbia instructed the Select Standing Committee on Health to examine, inquire into and make recommendations with respect to the changes that are necessary to improve the provision of health services in British Columbia, and to ensure that government expenditures on health care services are sustainable.

The Committee was specifically directed to conduct broad public consultations across British Columbia, on proposals and recommendations regarding:

- the sustainability of the health care system in its current form and historical rate of spending;
- immediate and medium term solutions to better plan and manage public health care services, costs and funding pressures;
- measures to improve and renew the provision of health care services in British Columbia in order to ensure the long term sustainability, accessibility, quality and timeliness of health care services, as well as improve health outcomes and the overall health of British Columbians; and,
- other issues as may be determined by the Committee.

The Committee was further mandated to prepare a report on the results of those consultations by December 15, 2001.

The Committee is an all-party committee composed of eleven members of the Legislative Assembly.

Written and oral submissions from the public were solicited, and this call was advertised accordingly in various daily and weekly newspapers throughout the Province.

Prospective witnesses registered with the Office of the Clerk of Committees and were allotted a speaking time; further time was set aside at public hearings for unscheduled speakers, who were permitted to register at the door whenever possible.

The Committee ultimately heard from more than 700 people and organizations. Submissions included 350 witness presentations, and more than 350 written submissions.

The Committee would like to acknowledge the large number of MLAs who did not serve on the Committee, but assisted in raising public awareness about said hearings, and forwarded additional submissions to the Committee on behalf of their constituents for consideration.

The Committee also thanks numerous individuals who aided the Committee at all stages of its work. Craig James, Clerk Assistant and Clerk of Committees, and Anne Stokes, Committee Clerk, traveled with the Committee and provided incalculable administrative and procedural advice. Wynne MacAlpine, Research Analyst, also attended meetings and afforded invaluable support. Anne Mullens, Committee Consultant, drafted the report and provided significant assistance to the members. Assistant Researcher Pamela CBF Grant, assisted with briefing materials, editing and provided submission summaries. Mary Newell, Jacqueline Quesnel, and Dorothy Jones, of the Office of the Clerk of Committees handled the travel plans, logistics, arranged witness participation and spent time on the road with the members.

The Committee also thanks the Hansard staff, including Wendy Collisson, Virginia Garrow, Amanda Heffelfinger, Marilyn Pollard, Pat Samson and Catherine Schaefer, who traveled with the Committee to record hearings.

Above all, the Committee wishes to extend its sincere thanks to the many British Columbians who took the time to write and present their ideas for consideration.

Transcripts of the Committee's public hearings are available at http://www.legis.gov.bc.ca/CMT/37thParl/health/index.htm

OVERVIEW OF THE HEARING PROCESS

In October and November of 2001 the Select Standing Committee on Health travelled around the province to consult with the citizens of British Columbia about ways to renew and improve our health care system. Since the committee formerly convened eight years ago, challenges facing the health care system have steadily intensified and costs have risen dramatically. The committee was reactivated to find ways to improve policy, planning, administration and service delivery of health care in B.C. Consulting with a broad range of British Columbians in all regions was a way to hear firsthand their creative, insightful and practical short-, medium- and long-term strategies and solutions to address rising costs or to increase efficiencies in the system.

Hearings were held on 14 days in 10 locations: Victoria, Terrace, Fort St. John, Quesnel, Courtenay, Prince George, Kamloops, Kelowna, Kimberley and Surrey. More than 350 people — individuals, doctors, nurses, support staff and other health professionals, administrators, unions, volunteers, support groups, first nations groups and others — took the time to appear before the committee, and more than 750 people prepared written submissions expressing their needs, concerns and ideas for the improvement of the health care system. It was the highest volume of submissions received in the history of the legislative committee hearing process.

The sheer complexity of the B.C. health care system was evident from the vast array of issues raised — from the minutiae of obscure regulations and the role of alternative health to the fundamental structure and governance of the system. One submission recommended changing the entire structure, with the management of health care–operating removed from the Ministry of Health and instead operating as a Crown corporation at arm's length from government, like the Insurance Corporation of B.C. model. Many of the organizations and individuals who appeared had a direct interest in the health care industry.

Unifying features of the otherwise highly diverse submissions were the passionate belief that B.C. must work towards maintaining its viable, high quality and effective health care system and that such a system is an essential social good and, indeed, is a defining characteristic of Canadian society. What differed, however, was the multitude of methods and varied philosophies presented on the roles of government, health care providers, private industry, the general public and individuals in keeping that system healthy and sustainable well into the future.

It is impossible to detail in this report the full range and rich variety of the hundreds of submissions received. Exact transcripts for all committee proceedings can be found at the B.C. legislative committee's website: www.legis.bc.ca/CMT/37thParl/health/index.htm. Within the transcripts are a wealth of ideas, large and small — many untested and inexperienced — that might be of interest to other individuals and organizations in B.C. All are encouraged to read the transcripts. This report, by virtue of the need for clarity and priority, highlights the leading issues challenging the health care system in B.C. and provides some of the actions the government could take to address these concerns.

SETTING THE CONTEXT

In each minute that ticks by in British Columbia, we spend another $18,075 on health care services. In each hour that passes, another $1.08 million is consumed. By the end of a single day more than $26 million has gone towards trying to keep the population healthy, treat their injuries and illnesses or support their chronic care needs.

Are British Columbians getting the best care for the money spent? Do the dollars buy the greatest improvement in quality and length of life? Is our system working in the most efficient and effective manner? In recent years many people in B.C. would answer those questions with a resounding NO. Almost every day brings calls for more money to be put into the system to shore up wages, expand programs or treat more people. New technologies, new pharmaceuticals and new procedures are constantly coming on line that hold out improved diagnosis and treatment, inevitably at a higher cost. At times, when emergency rooms close because either no beds or no staff are available, the health care system seems on the verge of collapse.

Yet, clearly, spending money on the health care system at the present exponential rate of growth cannot continue. This year's $9.5 billion provincial budget is up more than $1 billion from the year 2000. If health care spending continues at the same projected 5 percent rate of growth, it will consume $13.5 billion per year by 2005. It now eats up 40 percent of the provincial budget, cutting into the spending of other government programs, such as education, social programs, employment initiatives and maintenance of public works — all of which are highly valued and necessary for an equitable and healthy society in B.C.

Even in the healthiest and most buoyant economies it is abundantly clear that such increases in spending for health care alone are not sustainable. In times of economic downturn, as have hit this province and North America during the fall of 2001, even maintaining the present level of spending is an enormous challenge.

An even greater challenge is to ensure that the money we are spending is used wisely and well, that it is managed effectively and that British Columbians are getting their money's worth. After all, it isn't simply "government" dollars that feed the health care system; it is taxpayers' dollars. Any increases in spending mean members of the public must ask themselves: "Am I willing to pay more taxes for this?" It is in everyone's interest that we have an effective and sustainable health care system that we can all afford well into the future.

UNIVERSAL PROBLEM

British Columbia is not alone in its struggle to find a way to align the health care needs of its population with the resources available. Every province in Canada and every industrialized nation in the world is grappling with how to provide high quality, efficient and medically necessary health services at an affordable price to those who need them. Most countries are trying to maintain a health system that is accessible to the public regardless of its ability to pay. As one submission to the committee observed, quality, cost and access are an "iron triangle" restraining every developed nation in the world. "Pick any two, but the third will be elusive," Alex Berland, a health care consultant, told the committee.

As another witness noted, the forces driving the ever-increasing costs are, for the most part, beyond an individual province's or country's control. Over the last 40 years the realm of the possible in medicine and medical technology has grown by leaps and bounds. Back in the 1960s, when Canada's medicare program was first being created, there were no cardiac bypasses, hip replacements, cataract excisions, organ transplants, nor were there special care nurseries saving 24-week-old premature babies. The number of pharmaceuticals a doctor could prescribe was limited to a few hundred. The most commonly used diagnostic tools were an X-ray and a stethoscope.

However, each subsequent year has brought new procedures, new diagnostic tools and new pharmaceuticals, all at an ever-increasing cost. Patient expectations for care rise along with the availability of new technologies. While a stethoscope and X-ray may be all that are needed to diagnose a condition, patients and doctors want the MRI or CT scan. Rising costs are not just limited to "new" procedures; incremental costs are being experienced in all sectors of health services, even for medical procedures that have been in existence for a while.

> *"Advances in coronary angioplasty — balloon angioplasty — will give you an idea of the kind of incremental costs we're talking about.… We currently provide about 4,200 procedures a year for the province at a cost of $14 million. In 1995, 3,000 cases were performed at a cost of $6.6 million.… We've increased our services by 40 percent but our costs by 112 percent. Why is this? Well, first, the actual techniques and technology have improved. The improvement gives us better outcomes, but it costs more — more expensive catheters, more expensive technology. You need better expertise, so you've got higher training needs. Even though we get better outcomes, the incremental cost rises."* — Dr. Penny Ballem, Deputy Minister of Health Services and Health Planning, Victoria

The inability to deny potentially life-saving or life-enhancing advancements to a public that expects them has placed budget-minded governments between the quintessential "rock and a hard place." Deny a service and someone may die; allow it and costs continue to climb, perhaps eventually threatening the viability of the whole system.

Compounding the problem of resource allocation is the tug-of-war between paying for high-tech medicine and paying for prevention efforts that if applied early enough might remove the need for acute-care intervention. It is widely accepted that the greatest gains in public health and long-term health status for the population — as indicated by such measures as infant mortality, longevity, injury rates and years without disability — are not reflected by the number of liver transplants performed or MRI scans available. In the last century public health experts note that the greatest gains in the health of populations have come from providing clean water and improved sanitation, widespread immunization programs, antibiotics and infection control. In addition, it is increasingly recognized that the social determinants of health — for example, literacy, employment, education, housing and level of income — have a far greater bearing on an individual's ability to attain good health than access to acute care services.

Numerous witnesses before the committee noted that when the Canadian medicare system was established, only two types of services were covered — hospital services and doctors' services — which has naturally distorted the health care system to an acute care,

intervention-oriented system. Many stressed the need to shift the health care system away from high-tech, acute care, "rescue" medicine towards a more preventive, population-based health and chronic-care model. One witness described it as being akin to pulling people from a river with their arms and legs bitten off but not dealing with the alligator upstream. Others noted, however, that the problem in focusing more resources on prevention is that while it may eventually save money, in the short term it demands an increase in the budget. It is a long-term, uncertain investment, with the benefits perhaps accruing 20 years hence, while people need attention for their acute problems today. With a limited budget, attention invariably gets distorted to short-term, immediate need.

> *"What is so powerful about medical technologies is that once it becomes possible to use them to save our own lives or those of our loved ones, it becomes imperative that we use them — it is not optional. Yet we lack an effective and meaningful social mechanism for allocating resources between competing demands of prevention and technological correction."* — John Olsen, witness, Courtenay

In addition to the previous concerns, other challenges have emerged. Worldwide there is a shortage of nurses, doctors and other health professionals. Increasingly stressful conditions are having an impact on workplace morale and job satisfaction. The workforce is aging and so is the population in general, which also threatens to place more demands on health care systems. While the impact of both human resources problems and aging-population pressures in B.C. will be discussed in more detail later in this report, it is clear that the problems facing B.C. are being faced by all other provinces in Canada, if not most industrialized countries of the world.

SEARCHING FOR THE ANSWERS

No single society has yet struck the perfect balance and designed a problem-free system. In Canada, however, we have been searching for solutions for a number of years. Since 1990 there have been six different provincial and federal royal commissions or special committees to examine the state of health care and make recommendations. Those include B.C.'s 1991 Royal Commission on Health Care and Costs, the Seaton commission; the 1994-97 National Forum on Health; Saskatchewan's 2001 Fyke commission; and Quebec's 2001 Clair commission.

Common themes in all the studies have been the need to define the principle objectives of the health care system, to improve organization of the system, to increase the focus on quality and accountability, to better manage human resources issues, to undergo primary care reform and to focus more on population health rather than acute care medicine.

Two federal reviews are currently underway. The Senate Committee on Social Affairs, Science and Technology — the Kirby commission — headed by Senator Michael Kirby, was convened in the fall of 2000 to lead a multi-pronged examination of the Canadian health care system and has now released two of its five reports. In April of 2001 former Saskatchewan premier Roy Romanow was appointed to lead the Royal Commission on the Future of Health Care — the Romanow commission — which will report in the fall of 2002.

In addition to government-led initiatives, numerous individuals, academics and organizations have turned their own lens on the problems and made recommendations for various overhauls. Health experts penning studies, books and research tomes on how to solve the health crisis are a veritable growth industry. Some of the notable contributors to the debate include UBC's Centre for Health Services and Policy Research and the Fraser Institute. Individuals include Dr. Michael Rachlis, author of Strong Medicine, which advocates salaried doctors working in multidisciplinary teams — primary care reform — and Dr. David Gratzer, author of Code Blue, which promotes medical savings accounts — annual funds given by government to individuals who then spend the moneys on their health care needs.

> *In 2000 many countries were shocked when the World Health Organization (WHO) released the first ever ranking of world health systems. The WHO analysis used a controversial methodology that ignored wealth and rated countries by what they accomplished with what they had, particularly in health equality, population health and distribution of financial burden. France was rated number one, with Italy in second place. Canada was shaken at thirtieth place, just ahead of Australia and seven ahead of the United States. Critics of the WHO report's methodology, however, noted that citizens of the countries weren't polled for their opinions. A Harvard study surveyed public impressions and revealed a different hierarchy: Denmark, ranked sixteenth by WHO, led the list with 91 percent of the population satisfied with their system, but only 65 percent of the French and just 20 percent of Italians expressed satisfaction with their systems. In Canada 46 percent of those polled said they were satisfied.* [1]

While all the reports, studies and books tend to cover the same longstanding and emerging issues, the recommendations for how to deal with funding pressures fall under two major philosophies. One philosophy is that there is enough money in the system and that what are needed are improved efficiencies, such as restructuring the health care model, removing fee-for-service payments to physicians and expanding primary care reform. The second philosophy holds that while restructuring and reform are necessary, new money is also needed.

In September 2000, after almost a decade of restraint for health funding, the federal government committed $23.5 billion over five years in new money to all health care systems in the country. B.C.'s allotment came to $2.5 billion over five years. As a number of commentators have noted, the most immediate effect across the country was the fuelling of demand for higher wages in the health care sector, a number of strikes and labour negotiations that led to expensive new contract settlements.

Leading the "new money" debate and creating the most discussion and controversy has been the Kirby commission. In its Volume Four: Issues and Options, released in September 2001, the commission notes that it is being deliberately factual and non-ideological because its objective is to launch a public debate. "Such a debate needs to include options that are often rejected out-of-hand," noted the report, asking the questions: "What services should be covered? How should those services be financed? And how should they be delivered?"

The Kirby commission notes that the Canadian system is unique among industrialized countries in that it pays 100 percent of the cost of delivering hospital and doctor services — which 40 years ago comprised the greatest health care expenses — but pays little for home care, drug therapies, home medical equipment, assisted-living devices and health professionals like physiotherapists and occupational therapists — which today may be essential for health and well-being.

The Kirby commission discusses the pros and cons of user fees, co-payments, deductibles, higher premiums, tax incentives and disincentives, public-private partnerships, private insurance and private provision of service in a "two-tiered" system. The commission discusses alternate financing schemes such as medical savings accounts, promoted by Gratzer and by the Fraser Institute's Cynthia Ramsay. While the Kirby commission's final recommendations are awaited in Volume Five, due in the winter of 2002, its no-holds-barred approach has sparked the first frank and open discussion of all the options, regardless of their potential disfavour with the Canadian public. This committee commends the Kirby commission for its forthright discussion. It is only by reviewing all the options that we can decide what avenues should be undertaken.

> *"Given the stated objectives of Canadian health care policy — access to medically necessary services and no undue financial hardship as a result of having to pay health care expenses — Canadians need to consider whether the present structure should be changed. Is it still appropriate for government to provide 100-percent coverage for two, albeit critical, services but less or no coverage for other services that most would argue are equally medically necessary?"* — Senator Michael Kirby

It is important to note, however, that while the abundance of commissions, studies, reports and books has been replete with recommendations, in many cases the steps needed to implement the recommendations have been lacking. Additionally, the evidence confirming whether certain changes will produce the desired results have also been lacking. As the report will discuss in more detail later in the section on evidence-based care, this committee feels it is important that any reform, restructuring or alternate financing methods that are undertaken have an evaluation process so that we know whether the intended goals were indeed achieved.

> *"At no time has the B.C. government had a greater mandate to make the changes necessary to get our health care system back on track. Let's swallow our poison now.… As we see it, there have been too many committees trying to define the problem and come up with solutions.… It is time to get to the task of implementation."* — Dr. George Linton, Terrace

> *"We are continually asking the right questions, but we do not seem to have the strength or the political will to make the necessary changes."* — Irene Lipovszky, Coronary Health Improvement Project, Prince George

NEED FOR A MADE-IN-B.C. APPROACH

While lessons can be gleaned from other provinces and other countries, they will need to be adapted to meet the unique needs of B.C. For example, Singapore is often rated as one of the top health care systems in the world, with a public that is held responsible for some of its health care choices through medical savings accounts and a system that responds well to most citizens' needs. However, applying a Singapore model to B.C. is problematic. The countries are vastly different. Singapore is one of the richest countries in the world, with the highest gross domestic product per capita of any nation, the highest literacy rate and one of the lowest unemployment rates, at 3.2 percent, in the world. The entire country is the combined size of Vancouver, Richmond, Burnaby and the North Shore.

B.C.'s immense geographical expanse — marked by vast regions of rugged coastline, mountainous and inhospitable terrain and isolated communities — is one of its largest challenges. The scale is daunting: three United Kingdoms could fit into its 950,000 square kilometres with room left over for Denmark, Belgium, the Netherlands and twenty Singapores. The province's average population density per square kilometre is just 4.3 people compared to Germany's 230, the United Kingdom's 242, Japan's 335 and Singapore's 6,400 people per square kilometre. [2]

Most of the province's 4.1 million people are concentrated in the lower mainland and southern Vancouver Island, with about one million people scattered over the rest of the land mass. In some regions of the province a bad winter storm or a closed mountain pass can cut off one community for days from its neighbouring communities and the medical services that may be there. Some aboriginal communities have no road access and can only be reached by air. This highly uneven population distribution and the severe geographical challenges intensify the problem of delivering uniform, effective and equitable health services throughout the province.

> *"We deliver services to Atlin. That is the same as delivering services from Vancouver to San Francisco, to give you an idea of the perspective. But it is not the I-5 we drive down. It's Highway 37, which is a half-gravel road. In winter there can be as much as four feet of snow on it. A larger percentage of our population has no roads at all."*
> — Russ Seltenrich, Terrace and Area Community Health Council, Terrace

The geographic realities accentuate regional disparities and pit the relative "haves" of the urban populations against the "have-nots" of the more remote locations. Rural and remote locations have tremendous difficulty recruiting and retaining health care staff. Patients in rural communities can incur large travel and accommodation costs obtaining health services. Boom and bust cycles for many of B.C.'s resource-based economies add to the complexity of providing health services and maintaining a viable economy and population base that can sustain the livelihoods of doctors, nurses and other health care providers. An insufficient population base can also mean that certain medical procedures, which require high volumes in order for physicians to maintain their skills, are not done with enough frequency to make their delivery as safe as in urban centres. Community supports may also be lacking for services like Meals-on-Wheels, home care and adult day centres.

Demographic differences in various regions and communities also play an important role in the range of health care needs and services required. A community with a high proportion of elderly residents — such as Parksville, Qualicum or Kelowna — will have a different need and demand for service than a community with a high proportion of resource-based workers and young families, like Kitimat or Fort. St. John.

> *"We need to have common principles throughout B.C. in what we are trying to do, but I think we have to be very flexible around how it is actually structured and funded in each area. Different communities are different and their needs are going to be different."* — John Tegenfeldt, former Deputy Minister of Health Services, Victoria

Despite all the angst in B.C. around health funding and the challenges of service delivery in a huge province, there is good news. As Dr. Shaun Peck, deputy provincial health officer, told the committee, B.C. has comparatively a very healthy population. We have the lowest infant mortality rate in Canada and the longest life expectancy: 82.2 years for women and 76.8 years for men, which is among the best in the world. Between 1986 and 1998 there was a progressive reduction in deaths and hospitalizations for children and youth. Between 1978 and 1998 there were improvements in self-reported levels of arthritis, high blood pressure, heart disease, migraines, bronchitis and activity limitation.

As a province we have the lowest rate of tobacco use — averaging 20 percent of the population — in Canada, and while some regions have a higher proportion of smokers, the rates are falling. We are aging more healthily and with less disability than in years past, and it appears this trend will continue, with baby-boomers experiencing less ill-health and disability in their sixties and seventies than their parents. Every day thousands of British Columbians are getting high-quality, appropriate care from their doctors; having necessary surgeries; receiving the drugs and medications that help keep them well; or returning to work because of successful medical intervention. We have a lot to be proud of.

> *"We need to put these issues in perspective and consider the suffering of the rest of world rather than just dwell on the imperfections of our high-tech health system. I believe that we have too high expectations of the health system."* — Hilary Crowley, Physiotherapist, Prince George

There are disparities. The North Shore is rated as the healthiest region in Canada, and Richmond is close behind with the lowest rates of disease, injury and disability. But other pockets of the province — particularly the northwest, Cariboo and Thompson regions — have poorer health. The aboriginal population in B.C. has the worst health status on almost every indicator of health, including an average life expectancy of up to 12 years less than the rest of the population.

Emerging health concerns in the general population include type 2 diabetes, which if uncontrolled can lead to a host of chronic and acute health concerns, such as blindness, kidney failure, heart disease and stroke. Children are becoming more obese, raising the spectre of health problems like heart disease and diabetes in the future. Asthma is increasing. Mental illness is still taking a tremendous toll in years of productive life lost to disability and the burden of the disease on some British Columbians. We can and need to do better.

OVERARCHING PRINCIPLES

Any discussion about how to renew or reform B.C.'s health care system provokes a highly heated, emotional and polarized debate. As Senator Michael Kirby has noted, Canadians are deeply attached to their health care system, which has obtained "iconic" status and is used as a way to distinguish ourselves from the United States. During the hearings some witnesses were impassioned and at times angered that any changes were being considered, especially if they involved any financial changes to the structure of the present-day system.

It is possible, however, to map out some common guiding principles that should apply to an ideal B.C. health care system — one on which almost all can agree. Those principles are: **equity, patient-centred care, evidence-based care** and **accountability**. These four principles are the cornerstones on which the rest of the system should be built.

EQUITY

No one should face excessive financial hardship or possible bankruptcy because of illness, disease or disability. Access to timely and medically necessary health services should be available to all, regardless of income. These two access issues are fundamental to Canadian health care and are tenets almost all British Columbians would agree with.

This doesn't mean, however, that British Columbians should not bear some responsibility to keep healthy or to contribute to the future sustainability of the health care system, which will be discussed in more detail further in the report. Rather, it means that any funding mechanism or financial involvement should be equitable and fairly distributed. No one disease profile, demographic or sector of society should bear a disproportionate burden of the health care costs.

Your committee recommends that any health care reform does not place undue financial hardship on individuals or certain sectors of society.

PATIENT-CENTRED CARE

Patients must be at the centre of the health care picture. Services should be coordinated around their needs for safe, timely and effective care. Ideally the goal should be an integrated, cost-effective system characterized by closer working relationships between hospitals, long term care facilities, primary health care, home care, public health, social welfare agencies and schools.

> *"Our health care system isn't really a system, but rather it is a series of responses to acute episodes in ill health…. It has become a patchwork of health care delivery systems rather than one integrated system that works together."* — Hon. Colin Hansen, Minister of Health Services

Currently, the system is highly fragmented with redundancies and duplications, a lack of communication and coordination, competition among service providers for control of resources and little or no incentives for collaboration. Turf wars are rampant and some

providers seem unwilling to alter practices or share autonomy for betterment of patient health.

Witnesses told the committee about their experiences as patients in a fragmented system, including the need for duplicate blood tests between two hospitals in the same regional structure that did not share any information, repeated questions and tests, and instances where one provider did not know what another provider had done. One witness described the bureaucratic red tape that has for two years prevented his son from getting necessary eye surgery, which is covered by MSP. The only facility with the equipment to do the operation is private and charges a facility fee, which MSP won't pay and the family is not allowed to pay. Another witness described medication rules so stringent that if a patient with arthritis can't remove her medication from the bottle, the home support worker is not allowed to extract it for her.

> *"Over the past decade the health sector has concentrated more on the rights, benefits and entitlements of workers and less on the needs of patients, residents and clients."*
> — Rick Riley, CEO, Greater Trail Community Health Council.

Patient-centred care means finding a way for government, unions and health regions to work together to ensure that patient needs come first. Employers and employees must embrace flexibility and cooperation to establish rewarding and satisfying work — in which the ultimate goal is improved patient care — and work to remove the barriers that prevent cost-effective, high-quality care.

In B.C. 80 percent of acute-care costs goes to labour costs — the cost of paying the nurses, technicians and hospital support staff. In the province there are some 70,000 health care workers, not including physicians. The committee heard repeatedly that B.C.'s high health labour costs and inflexible staffing regulations are creating a virtual "stranglehold" in the health regions, stifling innovation and preventing a more efficient, cost-effective deployment of staff.

With the cost of equipment, supplies and medicine continually rising, there is little budgetary room in which the health regions can manoeuvre, because salary and benefit agreements have already been negotiated and commitments have been made. During budget shortfalls health regions have no options but to lay off staff and shut beds, even if patient demand and need is high, because the health regions cannot pay the wage costs to keep the services operating. However, the committee was told that because of job security legislation in B.C., when hospitals lay off union staff, termination agreements can mean it will take as many as 18 months before the region sees the budget benefit of that layoff.

Larry Odegard, president of the Health Association of B.C., told the committee of a survey by the Conference Board of Canada that compared pay scales of 14 categories of employees across Canada. In nine of the 14 categories B.C. paid the highest wages and was second or third in the remaining five categories. The wages of support staff — such as housekeeping, laundry, kitchen, etc. — in some cases were 40 percent higher than in Alberta for the same type of work. "These are the challenges that are disproportionate and of concern to us," Odegard said.

"If health care dollars are to be used for patient care, then we should be paying market rates for such non-technical positions as housekeeping services, food services, laundry and maintenance." — Lael McKeown, former Chair of the Terrace and District Health Council

Moving away from global budgets to a population-based model in which the money received in the region reflects the demographic need for health services will help enhance patient-centred care. The money should follow the patient, so if a patient needs to be referred to another region to receive services in a secondary or tertiary facility for more advanced care, the money goes with him or her.

Your Committee recommends the following:

- **Ensure that patients needs come first.**
- **The needs of patients for safe and effective care be at the centre of any health care reform and revision. Decisions about funding or services should be evaluated on how they will improve patient health.**
- **The funding model should be changed to reflect population-based funding in which regions receive their budgets based on the demographic profile of their residents and the care needs of the population being served.**
- **Funding should follow the patient.**

EVIDENCE-BASED CARE: DOING WHAT WORKS

Putting patient needs at the centre of the health care system does not mean that anything the patient wants, the patient should get. Services provided by the health care system must be based on evidence that they are safe, effective and necessary. As the Seaton commission noted 10 years ago, the focus of the health care system must be on providing those services that improve health outcomes. Services that cannot be shown to improve health outcomes should not be funded by the public system.

Great strides have been made in evidence-based medicine over the last decade. Evidence-based standards have been shown to promote consistency in access and clinical outcomes. The work of B.C.'s Medical Services Plan, in cooperation with the B.C. Medical Association, to develop evidence-based clinical guidelines and protocols for B.C. doctors should be applauded. Some 30 protocols have now been developed which outline how certain symptoms, illnesses and diagnostic procedures should be treated. As Dr. Howard Platt, medical consultant to MSP, told the committee, evaluation of the earliest protocols is showing that they help ensure a uniform, high-quality standard of care; reduce "defensive medicine" in which doctors order tests simply to avoid legal liability; improve patient outcomes; and reduce patient complaints. Further work in this area should be encouraged and supported.

> *"The protocol experience in B.C. has been a very successful one. They have all been prepared as a mix of good medical practice and fiscal responsibility. One protocol alone, the laboratory protocol, has paid for the whole project. All the meetings, all the expenses have been paid by the savings from one protocol. These protocols are cost savings, but they are also the medically sensible things to do."* — Dr. Duncan Innes, Pathologist, Kelowna

Applying evidence-based standards would improve the consistency and quality of care throughout the province. Research known as "clinical practice atlases" can show variations in the extent and quality of care throughout the province. The committee was told, for example, that children in Cranbrook are four times more likely to get tonsillectomies than children in Vancouver. Dr. Platt noted it is unlikely that children in those communities are so different, but more likely that doctors' operating criteria are different.

Work in other jurisdictions, such as that done by the Institute for Clinical Evaluative Sciences in Ontario, has shown that patient lives can be at risk if they undergo certain procedures in small hospitals that have volumes too low to maintain clinical skills and expertise. Evidence-based standards would support consolidating specialty services in regional referral centres, not as a cost-saving measure but as a measure to improve patient outcomes and ensure the maintenance of high standards of safe and effective care.

The B.C. Cancer Agency's delivery of services is a model that could be emulated for the development of evidence-based treatment protocols for various disease groups. Unlike other provinces in Canada, B.C.'s Cancer Agency has developed a framework for its services that defines and maintains standards and guidelines for cancer care and treatment throughout the province, in essence ensuring that all providers are on the same page. As a result B.C. has the best cancer survival rates of any of the provinces.

Commitment to evidence-based care means a commitment to research, monitoring and performance measurement. It means a commitment to collecting meaningful, comparative information — something that is very difficult to do right now in B.C., as this report will discuss in the section on information management. It means following patient outcomes and basing decisions for resource allocation on the ability to improve patient outcomes.

> *"We must shift to evidence-based decision-making and outcome measurement. We must measure, monitor, evaluate and manage the system rather than just doing more… It's an awful thing for a CEO to sit here and admit that for the most part we don't know what the hell we're doing. I can tell you how many hip replacements we do…but I couldn't tell you what the patient outcome was, without pulling each one of those individual charts and going through it myself. Without that kind of information, I don't know that we're spending the money the right way."* — Rick Robinson, CEO, South Peace Health Council

Having an evidence-based culture in the health care system does not mean that innovations or new, untested ideas won't see the light of day. It means that any change, reform or advancement is first undertaken as a pilot project with firm criteria for evaluation and monitoring to ensure it works before it is applied, wide scale, to a whole system. This evidence and evaluation culture must be constantly supported in B.C.

Your Committee recommends continued support and enhancement of evidence-based standards of care to be applied across the province. Any health care reforms or initiatives must be evaluated to ensure they are moving the system in the right direction.

ACCOUNTABILITY

The fourth and final cornerstone of B.C.'s health system should be accountability — not just on the part of government, but on the part of every player in the system at each level. Evidence-based culture sets the standards and protocols for performance; accountability provides the transparency, openness and reporting to ensure those standards are being achieved. Numerous witnesses lamented the insufficient accountability systems preventing the health care system at all levels from truly knowing what it is achieving. There is poor role definition, a lack of a clear mandate and little ability to tell which health authorities are doing a good job and which are not. Insufficient information technology also hampers the ability of the health system to be accountable — which will be discussed in greater detail later in the report.

As former Auditor General George Morfitt noted in his numerous writings, at its essence accountability is the right to know how and why decisions are made and how and why dollars are spent. Getting this information on B.C.'s health care system is almost impossible. Roles and responsibilities of the government, health authorities, health care providers and patients must be clearly defined and then must be clearly reported at all levels.

System Accountability

In 1995-96 the auditor general's office established an accountability framework that is still relevant today.[3] The framework involved setting clear objectives, establishing effective strategies to meet those objectives, aligning management systems to follow the strategies, measuring the performance, reporting the results and establishing clear consequences if the objectives are not achieved.

> *"If we cannot measure what we do, we cannot evaluate it. If we cannot evaluate it, we can't change it properly."* — George Caisley, acting Chair, South Peace Health Council

In recent years the Ministry of Health has developed an accountability framework and has earnestly begun to develop performance indicators. Some of the health regions, such as the Okanagan-Similkameen, have put a great deal of effort into performance "report cards" which help assess how they are doing and help guide decision-making. However, in the ministry and across the province more effort needs to be put towards establishing clear objectives and targets; measuring success; open reporting of the results, not just activities; and the consequences if the results aren't met. There needs to be an overall plan for health care in the province, and target outcomes should be set from health indicators in each region. Regions should be accountable to reach their health care targets based on the health status of their populations.

"In the accountability framework, I'd like to see what we are accountable for at every single level from the individual, to the hospital, to the region, to the government level, and just make it clear what every one of those levels is accountable for. Then give us the flexibility to manage or do what we're supposed to do within that accountability framework." — Elizabeth Riley, president and CEO, Children's and Women's Health Centre of B.C.

Physician Accountability

Doctors act as independent, autonomous professionals, and while they are accountable to the College of Physicians and Surgeons for the quality of care they provide, it is not a particularly open and transparent process for the public or the government. They are paid by public tax funds, but they are not contractually bound through their payment system and are not bound to any particular behaviour or activity. They are gatekeepers to the health system in their regions and to the use of services, but they are not accountable to the regional structure. They bill the Medical Services Plan for the care they provide, but those billings are only reviewed or questioned in specific audit situations.

"There is no job description associated with participating in the fee-for-service system. There are no objectives linked to the needs of the health care system or society at large. There are no performance expectations associated with this compensation, except that you fill in the forms and give the patient-ID, the billing code and the diagnostic code. There is virtually no assessment of the performance of physicians. We are basically saying to physicians: 'You are the doctor. You decide what you want to do, how many times you want to do it and what you need to do, and we will pay you as many times as you perform that activity.'" — Dr. Andrew Larder, Medical Health Officer, East Kootenay Region

The establishment of clinical protocols, described in the section on evidence-based care, is now enabling an examination of decisions and can be linked to limits on coverage. The more evidence-based standards of care that become available, and the more the public knows about the existence of these standards of care, the more possible it will be to keep members of the medical profession accountable for the decisions they make.

"*The recommendation [in the protocol] is that diabetics should have their urine tested for tiny amounts of protein every year. We know that only about 40 percent of diabetics are actually being tested. No wonder they are going on to renal failure. We are not even looking for it.… When we start publicizing it as a performance measure…we hope that will generate more activity from doctors in doing it right and more understanding by the public of what needs to be done."* — Dr. Howard Platt, Medical Consultant, Medical Services Plan

Patient Accountability

Patients need to be accountable for their use of the system too. In order to be accountable, however, patients need to be more knowledgable about their own health and about appropriate use of the health system. Numerous research studies in Canada and abroad have shown that when patients are informed and responsible partners in their own care, their health improves and their use of the system improves. For example, a recent federally funded study in Alberta evaluating a diabetes education pilot found the number of clients whose blood sugar was out of control decreased from 64 percent to 22 percent after the program.[4] B.C.'s HealthGuide program, which delivered a comprehensive book of common health problems to every household in B.C. and established a 24-hour, toll-free NurseLine, is a positive development. However, witnesses before the committee noted that the program has been very poorly promoted and many people in the province do not even know the telephone hotline exists.

> *"People need to be educated that the single greatest determinant of their individual health is not found in a pill, a scalpel or a CT scan. It is in their everyday life — how much they eat, how much they exercise, how much they drink and whether or not they smoke. If we all, as individuals, focus on what we can do for ourselves and not on what government can do for us, that, I think, is our greatest guarantee of a sustainable and cost-effective health care system."* — Isobell MacKenzie, Peninsula Community Health Services, Victoria

Patients often have little understanding of the nature of their own health problems and how their lifestyle actions may be contributing to their ill health. Another federally funded study in Saguenay-Lac-Saint-Jean, Quebec, provided patients with information about smoking, physical activities and eating habits as a means of risk management for cardiovascular diseases. Researchers found that providing patients with this information had a positive effect on their blood lipid levels and their level of physical activity.[5]

Educated patients can become responsible coordinators of their own care, but this requires that they be able to assemble their own health records. Accessing health records is now a difficult and onerous process. It should be routine that patients get copies of their test results and medical notes for their own health records. At the time they see the doctor, a statement of services should be made and costs given to the patient. The improvement of information systems, such as the widespread use of electronic health records, could eventually lead to an individual being able to go on line, enter their personal health number and password into a health data bank and access all their medical records, view test results and plan upcoming preventive tests, just as one can access banking information on line today.

Like doctors and regional health authorities, in order to be accountable for their care, patients need to know what is expected of them. Once expectations have been established, British Columbians should debate whether consequences should be established for people who do not take responsibility for improving their health or using the health system wisely — such as lower priority treatment for cardiac bypass surgery for patients who do not try to quit smoking or a fee for continued inappropriate use of emergency departments.

Your Committee recommends the following actions be taken to improve accountability at all levels:

- **A provincial plan for health care must be developed and implemented with clearly established objectives, targets, reporting mechanism, evaluation and consequences. The regions should have the flexibility within the accountability framework to address regional and local circumstances and decide the best way to meet those targets in relation to the demographic needs of their populations.**
- **The creation of MSP/BCMA clinical protocols should continue to be a priority and be used as an accountability measure of physician practices. Physicians who routinely practise outside these accepted protocols should face appropriate sanctions.**
- **More effort should be made to educate patients about how to be responsible for their own health and use the health system wisely.**
    - **Promote the *B.C. HealthGuide* and NurseLine more widely.**
    - **Patient copies of medical records, test results and statements of use of medical services should be more easily available or routine.**
    - **Expectations of what constitutes appropriate use should be widely publicized.**
    - **Public debate should be held as to whether reasonable consequences should be established for people who repeatedly fail to take responsibility for their health.**
- **An independent quality control team should periodically visit health care region sites around the province, unannounced. They should examine practice, delivery and outcomes and assess provider satisfaction and patient satisfaction. The quality control team should ensure the region is meeting objectives set out by the provincial plan and the accountability framework and make recommendations for improvement.**

REGIONAL RESTRUCTURING

In an attempt to move health care services "closer to home" and, ideally, make health services more integrated and responsive to local health needs, the provincial government transferred responsibility in the mid-1990s for the delivery of health services to local or regional governing bodies. This regionalization of health care resulted in the formation of 52 health authorities throughout the province. Eleven of the authorities were large, mostly urban-based regionalized health boards; 34 were community health councils; and seven were community health services societies. It is clear from numerous testimonies delivered before the committee that this noble attempt at more local control has been a highly flawed endeavour and has instead created an overly complex, cumbersome, fragmented and bureaucratic system.

Some of the problems include a multitude of very small health authorities that lack the critical population mass necessary to do an effective job of managing health delivery in their areas. Roles and responsibilities between the different regional and provincial players are not clear. Individuals serving on boards of health authorities lack a clear understanding of their mandate and a clear delineation of how it differs from the mandate of others in the system. The volunteer base, which was an extremely vital and contributing force before regionalization, has eroded, and a valuable resource was allowed to dwindle.

> *"Regionalization has not been cost-effective nor care-effective. It has taken away universality in health. Often other regions won't accept a patient if the patient is not from their community or region. Two weeks ago we wanted to transfer two psychiatric patients to the South Okanagan. They wouldn't accept them, so we had to send them to Alberta."* — Jim Vaillancourt, Creston and District Health Council

RESTRUCTURING GOVERNANCE BODIES

The need to restructure to a more simplified and clear chain of command was highly evident throughout the hearings. Indeed, not only did many of the CHCs and CHSSs recommend various amalgamation strategies, many had heard rumours that new configurations were already being planned by the Ministry of Health. There was a great deal of angst among health authority board members who appeared before the committee about the delay in revealing what the new configuration would be. The message was sent repeatedly that until they knew the new structure and shape of amalgamation, their hands were tied for their own planning processes. The message was: "We know it is coming; get on with it."

Nevertheless, there was tremendous concern that new boundaries and structures would be derived from a Victoria-based perspective and not take into account the local geography and established referral patterns of a region. For example, the Peace-Liard region in the northeastern part of the province wanted its three community health councils amalgamated into one regional health board, but they did not want to be lumped in with Prince George because patients were rarely sent there for tertiary services. They would either be sent to Grande Prairie or Edmonton — less than an hour away by air — or to Vancouver.

> *"To lump together areas that have different cultures, trade routes and practical delivery realities will not help the health care services in B.C."* — Al Richmond, Cariboo-Chilcotin Regional Hospital District

Likewise, witnesses from Campbell River and Comox stressed the need to amalgamate the seven health authorities on Vancouver Island into three distinct regions — the capital health region, Central Island and North Island/Powell River — not simply one large Vancouver Island region. Representatives stressed that to force the north part of the Island in with the lower two would go against referral patterns, dilute decision-making and increase costs. Another example of having a health region not take regional referral patterns into account is having Surrey Memorial Hospital as the referral hospital for Delta, White Rock and Tsawwassen. Those communities almost always refer into Vancouver hospitals.

> *"To be effective, the reallocation of responsibility and authority should apply to populations large enough to share financial risks of providing a full spectrum of health services, yet small enough to engage a sense of responsibility of stakeholding in the people receiving and providing service."* — Dennis McMahon, Comox Valley Health Council

Restructuring regional health authorities will create a great deal of temporary upheaval — and, in some cases, discontent — in the regions. It is essential, however, that this simplification and streamlining be done as soon as possible. Regional demographics, referral patterns and projected growth patterns should be considered, but the most important consideration is whether the restructuring will be a positive step to improve patient health and access and provide coordinated, unduplicated, effective administration.

Your Committee recommends the following changes to the regional health authorities:

- **The number of health authorities should be significantly reduced, keeping in mind the regional referral patterns.**
- **Members should be appointed to the regional boards, recognizing geographic representation and health care expertise.**
- **The regions should be run by leading health care CEOs, who report to the Ministry of Health and manage the overarching health plan, but who have the authority, flexibility and incentives to tailor the health needs of their particular region.**

RESTRUCTURING ACUTE-CARE SERVICE DELIVERY

Along with reducing the number of regional health authorities, redesigning how acute care services are delivered in the province also emerged as a recurring theme and flash point during the hearings. The committee heard repeatedly that it is not safe for patients, not economically viable for providers and not cost-effective for the province to maintain multi-service referral hospitals in small or even medium-sized communities in B.C. With increasing complexity in modern medicine and surgery, all specialty and subspecialty services should be concentrated in designated regional centres. Pediatrics, trauma care, psychiatry, neurology, orthopedics, high-risk obstetrics and other surgical specialties should be considered for consolidation. Tertiary services — such as organ transplants and other low-volume, highly specialized services — should be concentrated in one centre only in the province until population volumes and demand can support a second facility.

Dr. Michael Humer, a thoracic surgeon in Kamloops, presented a highly detailed strategy at the Kamloops hearing for the optimized coordination and quality delivery of thoracic surgery services in the province to replace the haphazard system of care now functioning. His long-range plan focused on concentrating thoracic surgery in four locations around the province, — Kamloops not among them — with three surgeons in each location to remove the stress, isolation and inefficiencies of solo practices.

He stressed his model would ensure the standardized and optimal delivery of care to patients, help retain physicians, help provide enough volume to keep the skills current and the patients safe and best allocate the resources. Yet he acknowledged it would cause initial upheaval. He suggested that each specialty and subspecialty group of physicians and surgeons in B.C. should draft similar strategic plans for centrally located services. "It is only by creating these plans that the increasing medical needs of the people of British Columbia can be addressed in an acceptable fashion," he said.

> *"Consolidation of services is a hard sell for the public on an immediate basis, but if in the long run they actually get improved physician access and improved care, it is in their best interests."* — Dr. Jon Just, General Surgeon, Kamloops

While the committee heard substantial agreement with the principle of concentrating specialty services in designated referral centres, decisions about regional referral centres will be highly controversial and divisive. For example, which community loses its ICU, and which community gains the regional designation to concentrate ICU services?

Part of the problem is that health care is not simply a service that is given to patients to cure their ills and improve their lives. It is an industry that supports more than 10 percent of the jobs in the province, supports regional economies and touches the lives of all who live in the communities. Concentrating services in one area will mean lost jobs in another area and ripple effects through the local economy. People living outside urban centres often think nothing of driving an hour into a larger town to see a movie or purchase clothing, groceries or appliances, yet they protest being forced to do the same for their specialized medical care, even if it means the care they receive is safer, of higher quality and more effective.

Communities such as Prince Rupert, Smithers, Hazelton and Terrace will face a tremendously difficult negotiation in deciding which community in their region should be

the referral centre. Specialist physicians in Terrace made a convincing presentation to the committee to support their location, but the other locations would fight that designation. Consolidated services must be achieved for the reason that they maximize the safe and effective care of patients. If we keep focused on our principle of evidence-based, patient-centred care, the correct option can be made palatable to even those who protest services leaving their community.

> *"The fiscal reality of the times say that maybe it is time to park the parochialism and deal with what is the going to be most effective for the patient at ground level. Let's not let our perceptions stop us from doing what is right and what will work."* — Steve Thorlakson, Fort St. John

Setting up satellite outreach and primary health services in other communities will be essential to the design of regional referral centres. These services would provide top-quality primary care, prenatal care, management of chronic care issues, wellness programs to maintain health and would have the emergency response and triage capabilities to effectively deal with emergency care. As retired surgeon Dr. Donald Strangway noted, every community hospital or satellite clinic needs to be able to deliver thrombolytic therapy to deal with a heart attack, give a blood transfusion, maintain an airway, carry out artificial ventilation on a short-term basis, splint and stabilize fractures. "Beyond that, many of the regional hospitals should, as soon as the patient arrives, be making arrangements for transfer to the regional trauma centre," he said.

Essential to this consolidation plan is the enhancement of our provincial ambulance and paramedic services — which will be described in more detail in the next section — to strengthen the links between rural areas and regional centres. The key to success will also be to ensure that health practitioners in the outlying communities are not isolated and feel supported and valued as part of a well-connected, functioning system in which they play a pivotal role. Once telehealth initiatives can be proven cost-effective, reliable and useful, linking outlying communities to specialist services via video and computer may eventually help service delivery around the region.

These proposals will be a bitter pill for some communities, and the strategic plans must be carefully worked out to ensure patient care and physician retention will indeed improve. The reality is that with the current problem of physician and nursing shortages and with solo specialists refusing to be on call every night of their lives, many communities in outlying areas are often compelled to close their ICUs or refuse high-risk or specialty patients, such as high-risk obstetrics patients. Those patients must then be transported to the next community without the benefit of a formalized and effective referral plan.

It is safer for the patient, more satisfying and viable for the physicians and a more efficient use of resources if services are concentrated in one location, with an established network of outreach programs developed for the surrounding communities. Specialists could even arrange mobile clinic days in each of the outlying communities to remove the need for the patient to always travel to the centre.

Your Committee recommends that the Ministry of Health, in close collaboration with each specialty and subspecialty service in the province, work out a detailed referral network establishing regional referral centres in each of the new regional health districts that maximize patient care, improve access and lead to higher retention of specialist services.

REORGANIZING PROVINCIAL AMBULANCE SERVICES

Ensuring that the emergency and trauma care needs of B.C.'s population are met requires a fast, efficient and reliable ambulance service with sufficiently qualified paramedical staff and a fleet of appropriately equipped and versatile air and ground vehicles. The committee was told that trauma patients require appropriate intervention within the "golden hour" of the onset of injury to have the maximum chance at recovery.

The B.C. Ambulance Service is the only provincially operated ambulance service in Canada and operates with an annual budget of $158 million under the authority of the Ministry of Health Services Emergency Health Services Commission. The BCAS came under government auspices through legislation in 1974 in response to concerns about the lack of uniform standards; the odd mélange of commercial providers, including funeral homes; unsavoury competition practices; and uneven patient care.

Now, all telephone requests for ambulances in the province are directed to three regional dispatch centres. Air ambulances are dispatched through the Provincial Air Ambulance Coordination Centre in Victoria. The service averages about 415,000 calls a year — of which only 44 percent are emergency and the rest "transfer" cases. Of those, 6,300 are air ambulance responses, making the B.C. Ambulance Service one of the largest ambulance operations in North America.

B.C. patients who are transported by either ground or air ambulance service are billed for the trip — $54 for the first 40 kilometres and 40 cents a kilometer, thereafter to a maximum of $274. If an ambulance is called and not needed or refused, a response fee of $50 is charged. Employers are responsible for the transportation of any worker injured at a job site, and while they may use the B.C. Ambulance Service, they will be charged a substantial fee.

Numerous witnesses who appeared before the committee stressed that in its present mode of operation the BCAS is failing to meet the needs of small towns and rural populations. The working relationship between the provincial ambulance service and local delivery of health services is strained. Witnesses urged the regionalization of services or at least the regional coordination of services.

It was noted that the most highly trained paramedics — Advanced Life Support — are almost exclusively located in high-density urban centres, yet those populations already have the closest access to trauma care. Concerns were raised that new training standards, while substantially improving the skills of the lowest level of paramedic across the province, may lead to a downgrading of skills at paramedic level 2 in medium-sized towns and communities across the province. If more highly trained personnel transfer or retire, they will be replaced by a person with a lower level of training.

> *The transport system we have is totally inadequate…. I have had people arrive more than 20 hours after their injuries…. People have died as a result of that or been left with significant disability.* — Dr. Richard Brownlee, Neurosurgeon, Kamloops

Concern was also raised that the air ambulance system cannot respond fast enough. Planes are usually dispatched from Vancouver, sent out to the rural areas, then return to Vancouver, wasting precious time. Stationing aircraft in strategic locations throughout the province could shorten response time. In some B.C. communities fixed-wing planes cannot always land in bad weather, so more helicopter capabilities are needed. Helicopters also provide "site-to-site" transportation, removing the need for a ground ambulance to get to and from the plane. Witnesses told the committee that B.C. Ambulance regulations and union rules prevent small towns, which may have a commercial plane or helicopter and a trained paramedic on hand, from transporting an injured person because they must wait for the designated BCAS service or an official contractor.

Numerous witnesses raised the example of STARS, the Shock Trauma Air Rescue Service, which is a non-profit charitable organization operating in Alberta. In conjunction with other ground and air ambulance services, STARS operates two helicopters — one in Edmonton and one in Calgary — staffed 24 hours a day with a pilot, co-pilot, emergency/ICU–level nurse and advanced life support paramedic. An emergency physician is available to accompany trips and, according to the STARS program, does so on about 50 percent of all flights. All staff wages and operating costs are covered by donations predominantly from private benefactors, service groups and corporations. Patients transported by STARS are not charged any fee for the trip. Witnesses who appeared before the committee, particularly in communities near the Alberta border, said STARS is frequently called to transport B.C. patients to Edmonton or Calgary.

> *"Even coming from Kamloops takes time…. We can have a turnaround from STARS Ambulance that is much faster. They can be out in 35 minutes."* — Claire Riedel, Chair, Columbia Valley Health Council

Your Committee recommends that the following changes to the B.C. Ambulance Service:

- **Devolve operation and control of the system to the regional health boards while ensuring an adequate cash flow to properly operate the system. Provincial standards should be set and a measurement or oversight mechanism should be put in place to ensure compliance with standards. The regions can have the flexibility and control to decide how to best deliver those ambulance services.**
- **Encourage health regions to upgrade skill levels of all ambulance personnel.**
- **Coordinate the training of paramedics with local trauma centre physicians or by qualified personnel in training courses throughout the province to remove the need and expense to have trainees travel to Vancouver.**
- **Develop good communication technology between ambulance and emergency response personnel in trauma centres within regions.**
- **Encourage the formation of a non-profit, charitable, STARS-like response system in B.C. to augment helicopter response in the province.**
- **Encourage service clubs — such as Rotary clubs, Lions clubs, etc. — to help purchase and provide some of the high-tech monitoring equipment needed in ambulances — for instance, automatic defibrillators or cardiac monitors.**

INFORMATION MANAGEMENT SYSTEMS

Increased accountability — the ability to monitor use of health services, to track patients and manage their health needs effectively, to integrate service delivery and to compare and analyze system performance — relies on one tool: coordinated information technology. This is something the health system simply doesn't have. The extreme problem of non-existent, insufficient or incompatible information systems in health care is occurring Canada-wide and is crippling our ability to improve our performance and patient care.

> *"The health care system in British Columbia is easily a decade behind any other industry in North America when it comes to utilizing information technologies and management tools. It is an expensive process to catch up, but we have to catch up."* — Hon. Colin Hansen, Minister of Health Services

Establishing a comprehensive information management system requires high-priority attention, a significant investment and a sweeping change to our current situation. The challenge is not simply to provide computers and places to plug them in across the health system. It is the difficulty and necessity that the information be collected in a standardized format, with a uniform set of variables, and that it be capable of being shared across traditional organizational and professional boundaries without undermining consumers' sense of privacy and confidentiality.

However, the complex and considerable challenges of coordinated information systems are not insurmountable. E-commerce and e-banking have proven that concerns over confidentiality; security of data, such as credit card numbers; firewalls; and communication between different systems can be addressed to the satisfaction of consumers.

> *"It's unconscionable that given the technological advances and information technology we have available today, most of the transmission of information between providers in the health system still occurs with the pen and paper of half a century ago."* — Paul Vermeulen, Kimberley Community Health Council

Dozens of witnesses before the committee stressed the urgent need to address the problem of non-existent, inadequate or incompatible information systems. Some rated it the number one issue to be addressed, which could then enable other progressive changes such as a reduction in administration, a reduction in the duplication of services, improved accountability, improved integration of services and improved patient monitoring and outcomes. Currently, each health authority is responsible for introducing its own systems, which are often costly to purchase and maintain and are often not compatible with other regions. Sometimes, systems are not even compatible within the same buildings. A provincewide plan is urgently needed.

> *"In St. Michaels Centre we have a LAN system of 30 users. We're presently putting in a hospice which is going to be tied to the Meditec system of Simon Fraser health region. Our LAN system is not going to be able to communicate with the Meditec system…so what is going to happen is that five directors are going to have two computers in their offices. It is a waste of scarce resources."* — Gerry Herkel, care administration group of the Simon Fraser Health Region

Dealing with patient confidentiality is often described as the main stumbling block to creating a coordinated information system for patient care. Health information can be extremely sensitive and professional ethics in health care demand a strict adherence to confidentiality. Sharing identifiable patient data among different providers raises the questions of who should be allowed access to the file. How do we prevent other non-essential members of the team, or prevent outsiders, from accessing the data?

Some concerns can be addressed by asking patients to sign an informed consent agreement that allows their electronic health records to be shared among certain health care providers, who they choose. If the consent form is clear, straightforward and not legalistic, and if patients are accurately told the advantages of electronic health files, most patients would agree to participate. Patients want to tell their medical histories only once, to have their tests and care coordinated and to have a more seamless integration of the services they need. Patients would want the benefit of a transferable electronic record if they can be assured that protective mechanisms are in place to ensure that only those people whom patients want to have access are able to see the file.

Health information for research, accountability and performance monitoring does not need to have the same confidentiality concerns. A simple program can be devised that immediately strips all patient-identifying information from the file. The problem with research is ensuring that the data is all collected in the same way and that data sets are compatible to enable meaningful comparison within the province and across the country. It is only by comparing information and performance that we can learn how to improve patient outcomes, improve services and manage systems more effectively.

There are some encouraging developments in B.C. on this front. A new service called PathNet, pioneered by MDS Metro Laboratory Services and B.C. Biomedical Laboratories, is in its early stages and has the potential to link every doctor in B.C. to every private and hospital laboratory in B.C. to immediately call up patient results. MEDITECH information service is being used in the Okanagan-Similkameen health region, linking patient files with doctors across the region. Partnerships with private industry and universities should be encouraged to help overcome the technical and confidentiality issues of coordinated information systems throughout the province.

Since the need for a coordinated information management system is extreme across the entire country, there is no need for each province to individually take on the substantial expense and the risk of developing incompatible systems in which comparative information cannot be shared. A combined effort will reduce duplication and cost, establish standardized formats and data sets and create a Canada-wide solution to persistent problems such as patient confidentiality and security of information.

The federal government has announced a number of programs which could help achieve these ends, including committing contributions in health information technology and creating the Health Infostructure Partnerships program, which supports innovative applications of information technology. The federal government should be lobbied for designated funds to deal with this significant, Canada-wide need that if properly addressed will improve the functioning of the whole health care system and the health of all Canadians. The need is urgent.

Your Committee recommends that the provincial Health ministers lead a joint effort to solve the Canada-wide health information management crisis with the financial assistance of the federal government. If federal support is not available for a pan-Canadian response, the province of B.C. should create its own coordinated health information management system.

PRIMARY CARE REFORM

Primary care simply means the first level of patient care in the health care system. For most of the Canadian medical system's history primary care has been represented by a solo general practitioner in his or her office and a five- to fifteen-minute patient consultation. The appointment typically ends with the giving of a prescription, the referral to a lab for tests or to a specialist for further investigation, or the reassurance that the problem is self-limiting and the patient will be fine. After the visit the doctor bills the Medical Services Plan for a fee for services rendered — hence the name "fee-for-service" — and the patient goes home.

Little time is spent giving strategies for managing chronic care issues, teaching self-care or giving lifestyle advice. Doctors aren't reimbursed for it, and with a room full of waiting patients, there isn't the time. Nor does the office have the ability to coordinate other services if needed, like social work, home care help, dieticians, addiction services or chronic disease management. In recent years the advent of extended-hour, walk-in-clinic services has intensified the quick solution into a single problem: no continuity and follow-up and no coordination of other complementary health services.

Over the last decade, however, a movement has emerged called "primary care reform," which promotes a substantially new model of practice. It features a multidisciplinary clinic or network in which a team of health care providers — perhaps one or two doctors, a nurse practitioner, nursing educators, dieticians, psychologists, physiotherapists, even pharmacists and chiropractors — works together to best meet the patient's needs. The doctor — who is usually paid by salary, reformed fee-for-service or another capitation funding model — can spend as long as needed with patients or send them to the nurse down the hall for training in how to use their medications or monitor their diabetes. Usually 24-hour telephone access, prevention services, wellness clinics and other supportive services are part of the package.

> *"We are offering darn good care as a community clinic. We've been able to double the size of our clinic. The efficiencies with the information system allow us to do things like call up all our patients with diabetes to see how many are meeting the guidelines…and we can call the ones in who aren't. We can talk about things that will make a difference, like diet, exercise, family life and compliance with medications. Patients need time; they need attention. That is being done in a different way now."* — Judy Burgess, James Bay Community Project

The philosophical benefits of the new primary care model are that it offers more consistent, integrated and coordinated care for patients, particularly those with chronic illness; a more collegial, rewarding and less stressful life for doctors and nurses; and better human resources deployment and cost-efficiencies for government. In general, however, few patients are aware of this movement and many doctors are skeptical of its benefits, wary of the wholesale change or fearful of the loss of independence. Governments are unsure whether it will indeed bring about better care with significant cost savings and, if it does, whether to use the stick or the carrot to bring about reform.

Since the mid-1990s the federal and provincial governments have been trying the carrot approach. In 1997 the federal government, through the health transition fund, devoted a

sizeable investment to promote primary care demonstration projects across the country. Ontario received $18 million for the creation of 18 primary care networks; B.C. received $9.6 million for the creation of seven demonstration sites. The demonstration projects had to operate under the following conditions: population-based funding and not fee-for-service; patient rostering, that is, signing up patients to the practice who agree not to doctor-shop or use walk-in clinics; 24-hour coverage; electronic health records to access patient charts; and the integration of non-physician providers. Evaluating the project to ensure improved care and cost-effectiveness was an essential part of the demonstration projects.

While these projects have been operational for less than two years, early results seem to be promising.[6,7] Doctors and other health providers reported their work as being more interesting, more satisfying and more amenable to improving the quality of patient care. Patients expressed high satisfaction — although polls taken of comparison groups in solo practices also expressed high satisfaction — and cost projections seem well in line.

The Ontario government has now stated its objective to have 80 percent of family doctors voluntarily join a primary care network by 2004. In a landmark decision early in November 2001, rather than opposing primary care reform, the majority of doctors in the Ontario Medical Association voted to allow family physicians to voluntarily join the networks if they so desired.

The committee heard many presentations that promoted the value of primary care networks, including submissions from the James Bay Community Project, one of B.C.'s demonstration projects. While there is still opposition from some doctors, it appears that as more doctors involved in the demonstration projects report satisfaction and preference for the model, warier physicians will feel comfortable joining the networks.

> *"Among our physicians there has been a shift in favor of primary care reform. Three or four years ago it was an absolute no. I think what we are hearing from physicians now is that they could be interested in working more closely with other health professionals so that they have more satisfaction in what they are doing. I think maybe it is an idea whose time has come, but we might have to do it a bit differently in each community."* — Tracey McDonald, CEO of Central Cariboo–Chilcotin Health Council

One of the biggest promises of primary care reform is that the use of multidisciplinary teams of health providers, including nurse practitioners, could improve access to medical services and quality care in remote and rural regions. In particular, it is seen as a way to better meet the physician shortage throughout the province by a better deployment of staff. Chronic care issues like mental illness, diabetes, heart disease, asthma, arthritis and seniors' health would be better managed, leading to fewer complications and fewer hospitalizations. Some of these benefits have yet to be realized, but there is great optimism that they will bear out.

In fact, the federal government, in further demonstration of its faith in the reform, announced in September 2000 the formation of the $800 million primary health care transition fund, with the aim to support the transitional costs of implementing changes and encourage more physicians and jurisdictions to bring in the new models.

Your committee recommends the following:

- **The provincial government and Ministry of Health continue to provide opportunities and financial incentives for physicians to voluntarily join primary care networks.**
- **Barriers and delays preventing physicians from working under different payment systems other than fee-for-service through the existing alternate payments program must be removed through negotiations with the B.C. Medical Association.**
- **Additional alternate payment systems or models should be developed and encouraged — whether capitation, straight salary or combination of fee-for-service with salary. Physicians must be compensated for quality rather than quantity of care.**
- **Efforts should be made to maximize the contributions of the federal government through the primary care transition fund to help with infrastructure costs.**
- **Rigorous, independent scientific evaluation — not simply ideology — must continue to be part of the primary care reform process to prove its merits, as this is the only way that skeptics should be, or could be, converted to the logic of the reform process.**

PREVENTIVE HEALTH

Many of the leading causes of disability, disease and death can be linked to four major lifestyle factors: poor diet, lack of exercise, tobacco use and alcohol/drug abuse. Trying to fix the health care system without mentioning these four contributing factors would be a huge oversight. Yet it is not as though the public is unaware of these risks.

> *"We could prevent up to 60 or 70 percent of all cancers, up to 90 percent of all heart disease, up to 60 percent of all strokes, up to 90 percent of all cases of chronic lung disease, up to 90 percent of all diabetes — all the things that are filling up our hospitals and our doctor's offices and our graveyards. I am deeply concerned that the entire focus of the general public, the current government and the health care system as a whole is to pull drowning people out of the river. I implore you to ensure we devote adequate time and resources to making sure people don't fall into the river in the first place."* — Dr. Andrew Larder, Medical Health Officer, East Kootenay Region

The problem, however, lies in finding effective strategies to change behaviour and encourage people to adopt lifelong health habits that will both improve their health and help sustain the health care system. It is a thin line between the positive promotion of a healthy lifestyle and what may seem to the public to be an overly intrusive reach into their private lives — for example, the controversy that arose in Victoria when a no-smoking bylaw was attempted for elderly people living in long term care institutions that served, effectively, as their homes. Yet there are successes: some anti-smoking campaigns have been very effective, have constituted a public good and should be maintained, as should drinking-driving counterattacks and other lifestyle promotions.

The committee heard about a number of apparently successful health promotion workshops and volunteer groups. PARTY — Prevent Alcohol and Risk-Related Trauma in Youth — is a national, reality-based education program initiated and funded by the community and charitable foundations in Prince George and Cranbrook. The program teaches teens how to behave responsibly. A number of communities have started coronary health improvement projects that teach intensive diet and exercise techniques to people who are either post–heart attack or at high risk of cardiovascular disease. Reducing coronary risk factors through diet and exercise has tremendous potential, and many programs have been able to achieve dramatic results in lowering blood lipids and improving participants' health. The B.C. public should be made more aware of the success of these lifestyle programs.

Fortunately, many baby-boomers have adopted active lifestyles and there is evidence that they are aging more healthily than previous generations. However, it is the children of the boomers that are raising concern. Childhood obesity is at an all-time high. Instead of running outside to play after school, many sit in front of TVs or computers, eat fat-laden fast food and drink calorie-rich but nutrition-poor soda pop. Physical education is no longer a compulsory subject in school. Already, youths in their late teens and twenties are being diagnosed with type 2 diabetes, a disease more usually found in sedentary and overweight people at middle age.

Your Committee recommends that the following preventive steps be considered:

- **Reinstate compulsory physical education and health classes focusing on preventive health messages into the school curriculum.**
- **Promote healthy eating and healthy snacks to school children and the general population.**
- **Consider waiving the provincial sales tax on exercise equipment, sporting goods and items that promote adults' and children's physical activity.**
- **Encourage cross-ministry cooperation to design health promotion campaigns that promote eating more fruits and vegetables and getting more exercise.**
- **Investigate other successful health promotion campaigns in other jurisdictions to analyze their potential effectiveness in B.C.**

THE CHALLENGE OF HUMAN RESOURCES

The population is aging and so is the health care workforce. This trend, along with a number of training and workforce issues, is creating a critical shortage of almost every type of health care provider, including family doctors, all kinds of specialists, nurses, physiotherapists, speech therapists, laboratory technicians, pharmacists, home support workers, aboriginal health professionals and others. Throughout the hearings academics and professionals in every area of health care raised issues of geographical distribution, division of labour, recruitment and retention, underused skills and appropriate training — all challenges to the most effective use of human resources.

DOCTOR SHORTAGES

Almost every type of doctor is in short supply in B.C.: family doctors, surgeons, pathologists, oncologists and other specialists. An estimated 100,000 people in B.C. do not have a family doctor; two-thirds of GPs and family doctors in Canada are not taking any new patients; and the province needs approximately 350 new physicians to replace those who are retiring, moving away or leaving their practice — more than double the number our medical school is able to train. In fact, the committee was told that Canada is the only country in the Organisation for Economic Co-operation and Development (OECD) that's never trained enough doctors to meet its needs.

While the number of physicians practising in the province has steadily increased over the last decade, the general population has been growing at an even greater rate. According to the Ministry of Health, in 1991 the GP-to-population ratio was 1 to 857 but by 1999 it was 1 to 935. The shortage of GPs is particularly crucial, as without them, the committee was told, the "whole system is in gridlock" — patients can't get referrals to specialists, and hospitals can't do discharge planning because patients don't have family doctors. When a family doctor retires or leaves, patients are "orphaned" and can't find new doctors to take them on. In all, the system suffers from instability due to lowered GP commitments to patients.

> *"We have about 15,000 patients at the moment in Kamloops — this is our estimate — that do not have a family physician. Since 1999 we have had no new family physicians practising full-time — not one."* — Dr. Gerhard Schumacher, GP, Chief of the Department of Family Medicine at Royal Inland Hospital, Kamloops

The need for B.C. to train more doctors is crucial and must be supported in B.C. through the expansion of seats in the medical school, increased residency positions and targeted education funding. The University of British Columbia trains 120 doctors each year and this year increased its allotment to 128 — still far short of the 350 necessary just to replace those physicians leaving practice.

Walk-in clinics may be one factor sabotaging the role of the family physician in B.C. By providing options for high-volume visits, they provide high pay, and by pooling doctor resources, they allow for limited hours of work and more holidays — "high income, low responsibility," as Dr. Schumacher told the committee. What's lost is commitment to patients and to follow-up care on a consistent basis. Similarly, the role of hospital-based

doctors, who work for hospitals rather than with individual patients on an ongoing basis, is exacerbating the shortage of general physicians.

As discussed in the preceding sections, a move to consolidated specialist services in regional centres and the encouragement of more general practitioners into primary care networks could help fundamentally alleviate the shortage, and the pressure on general physicians, by providing more supportive working conditions and allowing for better quality of patient care.

The doctor and health professional shortage is particularly severe in northern and rural B.C., where the existing physicians can face unrelenting call schedules and no relief or assistance from colleagues in the same specialty.

> *"Yes, as we speak, I'm on call every day, everywhere from Smithers to Kitimat. I am on call for about 600,000 people every day." Q: "What happens when you go on vacation?" A: "When I go on vacation, there is nobody here."* — Dr. Barrie Phillips, Internist and Cardiologist, Terrace

It is seemingly impossible to attract urban or even Canadian doctors to rural communities where in some cases the most expression of interest comes from foreign doctors. The committee was told that these potential candidates have a difficult time qualifying for practice in B.C. because of the licensing requirements and "very high expectations" of the College of Physicians and Surgeons and the "current, unnatural mounds of red tape." In Ashcroft, where one family doctor has been serving 9,000 patients with the help of four locums, numerous physicians from overseas have expressed interest and are waiting to come in but have been held up by a bureaucratic process.

> *"They have got to start making it easier for us to bring new doctors in. We understand the need to maintain a standard, but sometimes it just goes over the score. We had a doctor in Saskatchewan who'd been practicing for seven years there, who was obviously deemed suitable to practice there, but he was kept out of B.C. over a minor technicality. We kept fighting it but it took a couple of years."* — Dr. Bill Redpath, General Practitioner, Terrace

Financial incentives were seen by many witnesses as a means of encouraging health professionals to stay in rural areas, through tying partial payment of student loans to a period of rural practice and through health care bonus schemes and so on. But some witnesses said these incentives have in the past turned out to be expensive and only moderately effective — the incentive is paid and after a few years the physician leaves.

Research is showing, however, that training those people who come from rural communities is the secret to recruitment and retention — they are the ones most likely to stay. In fact, 70 percent of physicians trained in a locality end up practising within 70 kilometres of where they were trained, said Nate Bello, chair of academic operations at UNBC.

This approach of gearing education to rural students was initiated seven years ago, and the committee applauds the coordinated efforts of UBC, UNBC and the University of Victoria to expand the program so that at least 50 percent of its training is done in the north. The same principle is being applied to the local training of fully qualified nurses by UNBC and the College of New Caledonia, where $1 million in funding has resulted in 18 new nurses in

the region and the education and training of more than 1,300 employees. A special agreement between the regional health board and the provincial government to spend $250,000 a year on specialty training for doctors willing to commit to working in the region has proven successful in attracting specialists, such as radiologists.

> *"We didn't really anticipate the crisis in physician supply, but the only Canadian recruits to Prince George have been people we've trained ourselves. If we hadn't gone into the business of providing residency training, we wouldn't have recruited any Canadians in the last five years."* — Dr. Galt Wilson, GP, Prince George

A major challenge to targeting rural students, however, is the fact that some rural education may not adequately lay the science groundwork in secondary school for most to pursue medical and health professions in university —due in large part to a lack of laboratory facilities in high schools. Tellingly, of UBC's 128 students only five or six students come from outside the lower mainland.

One innovative solution is the rural pre–health professional program, a one-year pilot project at the University College of the Cariboo funded by Health Canada and the B.C. Medical Services Foundation. The program focuses on health career opportunities programs, acting in an advisory capacity to help facilitate rural students accessing medical training programs. The program has received strong support from UBC, BCIT, health regions, schools and colleges, but funding is about to expire. It's run at a cost of $225,000 and is obviously the kind of innovative approach needed to help alleviate the crisis.

Your Committee recommends the following:

- **More positions should be made available in UBC's medical school, and efforts should be made to encourage applicants from rural communities.**
- **The College of Physicians and Surgeons of B.C. must be encouraged to enter a national credentialing program for all foreign-trained physicians. Currently, foreign physicians credentialed to practise in other provinces cannot easily obtain credentialing here. There should be one national standard so that free movement of physicians from province to province can take place.**
- **Consideration should be given to establishing a model of bursary or scholarship for medical students based on the National Defence ROTC recruitment model, in which the recipient contracts to spend five years practising in a rural or remote location after graduation in return for having their full tuition, expenses and a stipend paid.**
- **Funding support should be given for the rural, pre–health professional program at the University College of the Cariboo.**
- **Ways to discourage the proliferation of walk-in clinics and the exodus of family doctors to these practices should be explored.**

NURSING SHORTAGES

When the largest segment — and, some would argue, the key players — of health care are discontent or their numbers are dwindling, the whole system suffers. Ongoing surgical cancellations, emergency ward shutdowns and hospital bed closures are a direct result of a dramatic shortage of nurses. Authorities estimate there are currently 1,000 vacant positions for RNs in the province. B.C. has 35,000 registered and licensed graduate nurses to look after its 4.1 million people. That's fewer nurses per capita than every province and territory in Canada except Nunavut. Staff shortages lead to overwork, occupational injuries, lack of leadership and low morale which in turn lead to more staff shortages. Addressing these problems is an urgent priority of health care reform, for unless steps are taken to break this vicious cycle, it will get worse.

Within the next ten years B.C. faces the retirement of up to 14,000 nurses. Fifty percent of the nursing population is between the ages of 45 and 65, and most nurses retire at age 58. Also worrisome is the fact that nurses are the sickest workers in the country. Each week in B.C. about 2,400 nurses are absent due to illness. Nurses have the highest illness and injury rate of all professionals. The cost? In B.C. about $200,000 a week is paid in salaries for nurses unable to work, not including the cost of replacements. The full price of these absences cannot be measured in dollars alone.

> *"Today in Terrace our intensive care unit is being closed by the local administration for lack of nurses. I should mention that there's no intensive care open in Prince Rupert at the moment either, and the one in Kitimat is open only when I'm there. The Smithers hospital has no specialist. So the Terrace ICU has been the only one open over the last month or two. Part of the problem with this closure of the intensive care unit is chronic sickness by several nurses. I think the greater problem, however, is the shortage of nurses generally across the whole province."* — Dr. Barrie Phillips, Internist and Cardiologist, Terrace

The fundamentals of what many call a nursing crisis are varied, complex and entangled with issues of gender — 96 percent of nurses are women — as well as economics and societal change. For one, young women who are smart and scientifically inclined aren't choosing nursing in the numbers they used to. Many other options are open to them. There is no reason, however, why only women should consider nursing as a career, and more effort should be made to attract men to the profession. Obviously, nursing woes spread beyond provincial borders, extending to national and even global dimensions.

A common complaint heard is a lack of support both below and above nurses' range of duties. Many RNs, particularly in hospital settings, are burdened with non-nursing tasks as well as heavy patient loads. These tasks include delivering food trays, answering telephones, filling out paperwork and organizing staffing. RNs also struggle with a lack of leadership from head nurses and nursing directors, who could make discharge plans, arrange care in the community or assist new graduates. When nurses spend time on non-nursing duties, patients do not receive the health care and health education only nurses can provide.

> *"We're taking a person in a professional capacity and asking that nurse to provide administrative reports that are done daily, weekly and monthly. Would you take your*

professional person and have them doing a job that you would probably delegate to an employee of lesser value? What I mean by way of lesser value is instead of a person making $30 an hour, wouldn't you delegate that to somebody making $10? It's common sense. When we have a professional nurse providing front-line services to people and we take up in excess of possibly 25 or 30 percent of their time to provide that much in reporting, what we've actually done is taken away service from the people that need it the most." — Bob McCuaig, Kamloops

The flip side of being overworked is being underutilized. Nurses are an integral part of preventive health care and primary care, but opportunities to work in these roles are few. The B.C. HealthGuide and NurseLine are prime examples. If expanded and promoted throughout the province, these programs could reduce physician and emergency ward visits. The successful pilot project RN First Call — where nurses treated non-urgent cases in rural emergency rooms and clinics — could, if revived, go a long way to meet rural health care needs. In fact, 20 years' worth of research shows that nurse practitioners — RNs with advanced education — can perform many tasks done by family doctors. A federally funded study which looked at expanded nursing models throughout the country recommended that team practice between doctors, nurse practitioners and other providers "be the norm" in the delivery of primary health care, not only in rural areas but everywhere.[8]

"The emphasis must be on having the right provider in the right place at the right time. To assume that patients must first always see a physician limits the ability to maximize scarce health human-resources and restricts access to care." — Bonnie Lantz, President, Registered Nurses Association of B.C.

In the past two decades nursing has gone through a revolution. On the one hand, downsizing the health care system has greatly increased workloads, leading to a loss of organizational loyalty and decaying morale. On the other hand, tremendous changes in medical treatments, medical technology, health care structures and health service delivery mean nurses must study vast fields of knowledge and acquire sophisticated skills. Nurses now work in a greater variety of settings than ever, including acute care hospitals, long term and intermediate care facilities, surgical day centres, clinics and in the community. Still, the fundamentals of nursing — caring for and treating the sick — remain the same.

It is this complex scenario that makes education such a sensitive and controversial topic among nurses today. Currently in B.C. aspiring RNs can choose between a two-to three-year diploma program or a four-year degree program. Professional bodies, including the RNABC and the Canadian Nurses Association, believe diploma programs do not provide enough time to fully educate registered nurses. They argue that today's sophisticated health system demands nurses who are equipped with baccalaureate degrees. Interestingly, B.C. is one of only four provinces that still offer non-degree RN programs. Across the country baccalaureate education is becoming the standard. The committee was told that quick-fix solutions that cut the length of nursing education programs could, in the long term, backfire.

"It is dangerous to think that we can provide more nurses more quickly by limiting nursing education to a three-year diploma program. Far from being a solution to the nurse shortage, reducing nursing education may actually promote the loss of nurses. Education has been shown to be a significant nurse retention strategy. Last year a

report by the Canadian Council on Social Development indicated that nurses with a diploma made up 34 percent of those nurses leaving the country, while their university-educated counterparts made up only 19 percent. Nurses with diplomas were also less likely to remain working in direct care and more likely to take nursing assistant–type positions." — Bonnie Lantz, President, Registered Nurses Association of B.C.

Still, not all nurses or health providers agree. Others told the committee that nursing has become "overprofessionalized" and that all RNs do not require a university degree in order to care for patients. Some believe, given today's acute shortage, that society cannot afford to wait four years before a fresh crop of RNs enter the workforce. Several nurses and hospital managers told the committee that hospital-based, two-year nursing programs should be revived as a way to address the nursing shortage.

"Student nurses could work on wards from day one. There could be an apprenticeship program, perhaps, where they would be paid a small wage to start, maybe minimum wage, and by the time they got to be nurses, then the $24 an hour is earned. There is a use for university-trained RNs, but the basic care of patients doesn't call for it. By freeing up nurses for what nurses consider nursing, it would really relieve the shortages. Costs would be lowered, as the bedside care would in actuality be at a much lower and graduating scale. Live-in accommodation would ensure a lot of very caring people take part in a very worthwhile profession." — Magdalen Robinson, Surrey

Nursing is an extremely diverse field. Different levels of specialization demand different levels of education and responsibility — and, one would presume, different levels of remuneration. However, nursing pay scales have been based solely on seniority, not on job classification or skills. Nurses with university degrees or with specialized training for critical care or intensive care receive only slightly more pay than their colleagues without degrees or extra training. This situation has held back flexible and cost-effective deployment of various types of nurses, such as licensed practical nurses, and hampered the use of wage incentives to fill more stressful or challenging positions.

All parties — the Registered Nurses Association of B.C., the Canadian Nurses Association, the B.C. Nurses Union, the health regions and the government — should work together to find ways to enable the education of various levels of nursing, including expanding the roles of LPNs and nursing aides, and to pay nurses according to their skill and education levels. This will better meet the needs of the patients in B.C. and more fairly compensate nurses for the jobs they do.

"Instead of seniority being the main factor for valuing nurses or other professionals, we should focus on the skills and knowledge most needed at any particular time. The most easily filled jobs should not be the ones that receive the highest pay. As an example of this, as a nurse with some seniority I can get a nine-to-five job at a surgical outpatient unit and at the very top of the pay scale — when the hospitals are dying for people to be in the intensive care unit and night shifts. We need to focus more on letting the market drive the value of our health employees rather than letting

the collective agreements drive them." — Blake Mooney, RN, health care planner and operator of a privately owned, publicly funded nursing home, Surrey

Your Committee recommends that the following actions be taken to increase the nursing workforce, improve nurses' conditions and make better use of nurses' skills:

- **Educational options should be explored and innovative ways found to deliver the baccalaureate degree program for those who wish it. Diploma programs should be kept open. Employer-based, on-site learning should be supported at every step.**
- **The government, health providers and nurses throughout the province should work together to find ways to introduce differential pay scales according to education, skill level and responsibilities. Financial incentives could be considered for qualified nurses willing to work in short-staffed specialty areas.**
- **In consultation with the RNABC and the BCNU, government should expedite the nursing registration process while expanding recruitment drives for fully qualified nurses in other jurisdictions. This will make it easier for out-of-province and foreign nurses to work in B.C.**
- **Interim work permits would allow foreign nurses who meet qualification requirements to work while they prepare to write Canadian exams.**
- **A central pool of "flying squad" nurses should be created who can be deployed at short notice into regions experiencing short-term critical nursing shortages — for example, to relieve sick nurses whose absence has forced closure of an ICU.**
- **Efforts should be made to improve flexibility in the workplace, including creating more permanent, full-time jobs and hiring more support staff, such as ward aides, porters, clerks and licensed practical nurses. Also, more head nurses and nursing leaders should to be put into workplace settings.**
- **Some nurses on Workers Compensation Board claims or long-term disability should be used as mentors to students or new graduates. The $21.3 million allocated last August for nursing initiatives through to January 2002 should be maintained.**
- **The provision of assistance with tuition, perhaps linked to the provision of service in an area with a nursing shortage, should be promoted along with internship and cooperative education programs.**
- **Nurses' scope of practice should be enlarged by licensing, training and employing nurse practitioners in a variety of primary care settings. The government can boost this process by supporting the joint Ministry of Health-RNABC Nurse Practitioner Project, which is currently looking at recognizing the nurse practitioner role by the end of 2002. Government should also resurrect and expand the RN First Call program.**

OTHER HEALTH PROFESSIONALS

The committee also heard about shortages of health professionals in virtually every aspect of health care — speech pathologists, physiotherapists, occupational therapists, laboratory technicians, diagnostic technicians, pharmacists and more.

> *"I've asked for another speech language pathologist for the last nine years. I know there is no money, and I know I will be told that again this year. If you're not able to support us — physiotherapists, occupational therapists, myself — when you or someone you love has a stroke or a brain injury, there may be no one to help."* Anne Ross, Speech Pathologist, Kamloops

In addition, the participation of aboriginals in health careers has been historically low and yet is seen as pivotal in facilitating better first nations access to needed health care. The Institute for Aboriginal Health at the University of British Columbia has established a vision of first nations health careers and has 57 students currently enrolled in health sciences. As described in the section on doctor shortages, helping high school students obtain adequate science backgrounds to enter health programs is essential, and more community colleges should offer pre–health professional programs to enable to students to upgrade their skills to access health care programs in university.

Increasing training spots and bolstering education initiatives is key to addressing shortages. The need to address work conditions was also raised — wage issues, overtime and callbacks were all seen as playing a role in discouraging a younger workforce from joining some of these professions and creating a looming gap in critical human resources as older workers retire. Careers in the health professions — whether as physiotherapists, laboratory technicians, pharmacists or other professionals — should be promoted as rewarding, fulfilling and in demand.

Your Committee recommends that increased training spots and recruitment and retention initiatives be investigated to address the shortage of all health professionals in the health care system.

PHARMACARE

Paying for drugs and drug programs is a major component of Canadian health care spending. It is also one of the toughest ethical issues confronting governments, and all signs point to it becoming even thornier. As each new and more expensive medicine leaves the laboratory, promising to replace despair with hope, it must face the cold light of economic reality. The new drug Gleevec, for example, can turn the usually fatal disease myeloid leukemia into a chronic disease but at an enormous price: $35,000 a year for a single person.

The Canadian Institute for Health Information (CIHI) reports that spending on drugs grew continually over the past 25 years from $1.1 billion in 1975 to $14.7 billion in 2000. Spending on prescription drugs, according to the CIHI, is rising faster than any other component of health care.

Not surprisingly, in the past five years B.C.'s public drug benefit plan — Pharmacare — has grown by 44 percent, while the total B.C. health budget grew by 28 percent. Currently, the Pharmacare budget is $719 million, of which about $600 million goes to subsidize prescription drugs. Such dramatic spending escalations are unsustainable in the short-, medium- and long-term.

> *"The rate of increase of pharmaceutical expenditures in B.C. is quite astounding. It works out to about $300,000 per day. The way I look at this is: if you were to pay a doctor $100,000 a year, we could hire three doctors today, three more tomorrow and three more the day after that every day to infinity. That's the rate that our Pharmacare budget is growing."* — Alan Cassels, co-Chair of PharmaWatch

Why are costs rising so rapidly? The situation is complex, but the committee was told that along with the ever-increasing arsenal of new, expensive drugs, other factors include more people taking drugs; longer patents — a federal government arrangement linked to NAFTA; over-prescribing by doctors; and aggressive marketing tactics by the pharmaceutical industry that create a pill for every ill. The committee heard that research-based drug companies, wanting to extend their patent protection for as long as possible, can launch a court challenge which results in an automatic 24-month injunction being placed against generic competitors until the case is heard in court — which can effectively extend the patent for a number of years even if there is no prima facie case. In other manufacturing sectors a judge hears the facts of the case before allowing the injunction to be applied.[9]

While much is said about cutting Pharmacare costs, it should be noted that B.C.'s overall per capita drug expenditures are lower than in any other province and that, at 11 percent, B.C. has the lowest drug expenditure as a percentage of total health spending. Also, shifting the cost of drugs from government to individuals may come with a hidden price. When Quebec raised the cost of prescription drugs for those on social assistance and for the elderly, fewer patients took the drugs prescribed, resulting in increased adverse effects and more visits to hospital emergency rooms.[10] Helping people afford their medicines through a generous Pharmacare program probably stems the escalation of overall health care costs, the committee heard.

"Yes, we are paying more for drugs, but we are also getting benefit from those expenditures in terms of less hospital cost, increased personal productivity of well-treated individuals and reductions in the complications of illness." — Geoff Squires, President, B.C. Pharmacy Association

However, B.C. society must debate whether covering all the prescription drug costs of individuals over 65 years of age in the province — regardless of their ability to pay — and not the prescription costs of a young working family with a chronically ill child, for example, is in fact fair and equitable treatment. Could the Pharmacare program do more good for more citizens in B.C. if it was applied based on the ability to pay rather than on the age of the recipient?

Your Committee recommends the following:

- **That public debate be held about the pros and cons of adjusting Pharmacare plan coverage to apply a co-payment to those who are now covered but who may have an ability to pay and extending the benefits to those not covered who now bear high drug costs.**
- **That the province work with the federal government to amend the patent protection legislation to reduce excessive patent protection and abolish the automatic 24-month injunction applied to all court challenges launched by companies to extend their patents. A judge at a preliminary hearing should have the discretion to apply an injunction based on the merits of the case.**

REFERENCE-BASED PRICING

One of the ways B.C. has been able to help control its drug costs is through a policy called reference-based pricing (RDP). Other provinces have tried to curtail costs by increasing deductibles, taking drugs off the formulary or making people ineligible for coverage. B.C. looked to evidence-based medicine for answers and, using five classes of drugs, began to treat all medications within a category as "therapeutically equivalent." When drugs are known to be equally safe and effective, Pharmacare pays for the least expensive one — the reference drug — within the category. It will pay for more expensive ones if the reference drug fails or is inappropriate. Doctors must ask for permission to prescribe a higher cost drug, citing the medical reasons, by faxing their request to pharmacists on staff at Pharmacare through a process called "special authority."

Since B.C. introduced the policy in October 1995 the controversial program has been the centre of much discussion and study. The preponderance of evidence indicates that reference-based pricing saves the government a considerable amount of money and does not hurt patient care. A recent Canadian study concludes that after RDP was introduced, Pharmacare expenditures on just one class of drugs prescribed to seniors — nitrates — declined by $14.9 million. [11] Three years ago the office of the auditor general of B.C. reported that Pharmacare saved the government $25 million a year as a result of applying RDP to the first three of its drug categories. Yet another more recent, Harvard study concludes that B.C.'s RDP policy

"may be a model of successful cost containment without adversely affecting patients or cost-shifting."[12]

Nevertheless, aspects of the program continue to invite criticism. Pharmaceutical manufacturers condemn it, because the money RDP saves is lost profits for them, and as a result the companies have withheld investment from B.C. as a protest against the policy. Manufacturers of generic drugs, as the makers of the lower-cost alternatives, support the RDP program and told the committee that the program should remain in place. Physicians, who condemned the program at its inception, have now become accustomed to it. However, the often slow, cumbersome and frustrating process of faxing in special authority requests is a still a source of irritation.

Abandoning the program would be a fiscal step backwards and, indeed, expansion of the program should be considered to include more classes of drugs. The special authority process, however, could be streamlined. For example, the B.C. Pharmacy Association suggested that local pharmacists, using PharmaNet, would be capable of assessing whether the reference drug had been tried or was inappropriate and give the authority for the high-cost drug.

Your Committee recommends that reference-based pricing be retained and potentially expanded but that solutions be explored to streamline the special authority process. Pharmacists, physicians and government should negotiate a more effective special-authority process, including whether local pharmacists could take on the task.

DRUG APPROVAL

The overall drug approval process is also problematic, being described as unpredictable and often confusing. Before a drug can be included in the Pharmacare formulary, it must receive approval from the drug benefit committee, which in turn relies on advice from the therapeutics initiative and the pharmacoeconomic initiative. However, it is unrealistic to rely on drug manufacturers to comment objectively on which drugs deserve approval. As one witness told the committee, that would be like expecting parents to comment objectively on the merits of their child.

Understandably, deciding which drugs to approve is an enormously complex challenge, especially given the high costs of new drugs. To complicate matters, the World Health Organization reports that there are 306 essential drugs, while the B.C. government pays for more than 3,000 drugs — and new drugs appear in the marketplace at an ever-increasing rate.

> *"We have a provincewide program where we develop evidence around any cancer drug that we put forward to government. This year, for instance, that's in the range of about a $10 million increase in our $48 million budget. We think our budget, if it was left unconstrained, could easily be doubled within three or four years. It's a horrendous problem."* — Dr. Brian Schmidt, B.C. Cancer Agency

Yet testimonials of success with new drug therapies cannot be ignored. The committee heard from representatives of patients' lobby groups such as the Arthritis Society and the Hepatitis C Society, who told of their need for and problems with accessing new drugs. One such drug is Remicade, which has been shown to be effective in treating rheumatoid arthritis but which also has serious side effects, such as increased susceptibility to tuberculosis and higher incidences of death among patients with moderate to severe congestive heart failure.[13] Currently, government does not pay for Remicade, which can cost an individual $10,000 a year. The drug is given intravenously and because of associated risks must be administered in a hospital setting, which makes it even more costly. Yet, for those who respond to the drug, it may enable a return to active living, even full-time work.

Given these circumstances, how can government best decide which drugs deserve funding? Fair consideration must be given to new therapeutics — to ensure access to appropriate new drugs — along with each drug's clinical effectiveness.

Your Committee recommends the following actions be taken around the drug approval process:

- **The drug approval process should be streamlined and coordinated across the province. In consultation with other jurisdictions the government should design a simpler and more transparent process.**
- **A review process should be established to ensure that all high-cost drug therapies are evaluated with specific measurements related to cost and clinical outcomes. This should be done before these drugs are released to the general public.**
- **Establish a process for selecting individuals who may obtain financial support for high-cost drug therapies based on predetermined criteria and ensure that their progress and needs are regularly assessed.**
- **Negotiating with the drug manufacturers for the lowest cost possible for the drugs based on volume discount, provincial assessments and fair play to prevent price gouging for life-saving treatments.**
- **Consult with medical and scientific groups and the public to develop an ethical framework to help make difficult choices around drug therapies.**

ADVERSE DRUG REACTIONS

Hand-in-hand with the miracles and magic bullets of pharmaceuticals comes the problem of medication misuse. Up to 100,000 Americans die in hospitals each year from adverse drug reactions, making it between the fourth and sixth leading cause of death.[14] It is estimated that 10 percent of that figure, or 10,000 deaths a year, occur in Canada due to bad reactions to prescription drugs. Yet adverse drug reactions and inappropriate use of prescribed drugs have only recently been realized to be a serious health problem and health care expense.

Inappropriate drug use also includes taking drugs for a medical condition that can successfully be treated with other non-drug therapies. Mild hypertension, for instance, often responds to improved nutrition and exercise.

The problem of medication misuse is particularly acute among seniors. According to the B.C. Pharmacy Association, while 13 percent of B.C. residents are seniors, they consume 20 to 40 percent of all prescription drugs. The B.C. Pharmacy Association told the committee that up to 50 percent of all medications used by seniors are used inappropriately. The cost of emergency room visits and hospitalizations of seniors due to drug-related problems is estimated to be more than $210 million a year in B.C.

Your Committee recommends that efforts be made to educate consumers about unnecessary and harmful prescription drug use. Government can do much to ensure drug safety by setting up a consumer advisory council to provide the public with objective, easy-to-understand and quality drug information. These measures would result in both safer, more effective use of prescriptions drugs and healthier British Columbians.

EXPANDING THE ROLE OF PHARMACISTS

Pharmacists are highly trained individuals who are best situated to know about the chemistry of various medications, how they might interact with other drug ingredients and how to be up-to-date on the various warnings and advisories issued about pharmaceuticals. Yet, as the committee heard, under the current system their skills are underutilized, their time taken up with non-pharmaceutical duties and their numbers too few. Up to 75 percent of a pharmacist's time is spent on non–pharmacy related activities. These demands are imposed by Pharmacare, PharmaNet and private drug insurance plans. The result is that only 25 percent of a pharmacist's time is available for clinical services at a time when it has been shown that patients benefit when they interact with a pharmacist on a regular basis.

> *"The key goal of the profession of pharmacy is to ensure the responsible provision of drug therapy for the purpose of achieving health outcomes that improve a patient's quality of life. There is no other health professional that has as comparable a degree of specialty training in drug therapy as does a pharmacist."* — Geoff Squires, President, B.C. Pharmacy Association

The committee heard 23 recommendations from the B.C. Pharmacy Association that would give pharmacists a greater role in patient counselling, which they claim would decrease health costs. For example, the association outlined six community-based pharmacy programs that, they said, would over the long-term save the government $129.7 million a year. These programs should be seriously investigated and some — such as dose management of asthma — tried out as localized pilot projects. Part of the expansion of this role would be to devise a reimbursement structure for pharmacists instead of just a dispensing fee. It is beyond this committee's ability to confirm whether these projected savings are realistic. However, it is worth very close examination whether giving pharmacists a greater role makes good sense.

Your Committee recommends that the following actions be taken to expand the efficiency and effectiveness of community pharmacists:

- **Explore the establishment of new areas of pharmaceutical practice and counselling and negotiate an appropriate reimbursement fee. This will free up pressures on physicians and hospitals and allow pharmacists to more fully serve patients.**
- **Find ways to reduce overregulation and excess paperwork now involved in local community pharmacies — such as drug plan adjudication, administration and other regulatory work — thereby freeing up pharmacists, so they can spend time helping patients with drug therapy.**
- **Efforts should be made to increase the enrollment of pharmacy students at UBC in an effort to address the shortage of pharmacists in the province.**

CHRONIC AND CONTINUING CARE

The acute care model, where hospitals and physicians cure disease and manage crises, has largely been developed at the expense of the treatment of chronic disease, where the goal is not cure but to keep people out of hospital and to support their long-term health and daily living needs. The typical mechanisms of support in the chronic and continuing care arm range from meal programs and in-home nursing to respite care, day hospitals and residential services (extended or chronic care facilities).

The committee repeatedly heard that chronic care, continuing care and home care have simply not been viewed as key components of the health care system. This has been reflected in funding priorities and resulting development of a haphazard, fragmented and inconsistent system. As a result, patients throughout the province who need chronic care and home support services are occupying beds in acute-care hospitals because no space or services are available in long term care residences or through home support.

These so-called "alternate-level-of-care" patients are a major burden on the acute care system. For example, the committee was told that only 2,500 of 15,000 patient visits from the Parksville-Qualicum area to the Nanaimo Regional General emergency department last year were bona fide emergency cases. The rest needed home support or help with daily living.

The committee was told repeatedly that acute care and chronic care are two completely different types of health care models and need to be recognized as such. As witnesses from nurses in remote northern communities to managers of million-dollar extended care facilities in major cities pointed out, investment in home support and community health care, if done properly, will decrease both the costs and the demands on the acute care system in the long run. But this will require innovative and supportive measures for meeting the needs of the chronically sick, the mentally ill, the dying and the elderly outside the hospital and institutional setting — in their homes, in the community and in alternate institutions.

> *"I see health as a big jigsaw puzzle in which acute care is one small corner. I prefer to call it illness care. If governments could nurture the other parts of the puzzle, the problem of the ever-increasing spiral of cost for illness care would improve."* — Carole Harrison, Community Health Nurse, Terrace

The fundamental difference between the two sectors of care has been reflected in the fact that the Canada Health Act provides insured hospital and physician services but does not cover extended health care services — nursing homes, long-term residential care and home care. As well, the five principles of the Canada Health Act do not apply. Instead, these services are cost-shared with the federal government, and the result has been varying approaches to user fees and partnerships with the private profit and not-for-profit sectors. Private investment has also bloomed in this area of health service delivery. This means that the system is already flexible and that there is room for exploring innovative payment and funding models, from long term care insurance to income testing for care.

However, with more than one million Canadians now using home care services and the numbers expected to rise, there is a concomitant call for more community services and increasing formal home care — along with more consistent standards.

The question of how to divert, postpone or eradicate the need for the chronically ill to enter the acute care system sparked a host of ideas, running the gamut from independent foster care homes for the elderly to community wellness centres. But targeting the specific health needs of specific population groups is a key strategy. For instance, alternatives to the medicalization of death in an acute care hospital lie in community-based, freestanding hospice centres and home-based palliative care services and improved emotional and physical support for the dying and their families.

The committee heard that the cost per hospital bed is more than $1,100 a day; palliative care in-patient beds cost $600 a day. In the case where a freestanding hospice is to be built in Richmond in partnership with the non-profit Salvation Army, the largest non-governmental provider of social services in B.C., the costs can be reduced to $276 a day, with no compromise in standards, thereby saving the health care system $1 million annually. Significantly, such proposals also allow for patient choice in where and how they spend their remaining days. The government should target funding to this sector to ensure the specific needs of this population are met outside the acute care model.

Likewise, extending the reach of home care beyond traditional patient groups such as the elderly to new populations such as the mentally ill can potentially improve service and reduce pressure on the acute care system. On average in B.C., hospital stays related to mental illness are 45.5 days, three times longer than the stay for other diseases. Currently, of the 120,000 mentally ill British Columbians only about 30,000 are receiving health services, and those are severely uneven. Even volunteer organizations are in need of support.

The government has targeted $125 million for the mental health system to address these pressing needs, with the guidance of the Minister of State for Mental Health. Witnesses told the committee, however, that the 1998 mental health plan needs to be redefined, including putting in a time line, cost projections and specific objectives to outline how the money will be spent and the plan implemented. One of the witnesses stressed that there is presently a tremendous amount of duplication in the delivery of services to people with mental illness and that services would be more effective if consolidated.

> *"In Greater Vancouver we have about 18 non-profit organizations that are contracted by the health boards to provide roughly the same services for mental health patients. We see this as a tremendous amount of unnecessary duplication. Each executive director is getting some $80,000, with program managers and a manager for housing. Wouldn't it be more sensible and efficient to have just one or two organizations?"* — Roderick Louis, Chair, Patient Empowerment Society, Surrey

Targeting hospital needs more specifically can also alleviate pressure on the acute care system. The Simon Fraser health region is developing post–acute and sub–acute care beds for recovering patients in order to free up hospital beds for the critically ill. But unless acute care beds are shut down and resources transferred to the chronic care and continuing care system, demands on acute care are not likely to be reduced. The Carelinks[15] project at Simon Fraser provided immediate home care support to elderly patients showing up at emergency departments, diverting them or discharging them from hospital earlier. After two and a half years, the hospital reduced the number of beds by 30; these were closed rather than being filled up again.

One of the more urgent challenges in chronic care is the $2-billion-a-year continuing care sector, which provides housing and nursing services to adults at varying levels of care. Many of the facilities in B.C. are old and substandard. Waiting lists are long — 225 on the list in Creston. The operating costs per bed are $60 to $150 a day — costs for acute care are between $700 and $1,000 — putting long-term care out of reach for most seniors without government subsidy. Another 5,000 beds have been promised for B.C.

Clearly, seniors must be kept in their own homes as long as possible. Enhanced home support with a long-term care emphasis is crucial to reducing or delaying admissions to residential care facilities. Health care insurance might be designed to cover the needs of the elderly who are chronically ill, so service is effectively prepaid. Tax incentive measures could encourage builders and developers to provide modified homes to allow for "aging in place" rather than institutional care. Witnesses Gordon Porter and Patrick Simpson of User Friendly Homes suggested that all new buildings in B.C. have very slight modifications such as wider doorways without thresholds and properly placed blocking around tubs that could accommodate the need for eventual bathroom handrails. These simple design changes, which are still within the building codes, would cost less than $200 a home during construction but could save $40,000 in retrofitting down the line or prevent an admission into a long term care home.

> *"These are very basic design issues that when you build a home are very inexpensive or cost nothing to implement. But then this makes the home accessible to those with disabilities, keeps the elderly a little more independent and able to stay in their homes for a substantially longer time."* — Gordon Porter, Surrey

Flexibility in government policy and funding will be required to support innovative ideas, such as foster care for the elderly or the internationally watched project on the lower mainland called "Cluster Care," where teams of home care workers are meeting the needs of seniors in high-density buildings, resulting in a more efficient use of time, better service and clients staying home longer. A recent B.C. study found even basic cooking and cleaning services are proving to be cost-effective: a person cut off from these minimal services ends up using $4,000 more per person in other health care costs because of sooner-than-necessary institutionalization.[16]

Of prime importance in a growing emphasis on home care is the need to recognize the support given by family members: the Canadian Caregiver Coalition estimates they save the public health care system $5 billion a year and that their work is equivalent to 276,509 full-time employees. Some witnesses recommended that caregivers be given a stipend if they are looking after family members, but it was recognized that paying family members to look after their own relatives might set a difficult precedent. This is an area that needs further exploration. Some countries, such as Italy, pay family caregivers. Paying for "foster care" for elderly patients was another innovative suggestion given to the committee. These and other creative arrangements must be examined for their risks and benefits in a provincial context.

Costs associated with residential care must be reduced. A major portion of long term care budgets — 83 percent — is taken up by salaries and benefits. Residential care managers urged that, at the least, support services must be contracted out.

Costs associated with excessive bureaucracy must also be reduced. Witnesses described medication regulations so officious that every time a new prescription for eye drops was given to a home care patient, a registered nurse had to train the home care worker how to give them, even if the home care worker had delivered hundreds of eye drops before.

One of the more provocative ideas presented to the committee was to change the emphasis in residential care from health service to housing service. Currently, extended care residences are considered hospitals under the Hospital Act; however, as Bruce Goldsmith, CEO of the Lodge at Broadmead in Victoria, testified: "We do virtually no medical care. We don't even do stitches on-site. Residents are lucky to see their doctor every three months." He said nursing care provides 30 minutes of professional nursing time per resident per 24 hours. The rest of the day is spent supporting seniors in daily living activities. This has implications regarding the over-qualification of staff — LPNs could replace RNs, for instance.

The result of the health emphasis means numerous regulations impacting continuing care — the Community Care Facility Act, the Hospital Act and various professional regulations — end up being obstructionist. Witness Dudley Leather, who used to own and operate a residential care home in England, described how overregulation is forcing the closure or bankruptcy of hundreds of residential homes, rendering elderly clients homeless because of new restrictions and regulations, such as door width and room size, that many homes can't meet nor that their clients want or need. The committee heard that overregulation is crippling innovative and cost-effective care in long term care facilities.

> *"It's not legal in our province to take your own vitamins into a long term care facility. If you want vitamins, you're going to have to ask the nurse. She'll phone the doctor. When he phones back, she'll discuss it with him. If he agrees, he'll write an order. She'll then fax the order down to a pharmacy. The pharmacist is going to take the order and put every vitamin pill in a separate blister pack on a card. It'll have the dates and times and resident's name, etc. Then it's going to come back to the facility and get processed, put on a rack, and the nurse will distribute that vitamin pill at the time prescribed. But we're not finished yet. The vitamin pill is not covered by Pharmacare plan B, so the resident has to pay for it. So in addition to doing all the meds, the pharmacist will send out a bill, which goes in to a finance clerk, who's got to process the bill, deduct it from the resident's personal trust account, adjust their monthly statement and send the bill off to the pharmacist. That's how health care deals with vitamins in long-term care."*— Bruce Goldsmith, CEO, the Lodge at Broadmead, Victoria

In addition, public expectations of "rights" to health service would be lowered if the emphasis were changed to housing with a health component rather than the other way around. This might also encourage a greater willingness to pay for services. Other witnesses cautioned that as lesser needs are met at home, the needs of institutionalized clients have become more intense, so most residents do, in fact, need some type of nursing care. As well, moving residential care under a separate government or organizational structure runs the risk of further fragmenting an already poorly coordinated health care sector.

As public desire for quality home care service and consistency in home care workers grows, stability in the workforce will be necessary even when contracts are tendered and re-tendered. Where this is clearly in the public interest, disruption through awarding contracts to the private sector can be mitigated through requiring quality of service as part of the request-for-proposal process.

As the Kirby commission notes, all across Canada policy-makers are faced with the same challenge: it will take a fair amount of political courage at federal and provincial levels to defy pressure for more hospital beds and high-tech equipment and invest instead in community-based care that can bring about the most benefits in the long term.

Your Committee recommends the following changes be made to enhance chronic care services:

- **Spending priorities should be directed to strengthen this sector of the health care system, shifting the emphasis from acute care to community-based care.**
- **Long-term, intermediate, assisted and supportive housing should be considered as a housing issue with a health component rather than a health issue with a housing component. This will enable a much different look at what residents pay for their housing.**
- **Home care should be expanded and supported, enabling seniors to be maintained in their homes as long as possible. A broad-based assessment of their care needs should be applied, to examine what services should be delivered to best keep the individual out of acute care hospitals or long term care homes, and a care plan should be developed. The assessment should also take into account the client's ability to pay.**
- **Provincial standards of quality and consistency should be promoted in the chronic care, continuing care and home care sector.**
- **Overly restrictive and bureaucratic regulations that decrease efficiencies, needlessly infantilize the elderly and restrict innovation should be examined and eliminated.**
- **The risks and benefits of innovative housing and financing solutions to meet the needs of elderly and chronic care patients should be explored for their risks and benefits in a provincial context.**
- **B.C. Housing and the construction industry should be encouraged to modify building design to create more "aging-in-place" structures.**
- **British Columbians should be encouraged to purchase long term care insurance to prepare for their future health care needs.**

ABORIGINAL HEALTH

The problems of Aboriginal health across the province are aptly illustrated in the Okanagan-Similkameen region of B.C. This region enjoys one of the highest ratings of all health regions in the country, and yet the health status of its aboriginal community is among the lowest in the country. Nurse Brenda Baptiste told the committee that it is a region of "haves and have-nots when it comes to health."

While perhaps more extreme than other regions, the discrepancy is essentially the same throughout the province. Health statistics for aboriginal British Columbians have been documented in the provincial health officer's annual report, by Health Canada and in the 1996 Final Report of the Royal Commission on Aboriginal Peoples. These reports have shown that in the aboriginal population:

- the probability of death in the first year of life is four times higher
- heart disease and stroke are 60 percent higher than the provincial average
- diabetes rates are twice that of the general population
- tuberculosis rates are five times higher
- death from HIV/AIDS is twice as prevalent among aboriginal people, particularly in the downtown east side of Vancouver
- average suicide rates among aboriginal people are three times higher
- status Indians in B.C. live up to 12 years less than the general population.

This critical situation is meriting attention in B.C., and a first-ever special report on aboriginal health is due for release early next year by Dr. Perry Kendall, the B.C. provincial health officer, who has worked in close collaboration with the first nations community.

Meanwhile, representatives of aboriginal communities throughout B.C., from virtually inaccessible and tiny coastal communities to the downtown core of Vancouver, were a consistent presence before the committee ensuring aboriginal voices were heard. Several messages rang loud and clear, particularly the need for B.C. to assume clearer responsibility for aboriginal health rather than assuming it is a federal issue. Of the $9.5 billion spent on health care in B.C., only $10 million is spent on aboriginal health.

> *"Currently the provincial health care system exists in the convenient jurisdictional myth that first nations are a federal responsibility. If the first nations load on the health care system is to be decreased, the province needs to step out from behind the jurisdictional myth and implement a health promotion strategy for first nations people."* — James Wilson, Chair, Kwakiutl District Council

In fact, the federal government provides a minimal level of public health service, but this takes place largely on reserves and is barely enough to manage communicable disease. The committee was told there is an almost total absence of provincially funded preventive services despite the fact that the provincial health care system is mandated to serve all British Columbians.

The aboriginal population is a prime example of the need to situate health concerns within the larger social and political framework: strategies must target the health of an entire

population as well as provide care for sick individuals, and these strategies must take into account the "determinants" of health: poverty, unemployment, education, culture. These are preventive approaches that will avert future impact on the health care system — and in B.C., where fully half of all aboriginal people are under the age of 25 years, this is by far the most effective health strategy.

The Semiahmoo first nation in the Fraser Valley health region is a case in point for the necessary multi-pronged approach to health. In its small community of 75 on- and off-reserve members it has tackled alcohol and drug issues, family violence and mental health; it has developed social services, high school first nations programs for youth and educational support; and it has promoted cultural activities, such as traditional resource harvesting, sweat lodges, women's healing circles, powwows and feasts. The result is that 60 percent of the adult population has changed its lifestyle regarding drugs and alcohol, leading to improved family life and helping to facilitate a 100 percent graduation rate among its grade 12 students.

Elsewhere in B.C. the population-based approach to health care — the "honour your health" challenge developed by the Aboriginal Health Association of B.C. — has recently been applied in several communities on a pilot-project basis through the promotion of health prevention and wellness programs. A holistic and culturally appropriate approach to aboriginal communities is important, particularly given the fact there are 200 Indian bands in B.C. and 21 language groups, but this means intersectoral collaboration is crucial, which highlights the complex nature of the issue.

The involvement of aboriginal communities in tackling their communities' health issues is also fundamental and has been facilitated in B.C. by the formation in 1991 of regional aboriginal health councils, the overarching Aboriginal Health Association and the aboriginal governors working group.

> *"Communities tell us over and over that it's important to work with, not work for or do for, [aboriginal communities]."* — Lisa Algaier, Aboriginal Health Division, Ministry of Health Services (a division with 12 staff, 11 of whom are aboriginal)

At the federal level the transfer of health services is taking place, allowing communities to determine what their health needs are. While a history exists of poor relationships between aboriginal and organizational authorities, there is more determination among aboriginal communities to work in partnership with health authorities — health boards, community health councils and community health services societies. These relationships are just starting to develop in B.C. Examples of strengthening links between native and non-native populations include a federal first nations Inuit health branch initiative, supported by the province, to build a health centre in Prince Rupert — where half the population is aboriginal — and a partnership between the health region and the Osoyoos Indian band establishing an on-reserve speech therapy service serving both native and non-native residents. Nevertheless, better representation on health authority boards is key, as is a B.C. government directive to develop and implement aboriginal health plans in each health region.

Many of the issues raised by aboriginal witnesses were endemic to other isolated B.C. communities. High-tech applications such as telemedicine hold the potential to address

issues of human resource deficits. However, the cost implications are high and a number of technical issues must be addressed before implementation. The crucial question is whether money might best be spent on low-tech solutions until telemedicine is thoroughly pilot-tested. For instance, Health Canada pilot projects [17,18] have found that facilitating personal communication and contact with isolated aboriginal communities and in conditions where health and social needs are often overwhelming can have significant results. The hiring of liaison officers in pilot projects has played a significant role in facilitating first nations access to health resources. This is particularly important when the problem of accessibility was raised time and again.

The committee heard that it is also important to develop aboriginal capacity in the health field. "It appears that aboriginals prefer to access health delivered by aboriginal health providers or at least choose those operated by aboriginal health organizations," said Dr. Rosalyn Ing, of the Institute for Aboriginal Health at the University of British Columbia. The first aboriginal medical doctor graduated from UBC in 1993. There are fewer than 200 aboriginal doctors in Canada and only 1,000 aboriginal registered nurses. Currently, there are four aboriginal health centres providing primary care to their communities: Nanaimo, Prince George, Vancouver and Kamloops. The aboriginal community needs training in health care fields, contract management opportunities, health administration and financial management support. Capacity-building is crucial in a pre-treaty environment in order to prepare for a post-treaty environment. Human resources need to be developed and health-related career training provided for aboriginal students.

> *"We want the same thing We want to make a difference in the health status of our people, and you want to deliver programs and services effectively and efficiently. This is what we're proposing, that this can be accomplished through partnerships* — meaningful partnerships." — Brenda Baptiste, RN, Osoyoos Indian Band

Your Committee recommends the following actions to help improve aboriginal health:

- **Work with the federal government and aboriginal communities to coordinate programs and health care services to improve first nations access to available services.**
- **Promote education and prevention strategies in aboriginal communities.**
- **Support health education training for aboriginal students.**
- **Work with aboriginal groups to develop and implement aboriginal health plans for each region.**
- **Encourage partnerships between aboriginal communities and health organizations.**
- **Ensure appropriate aboriginal consultation in the coordination and regional organization of health services.**

FINANCIAL STRATEGIES

The preceding sections have focused on ways to reorganize the structure and delivery of health services, deploy the workforce more effectively, maximize efficiencies and meet the health needs of B.C.'s population more successfully. Many of the recommendations, if properly applied and evaluated, could ultimately save the health system money and produce more integrated, better-managed and cost-effective care.

However, some of the recommendations will require an initial financial investment to bring about the desired change. That leaves an overwhelming question: where will the money come from? A hard reality is that every new program that is designed and launched either takes money away from an existing program or else requires a new source of funds. Repeatedly, witnesses appeared before the committee promoting their own impassioned cause, saying in one way or another that government must "do this" or "do that" and all it would take is so many thousands or millions of dollars. Many of the suggestions seemed to have merit, but there was often little recognition by the presenter that funding their cause might mean another equally worthy service is not funded. Setting priorities and figuring out where the money would come from didn't often enter into the pleas.

Yet we can't escape the fundamental questions: where will the money come from? What services are worthy of public finance? How much money are we, as a society, willing to pay to maintain our health care system? What services are essential and must always be covered and what services, if any, should be left to a market system or private enterprise to provide?

These are difficult questions for Canadians. Unlike our American neighbours, we are used to having a public health care system that never asks us to think about our bank account or worry about our insurance coverage when we are struck with serious illness. This is a good thing, a crowning social achievement and one worth protecting — if we can. Yet it has also contributed to the widespread belief that somehow our health care system is a "free" service rather than one we are all paying very heavily for with our taxes. We must be realistic about our limitations. We must enter into a public debate about how far we are willing to go to maintain our health care system, how much each of us is willing to pay for it and if there are ways we can modify it and still keep intact the fundamental values we cherish.

The following is a discussion of some of the most common strategies to either improve spending, discourage inappropriate spending, raise more funds or perhaps take pressure off the public system.

INAPPROPRIATE USE OF FUNDS

Time and again the committee heard how the health care system was cut to the bone, that there was no fat left to trim and that any more surgical cuts to pare spending would deal mortal blows. Yet the committee also heard repeated stories of questionable spending: waiting rooms and administration offices being renovated or new desks, chairs or paint jobs for a front office while an OR sat without funds. While it is important to maintain a certain amount of upkeep and capital improvement to ensure our hospitals and infrastructure don't crumble into ruin, it is vital that everyone in the system asks the question: is this spending

necessary right now? How could we better use the funds to improve services or patient care? Keeping focused on the overarching principles of accountability and evidence-based and patient-centred care will help bring the appropriateness of the decision to light.

> *"This is a list of cellular phones that are paid for in our hospital. These are administrators' phones, nurses' phones, not doctors' phones. Can you believe it? There are 351 phones — and we are advised that we cannot use our cellular phones in the hospital. I don't know what they do with them!"* — Dr. Bob Ellett, Vascular Surgeon, Kelowna

The committee heard of budgets that cover hundreds of cell phones, in hospitals where cell phones should not be used because they can interfere with sensitive equipment. Repeatedly the committee was told that because there is no flexibility in budgeting, any savings that health authorities are able to realize are not left with the region to reinvest in other areas but are removed, in effect penalizing them for being cost-conscious. "Use it or lose it" appears to still be the budgetary mantra in some places. This must change. Instead, health authorities should be given incentives or rewards for finding more efficient ways to provide services and allowed to reinvest the savings into new and innovative programs or high demand areas.

Repeatedly the committee was told that no one really knows how much anything costs — not the patients, not the regions and not the ministry. "We don't know a lot about how efficient we are. We don't know what it costs to do a routine chest X-ray, and we don't know what we'd do with that information if we had it, because funding incentives haven't asked us to collect that information," Larry Odegard, CEO of the Health Association of B.C., told the committee. Enhancing information systems, putting in place a population-based service delivery funding model and enhancing accountability will bring to light inappropriate spending and help regions improve their efficiency and curtail inappropriate spending.

Your Committee recommends that with the improvement of accountability systems instances of inappropriate spending be investigated and curtailed. Spending at every level in the health care system must face the question: how will this improve patient care? Budgets must be flexible and population-based, and savings must be allowed to be reinvested in the local region so there is incentive for finding efficiencies.

DISCOURAGING INAPPROPRIATE USE AND ENHANCING PATIENT RESPONSIBILITY

B.C. citizens have no idea how much they, as individuals, are costing the health care system. How much does it cost to visit the doctor for a sore throat that will pass? How much does it cost for a referral to a specialist? A trip to the emergency room? A blood test? Because the public by and large thinks of the services as free, there is little onus placed on the individual to help distinguish essential use of the system from unnecessary use. The feeling seems to be that if the individual has the slightest concern that a visit might be necessary, he or she visits the doctor or emergency to let the experts decide, because it doesn't cost anything.

Why should the B.C. public care if they are using services, such as emergency rooms, inappropriately if they are worried about a health problem? They should care because they cost us all more money. Emergency rooms are a poor choice because:

- They are equipped to deal with serious and life-threatening injuries and illnesses. Patients who are not seriously ill will have to wait a long time, sometimes many hours, to be seen by a doctor.
- While being treated for a minor illness or injury, the patient may prevent or postpone care for someone who urgently requires medical attention.
- Emergency care costs three times the price of the same care in a doctor's office and is a waste of precious resources if the service is not urgently needed.

Visiting family doctors or walk-in clinics for minor and self-limited conditions can also be a huge waste of resources. Many illnesses get better on their own with no medical intervention. Common sense and "watchful waiting" can remove the need for medical care. The B.C. HealthGuide contains detailed listings of what symptoms need to be seen right away by a doctor, what symptoms can wait for 24 hours and what changes in symptoms should prompt a trip to the doctor. Tips for self-care at home are also given. The B.C. NurseLine also gives British Columbians access to confidential health information to help make good health decisions and use services appropriately. The NurseLine numbers are (604) 215-4700 within Greater Vancouver and 1-866-215-4700 toll-free elsewhere in B.C. By using these resources, all British Columbians help ensure the long-term viability of our health care system.

User Fees

Making the patient aware of the costs of services or removing the impression that they are all free is the logic behind many financial strategies, particularly user fees. The philosophical principle behind them is that if patients share in some of the cost up front, even if it is a nominal fee, they will understand the inherent costs in the system and access it only when it is genuinely needed.

> *"We had user charges for emergency-room services and other services. We were charging $10. They were abolished, of course, in the mid-eighties, and it resulted in increased workload right away. Two years after the emergency surcharge was withdrawn, the hospital in Abbotsford had a 30 percent increase in its emergency load."* — Donald Thomson, former CEO, Matsqui Sumas Abbotsford General Hospital

Studies have found that, overall, people do use health services less when user fees or co-payments are applied — but not across the board. The poor and the elderly tend to use services less and the middle-class and wealthy are unaffected by fees.[19] Saskatchewan, for example, had user fees for seven years and physician use dropped by 6 percent — but those with money hardly changed their behaviours and the elderly and poor saw their doctors 18 percent less.[20] Critics note that one of the key problems with user fees is that some health care visits must be encouraged by the system if we are to save money. Seeing a doctor early for a changing mole, a new lump, a PAP test or a regular A1c test to ensure diabetes is under control is far more cost-effective than waiting for those problems to bloom. Going to the

emergency for a stomachache might seem a waste of resources, but if that ache is appendicitis, it is essential that the patient seek help before it ruptures. Critics note that the key point in creating a cost-effective, sustainable system is not to discourage the use of the health care system but to encourage appropriate use.

Another concern is that only the initial contact with the health care system is left to patient choice. Once a problem is found or a diagnosis is needed, it is the doctors who decide what services patients need, so most of the spending in the health care system — and waste — is beyond patient control.

> *"Do we charge user fees? As we've learned over the last 45 years, charging fees to either restrict access or improve revenue sources is completely inefficient at both, but it is the first thing that people lunge toward."* — Larry Odegard, Health Association of B.C.

The Kirby commission notes, however, that Canada is alone among westernized nations in not charging some kind of upfront user fee or co-payment. It notes that even Sweden charges $12 to $15 for each visit to the doctor and about $12 a day for hospital stays, with the total amount for the year capped at $135.[21] The charges are not perceived by Sweden's citizens as impeding access but rather as promoting responsibility. The charges, however, do not raise money for the health system, as they cost as much to administrate as they generate in fees collected, the Kirby commission notes.

User fees are an extremely controversial and divisive topic among Canadians and among British Columbians. Although they are discouraged by the Canada Health Act — the federal government will withhold in transfer payments the amount any provincial government collects in user fees — both the Alberta and Ontario governments have stated they may consider applying them if the federal government does not increase its contributions to provincial health care budgets. The committee heard both strong support for and impassioned pleas against their adoption. Those in favour see them as a way to promote responsible consumer behaviour; those against fear they will penalize and shutout the poor even when their visits could ultimately lead to better preventive care.

> *"When Tommy Douglas introduced universal health care, there was a user fee involved — I think it was about $5 at that time. Looking at some kind of payment for people who use the services is appropriate."* — Teunis Westbrook, Mayor of Qualicum

> *"Everyone should have accessible health care, and this is not possible when health services have user fees."* — Sally Stevenson, Courtenay

Is there a way to promote the possible benefits of user fees without incurring their downsides? The Kirby commission and the Romanow commission are in the process of conducting extensive site visits and reviews of European models to assess the strengths and weaknesses of these systems. Their reports are expected by spring of 2002. It is anticipated that these reports may shed a great deal of light on what works and what doesn't when it comes to user fees and co-payments.

It is possible, however, to envision a role for user fees in health services that serve more as a convenience than a health need. Walk-in clinics, for example, could charge a user fee — dispersed to the government, not the physicians on staff — because these services are being shown to promote lack of continuity of care and a style of revolving-door medicine that is not conducive to good primary care. User fees might also be considered for use in repeated unnecessary visits to the emergency wards if they could be proven to not discourage visits for urgent and essential care. If user fees are applied in a limited sphere they should be subjected to an independent evaluation to ensure they are having a positive impact on consumer behaviour and not impeding access by the poor and the elderly.

Your Committee recommends that ways to discourage inappropriate use of health care services be examined. User charges for walk-in clinics and inappropriate use of emergency wards should be closely examined to ensure that, if applied, they discourage inappropriate use but do not impede access, particularly for the poor and elderly, to appropriate care.

Health Care as a Taxable Benefit

Back in the early 1960s, when the medicare system was first being designed, one model provided for the cost of health care services to be added to an individual's taxable income at the end of the year. While it was never applied in Canada, it has frequently been raised as a possible option that would remove some of the negative aspects of user fees yet still have patients better understand the true costs of medical services and choose them more wisely.

The benefits of this model were noted a number of times during the hearings. Since the services would be applied to income and be taxed at a progressive rate, poor people or people who paid little or no tax would not be charged for services. For an equal use of services, people with a higher income would be taxed at a higher rate, making it more evenly distributed across the patient spectrum based on the ability to pay. The Kirby commission notes that a cap could be applied to the amount an individual would have to pay per year or over a lifetime, thereby avoiding undue financial hardship at any income level. One of the only criticisms is that people are essentially being taxed twice for health care services, but that applies to any form of additional charge that is applied to health services.

Your Committee recommends that the government explore making health care services a provincial taxable benefit with an annual and a lifetime cap to avoid undue financial hardship in accessing health services.

Premiums

B.C. and Alberta are the only two provinces in Canada where residents are required to pay Medical Services Plan premiums. In B.C. the rate is based on family size and income. Monthly charges are currently $36 a month for an individual, $64 for a family of two and $74 for a family of three or more. These premiums are paid for by individual contribution, pension plan deduction, payroll deduction or employer contribution. Premium assistance is

available at rates varying from 20 to 100 percent for people of low income or who are experiencing temporary financial hardship.

Unlike the Insurance Corporation of B.C., which regularly raises premiums to reflect increased costs and claims, the Medical Services Plan has not raised its rates in a number of years. In fact, most people pay far more to insure their cars in B.C. than they do for their health. Compared to families in the United States, where insurance premiums for a family of four can range from $300 to more than $900 a month depending on the level of coverage and size of deductible, B.C. residents pay extremely modest sums. Even a slight increase in premium payments per month — such as a $5-per-month increase — could raise more than $100 million per year for health care.

During the hearing process, the public and health care providers frequently suggested raising medical premiums as an equitable and relatively painless way to increase more funds for the health care system and to pay for potential new programs that may improve the health of the population.

Your Committee recommends that modest increases to health care premiums be considered as a way to raise more health care funds.

PRIVATIZATION

No word in the health care lexicon triggers stronger reactions in Canada than the word "privatize." As the committee experienced firsthand, people line up on either side of the public-private fence, armed with statistics, studies and ideological arguments of the most heartfelt kind. Since Canada's publicly funded health care system is one of the cornerstones of this country's public policy, many argue that keeping it public is what makes Canada one of the world's best places to live.

But as the Kirby commission notes: "It is absolutely essential that the debate progress beyond political rhetoric. Canadians can no longer avoid tough choices by resorting to simplistic statements about how the current system works, many of which are only partially true." In fact, 30 percent of Canada's health care system is already private.

International comparisons show that there are creative ways of balancing public and private involvement in health care. Canadians will have access to more details of these arrangements, now extensively being studied, when the Kirby commission tables its final report in the spring of 2002.

International comparisons — particularly from the U.K. — also show that there are great social and economic dangers connected with certain of these involvements.[22] Keeping the failures as much as the successes in mind helps when proceeding with privatization initiatives.

> *"We've been dealing with private-sector and other alternatives in the health system for at least 30 years. We do need to fully explore these opportunities. We need to learn from elsewhere."* — Larry Odegard, Health Association of B.C.

Canada has always had some forms of privatization, and people have always profited from treating the sick and injured. Increasingly, certain private health care providers — either individual or institutional — operate completely independently from the public system. In B.C. there are three forms of private health care:

- the not-for-profit, privately owned but publicly funded facility where the private sector puts up the capital costs and contracts with government to provide operating costs. Patients don't pay any fees. This is the form taken by many charity-run continuing care institutions.
- the for-profit, private but publicly funded facility where patients, again, do not pay extra fees. The private sector puts up the capital costs and can earn a profit through cost saving, such as through contracting out certain services. Current investigation of building a privately operated and privately financed hospital in Abbotsford — the first such entity in Canada — would fit this category.
- the third form of privatization is the private, for-profit service where patients pay for interventions that are deemed "not medically necessary," such as laser eye surgery, to remove the need to wear glasses, and cosmetic surgery. Under the Canada Health Act, private, for-profit service cannot currently be offered for services deemed "medically necessary."

> *Recently, St. Paul's Hospital has begun to offer full-body CT scans for $995 for people who are not sick but who are using them to screen for potential illness. These procedures, while done privately, could have consequences down the road for public health care. The U.S. Food and Drug Administration, for instance, has expressed concern that full-body CT scans used as a screening tool could expose people to unnecessary levels of radiation. According to the Canadian Association of Radiologists, a whole-body CT scan is the equivalent of 500 chest X-rays.*

Since some form of privatization has been working alongside the public system for decades now, the debate is not whether we should allow privatization but rather how we can continue to best balance public and private interests so that people's health care needs are met fairly, equitably and in an economically rational manner. It was noted that since the public health care system currently only pays for hospitals and doctors, readjusting the distribution of payments to cover more services which are presently in the private sphere — such as home care, psychological testing and continuing care — even if that meant more private payment in the acute-care sphere, might lead to a more equitable system for all.

At the core of public anxiety around privatization is the fear that the introduction of privately run facilities will undermine the public system and allow people with money access to better care. The committee heard that focusing on private options must not come at the expense of better management, adequate funding, proper staffing and sound and strategic planning of the public system. Many British Columbians will be hard pressed to accept anything less than, as one Campbell River resident told the committee, everyone being "entitled to the same services, at the same cost and the same conditions as anyone else."

The committee also heard from witnesses worried about the international trade implications of embracing private, for-profit facilities. Both the North American Free Trade Agreement

(NAFTA) and the General Agreement on Trade in Services (GATS) have as their overriding objective the removal of all barriers to international trade in goods and services, including health care services. Numerous commentators have said the agreements are designed as a one-way process.[23] Once the hospital sector, for instance, allows a mix of public and private ownership, under GATS agreements it is unlikely to return to full public control without incurring prohibitive penalties in the form of compensation to business interests who can claim lost opportunities.[24]

Just how much privatization does the Canada Health Act allow? In brief, it discourages provinces — under threat of losing federal funds — from allowing providers to charge patients more than they receive under provincial health plans. In other words, it discourages extra-billing. As the Kirby commission notes, it does not prevent private, for-profit health care providers and institutions from delivering and being reimbursed for provincially insured services, so long as extra-billing and user charges are not involved. The essential intent of the act is to deter competition between public and private care which could lead to high-quality care for those who can afford it and inferior care for those who can't. Exactly what situations violate the act are currently under debate among several provincial governments and federal authorities. Alberta's Bill 11, for instance, allows private, for-profit health care facilities to compete against publicly funded hospitals for the provision of selected minor surgical services.

There's no denying that to some the idea of private health care has an immediate intuitive appeal, particularly given the current reality of infinite health care demands in a finite economic environment.

> *"If it is true, as has been stated, that within a short period of time medical costs will eat up half the provincial economy — I may be exaggerating here — we cannot continue as we are at present. Another truth is that in general people will not accept a lesser standard of health care than they are now receiving. The two equations do not add up. If you can afford to pay for your surgery or medical procedure to avoid a long waiting list, why not? If some of the procedures were done under the private system, this would free the public facilities to carry out more timely treatment. I would strongly recommend the establishment of private clinics to take some of the load off the publicly funded system."* — Dr. Donald Strangway, Terrace

But does the existence of private clinics really result in shorter public waiting lists? Evidence from both Alberta and Manitoba indicates that things aren't quite so simple. A study of waiting times for cataract surgery in Alberta found that patients whose doctors practise in both public and private clinics faced the longest waiting times.[25] In Manitoba, where until 1999 cataract surgery could be performed in both private and public facilities, the median wait for a surgeon who only worked in the public system was 10 weeks, but for a surgeon who worked in both systems, it was 26 weeks.[26]

Private facilities do not exist within a vacuum. They must draw their nurses, doctors and technicians from the same pool as public facilities. The concern is that if private care can offer more agreeable working conditions, the public system — with its severe staff shortages — will risk losing even more people to private care, harming patient access in the public system even more. The committee heard the suggestion that one way to mitigate the exodus

of doctors and nurses from the public system to the private system could be to establish contracts that require a certain number of hours to be spent in the public system.

Your Committee recommends the following actions concerning privatization:

- **Fully investigate the NAFTA/GATS implications of further privatization of health services. This issue should be raised at a national level.**
- **The government consider public-private partnerships in which capital financing comes from either private non-profit or private for-profit investment but patient services are paid from the public system.**
- **The government should investigate which health care services are most amenable to public-private or fully private arrangements. Steps should be taken, such as establishing contracts with doctors and nurses to commit a set number of hours to the public system, to ensure private services do not weaken the public system or increase the severity of the health-provider shortage.**
- **For those procedures that are deemed suitable to be performed in a private setting, an infrastructure fee should be negotiated with private care providers to offer necessary medical protocols in a private setting. For example, some elective day surgery could be covered by MSP and allow up to a one-night stay in a private surgery suite paid by MSP.**
- **Encourage the private sector to invest in and operate diagnostic equipment, such as MRIs, in private clinics. Private diagnostic tests deemed medically necessary should be paid for out of the public system at a fee to be negotiated.**
- **Ensure an oversight committee is in place to closely monitor for abuse and overuse all privately owned and publicly funded services.**

MEDICAL SAVINGS ACCOUNTS

In recent years a new way of funding medical care has come to the attention of Canadians. Books like Code Blue, by emergency physician Dr. David Gratzer — who won the Donner Prize for non-fiction in 1999 — the writings of Cynthia Ramsay and William McArthur of the Fraser Institute and others have promoted "medical savings accounts" or MSAs as a positive, patient-driven way to control health care costs. Other health policy experts across Canada have lined up to condemn the devices as "wolves in sheep's clothing" that will prey on the poor and sick in our society.

The concept behind MSAs is relatively simple: instead of spending taxpayers' dollars directly on health services, the government would each year deposit a set portion — usually $1,000 or so — in each citizen's tax-sheltered medical savings account. The individual would also be required to purchase catastrophic illness insurance to cover any devastating disease or injury that might strike. Out of the MSA funds the individual pays all their medical expenses for the year, such as trips to the doctor, X-rays, lab tests, small procedures and pharmaceuticals.

The MSA can be used for preventive health and in some cases can be used to purchase complementary therapies such as massage, chiropractic or acupuncture.

One of the features of the plan, such as that provided by the Indiana insurance company Golden Rule, allows the person to withdraw either a portion or all of the money left in the account at the end of the year to spend freely, giving incentive to keep healthy and spend wisely. Other MSA plans allow clients to roll over a certain portion of the unspent funds to build equity for future health care spending — such as building a savings account to pay for potential home care needs as one ages. A number of witnesses before the committee lauded the merits of MSAs.

> *"Now we force everybody to pay $2,500 per year in taxes to pay for medical. We could instead deposit $1,000 a year in their medical savings account and help them only after they exhausted all their account. Using your own account's money to purchase services is the most efficient and responsible way to use our health care dollars."* — Dr. K.K. Wan, Dentist, Surrey

Dr. Gratzer claims that MSAs control costs, satisfy patients and contribute to an increased focus on preventive health. He says that where MSAs are offered by employers in the U.S., more than 90 percent of employees opt to join them over standard insurance coverage. "With MSAs people get the health care coverage they want and the freedom to make their own decisions. For major illnesses there is catastrophic insurance. For minor illnesses there is money in the account to spend as you please but also a strong incentive not to squander it. In other words, you have empowered health care consumers able to take medical decisions into their own hands."[27] Various forms of MSAs are being used in Singapore, South Africa and in a number of employee health plans in the U.S.

However, critics of MSAs say the picture is not so rosy. In many jurisdictions catastrophic insurance doesn't kick in for chronic illnesses like diabetes, arthritis, heart disease and mental illness, so people who suffer from those ailments can be faced with high bills, or else they forgo the trip to the doctor, potentially risking much greater costs down the line. Some catastrophic insurance plans won't cover individuals with pre-existing conditions or cover people over a certain age, so these individuals may have no effective coverage at all. In our publicly funded system it is the equal contribution of the healthy through their taxes to the health care system that pays for the sick when they need to access services. Critics say giving healthy people their money back because they are not using the system will remove that broad base of funding support and lead to less money in the system.

Critics also note that the availability of private funds, instead of producing competition, tends to drive up the cost of minor medical procedures. Finally, they claim MSAs discriminate against people for being seriously ill. "For the poor and the unhealthy the likelihood is that the MSA gets used up each year. No funds will accrue, so they will have to come up with their own money more and more each year…. Unlike our system that provides more services to those who need the most care, the MSA system most benefits those who need the least care — the wealthy and healthy."[28]

The Kirby commission, in its review of MSAs, notes that any MSA proposal would require careful scrutiny but believes "it is not unreasonable to expect that a plan could be developed that avoids the pitfalls." The provincial government, for example could be the insurer for

catastrophic illness to make sure all would be covered rather than leaving it to the private marketplace. The Kirby commission suggested that it be "contemplated for application in a limited sphere, such as paying for long term care facilities, where there are already significant private and out-of-pocket charges.

MSAs are too new and inexperienced in Canada for the committee to pass judgments on their merits or risks in a B.C. setting. Nevertheless, they are an intriguing concept that is worthy of exploration, particularly if they can be melded with the public system as a way to introduce patient responsibility, choice and incentive for preventive health into our health care equation.

Your Committee recommends that further investigation be carried out on the benefits and risks of MSA accounts with the goal of designing a made-in-B.C. plan that still protects the sick but introduces preventive health incentives. Once a potentially workable design is found, it should be tried first in a pilot project in a region that volunteers to adopt the MSA plan. Results should be carefully evaluated against a control community.

DELIBERATIONS FOR THE FUTURE

Over the past two months this committee has been taking the pulse of the B.C. public and the province's health care providers, hearing their concerns and trying its best to take a rational, non-ideological, solution-oriented look at some of the key issues affecting our health care system. Some issues, however, are so complex and challenging that further public discussion and debate is needed. At the heart, this discussion must revolve around some key questions. What services must our public system be sure to provide? What interventions and procedures do not provide enough individual or public good to be included in a public scheme? Just because we can do something, should we do it? What procedures, drugs or interventions come at too high a cost, whether financially, physically or morally? What is the ethical line between paying huge sums to save the life of one person when that same money, applied in a different way, might save the lives of a hundred people? How do we draw that line? These are among the most difficult questions for society to answer.

> *"There is value to virtually everything going on in the health care services, but not all of these services provide sufficient value and benefit to warrant inclusion in a publicly funded program."* — Dr. Marshall Dahl, B.C. Medical Association

What is required is more candid, fundamental and non-ideological discussion of what good health care is and should be in this province. We need to define what is medically necessary and must be covered for all British Columbians, what services could be covered and what services must not be covered.

While this is difficult territory, some of this ground has been covered by the state of Oregon,[29] which in the early 1990s started a series of public discussions and struck a special commission to set about ranking health care services for coverage under the Oregon Health Plan according to their benefit to the entire population served. To arrive at a preliminary version of the prioritized list, they ranked conditions according to four factors: their cost, the net duration of benefit, physician estimates of the likelihood that treatment could alleviate symptoms and prevent death, and citizen views on the seriousness of symptoms and functional limitations. Over the last decade, through numerous deliberations, the list has been revised and refined, placing higher values on preventive care, maternity care and contraception, for example, among other interventions. Similar conditions are now clustered together, but higher ranking is given to interventions that prevent a disease rather than interventions to treat the disease.

Now, 743 items have been ranked, with the threshold for coverage set by the state Legislature each year on the basis of actuarial estimates and budgetary constraints. Typically, the last 100 or so items each year are not funded, including removal of cysts, fallopian tube operations and any condition in which there is no effective treatment available. Is the Oregon plan working? Are any people being hurt by it? What are the complaints and what are its successes? Can B.C. learn from some of its negotiations and prioritizations? These and other questions could be explored more deeply by this legislative committee in future sittings.

This committee could also explore other ethical and societal issues, such as the best way to honour patient wishes and needs, particularly in respectful end-of-life care. Public debate is

also needed to examine the issue of retirees moving to B.C. in later life who have not contributed to the tax base during their working life, yet who are accessing health services at little cost; or whether it is reasonable to have some seniors, who can afford it, to pay some of their drug costs, rather than having the Pharmacare program pick up the cost. These issues are beyond the scope of this report to fully explore at this time, but given the tremendous response from the public to this session of hearings — with more than 750 submissions received — it is likely the public would be highly motivated to participate again to help explore and potentially solve pressing issues facing our health care system.

This first report, however, should help to spark thought-provoking and crucial discussion of decisions to be made and directions that could be taken to help sustain the viability and effectiveness of our health care system.

Your Committee recommends that the Legislative Assembly continue to provide a mandate for further public consultation and public hearings into the issue of medically necessary care and other ethical and pressing issues facing the health care system.

APPENDICES

APPENDIX I - ENDNOTES

1 R.J. Blendon, M. Kim, J.M. Benson, "The Public Versus The World Health Organization on Health System Performance," Health Affairs, 2001, 20(3):10-20.

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Jo Cowherd	339	09-Nov-01 Surrey
Neville Cox	530	
Chief William Cranmar, 'Namgis First Nation	646	26-Oct-01 Courtenay
Lynda Cranston, Simon Fraser Health Region	440	
Dr. John Crawford	358	08-Nov-01 Surrey
Joyce B. Crawford	487	

Mayor Dayle Crawford, Village of Gold River	701	
Jill Cripwell	379	
Richard Cronk	423	
Hilary Crowley	292	
Tom Crowley	493	
Rodica and Florin Curteanu	177	
Fran Cuthbert, Sea to Sky Community Health Council	665	
Richard Cuttell, The BC College of Family Physicians	628	
Mr. and Mrs. Cutting	567	
Lori Cyr, Osteoporosis Society of Canada	609	
Paul Czene	666	
Dr. Marshall Dahl, B.C. Medical Association	384	07-Nov-01 Surrey
Roger Daigle	75	
Dave Danskin	550	
Barbara Dante, Nelson and District Home Support Services Society		02-Nov-01 Kimberley
Rheta Davidson	633	
Marianne Davies	108	26-Oct-01 Courtenay
Vernan Dean	139	
Sherry Delmar	505	
Lou Demerais, Vancouver Native Health Society	328	08-Nov-01 Surrey
Louise Dercole, Three Bridge Community Health Council	624	
Carol Derickson, Aboriginal Governors Working Group		01-Nov-01 Kelowna
Gaetan Deschamps	436	
Dr. Timothy Deutscher, Gathering for Rehab	538	
Christine DeVisser	473	
Marg Dinsdale, Healthy Heart Committee of Quesnel	31	
Shirley Dishaw	258	
Lorna and Wayne Dittmar	177	30-Oct-01 Prince George
Graham Dodd, Royal Inland Hospital	155	
Serge Doiron	434	
Ralph Dotzler, United Association of Injured and Disabled Workers	342	09-Nov-01 Surrey
Alva Dovell	236	02-Nov-01 Kimberley
Heather Down	560	
Peter C. Drummond	673	
Tim Dunbar	433	
Caryn Duncan, B.C. Health Coalition; Vancouver Women's Health Collective		08-Nov-01 Surrey
Duncan Dunsmore, Federal Superannuates National Association	604	
Dr. Robert Ellett	427	01-Nov-01 Kelowna
Karl Ellingsen	592	
Dave Emery	20	

Anita Endean, Prince George FAS Network	614	
Lily Eng	587	
Joan Erickson	25	
Paddy-Jo Esau, Child Development Centre		18-Oct-01 Fort St. John
Jack Etkin		25-Oct-01 Victoria
John Evans		02-Nov-01 Kimberley
Kathryn A. Evans	579	
Lynda Evans, Physiotherapy Association of B.C.	410	25-Oct-01 Victoria
Robert G. Evans	631	
Dr. Ellen Facey, University of Northern B.C.	30	19-Oct-01 Quesnel
Janet Fairbanks		26-Oct-01 Courtenay
Michael Fairbrass	137	
Frank Fallows	253	
Tracey Faria	533	
Carolyn Feldinger	282	
Jim Fenton, Regional Housing Resource Centre	216	01-Nov-01 Kelowna
Gwen Filippelli, South Fraser Health Region	382	07-Nov-01 Surrey
Evelyn Finlayson	301	
Gerry Fisher, Queen Alexandra Centre for Children's Health	612	
Susan Fisher	67	
John E. Flatt	540	
Irene Flint	589	
Martin Flynn		08-Nov-01 Surrey
Joanne Foote	693	07-Nov-01 Surrey
Marilyn Forbes	428	
Colin Ford	141	
Cameron Forghani		25-Oct-01 Victoria
Marilyn Foster		25-Oct-01 Victoria
Terry Fox, Inter Tribal Health Authority		26-Oct-01 Courtenay
Marilyn C. Francis	260	
Judy Fraser	576	
Gwyn Frayne, Coalition to Save Social Programs	120	26-Oct-01 Courtenay
Patrick Frewer, Seniors' Housing Advisory	500	
Menno Froese, Canadian Drug Manufacturers Association		08-Nov-01 Surrey
Linda Fry, Robson Health Association	691	
Susan Fryer	421	
D'Arcy Gabriele	188	30-Oct-01 Prince George
R.E. Gage, City of Merritt	683	
Tina Gainor	59	
Shawna Galt	439	
David Gans, Prosthetic and Orthodic Assocation of B.C.	226	25-Oct-01 Victoria

Lois Gardner	23	
Muriel Garland	563	
Sheelagh Garson, North Peace Health Council	9	18-Oct-01 Fort St. John
John Gentles, British Columbia Association of Optometrists	601	
Dan George, Aboriginal Health Association of B.C.	3	10-Oct-01 Victoria
Val George	71	17-Oct-01 Terrace
Drelene Gibb, Partnership Express Inc.	695	25-Oct-01 Victoria
Helen M. Giblak	470	
Heather Gibson, Nelson and Area Health Council		02-Nov-01 Kimberley
Pat Gibson, East Kootenay Community Health Services	457	
Susan Gimse, Union of BC Municipalities	625	
Winston Gittens	635	
Annette Glover	161	31-Oct-01 Kamloops
Bruce Goldsmith, Tillicum and Veterans Care Society		25-Oct-01 Victoria
Randy Goodman, Physiotherapy Association of BC		01-Nov-01 Kelowna
Dr. Gary Goplen	206	01-Nov-01 Kelowna
Joan E. Gordon	502	
Dale Graham, Comox Valley Nursing Centre	100	26-Oct-01 Courtenay
Sean Graham	655	
Gale Grant, Nicola Valley Women's Institute	702	
Judith H. Grant	84	
Lorraine Grant, Northern Interior Regional Health Board	178	08-Nov-01 Surrey
Wilhelm Grass	134	
G.J. Grealy	72	
Cliona Greene, Child Development Centre		18-Oct-01 Fort St. John
Margeurite Green-McCrae		08-Nov-01 Surrey
Alice Greenway	144	01-Nov-01 Kelowna
Darren Michael Gregory	555	
Lindsey Gri	318	08-Nov-01 Surrey
Julie Griffiths	185	30-Oct-01 Prince George
Lesley Griffiths	659	
Kathe Gruene		19-Oct-01 Quesnel
Tania Gruene		19-Oct-01 Quesnel
Simon Grypma, Nelson Professional Fire Fighters' Association	472	
Peter Guest	671	
Judy Guichon, Nicola Valley Community Health Advisory Council	166	31-Oct-01 Kamloops
Lorna Gunn		08-Nov-01 Surrey
Orest Gurash	588	
Linda Gutenberg, B.C. Pharmacy Association	387	25-Oct-01 Victoria
Dr. Peter Gutmanis	583	
Beverley Gutray, Canadian Mental Health Association	368	

Martin Haas	568	
Jasmine Haere	570	
S.L. Hagan, Port Alice Hospital	442	
Stan Haidish	300	
Berthe Hall, Thompson Health Region Board	163	31-Oct-01 Kamloops
Marilyn Hall, Central Coast Transitional Health Authority	537	
Sue Hall	485	
W.T. Halstead, District of Campbell River	632	
Betty Halverson, Port Alice Hospital	442	
C. Marke Hambley, Island Hearing Services	616	
Michael Hamer	27	
Cathy Hamilton	168	31-Oct-01 Kamloops
Eileen Hannon, The Catholic Women's League of Canada	277	
Hon. Colin Hansen, Minister of Health Services		25-Oct-01 Victoria
David Hanson, Northern Vancouver Island Brain Trauma Society	114	26-Oct-01 Courtenay
Ruby Hardwick	242	02-Nov-01 Kimberley
Kasandra Harfield	640	
Linda Hargreaves	102	26-Oct-01 Courtenay
Dave Harper	662	
F. W. Harris	86	
Martin Harris	672	
C. Lee Harrison	527	
Carol Harrison	45	17-Oct-01 Terrace
J.A. Harrison	528	
Blair Harvey, Vancouver Native Health Society	328	
Dick Haswell	143	
Norman Hatlevik, East Kootenay Community Health Services		02-Nov-01 Kimberley
Marion E. Hatton	195	
Dr. Marie Hay, Prince George FAS Network	614	
Andrew Hazlewood, Ministry of Health Services		10-Oct-01 Victoria
Frank Healey	650	
Alison Heath, Canadian Co-operative Association, B.C. Region	336	
Maria Heemskerk	76	
Fran Helland, Village of Ashcroft	160	31-Oct-01 Kamloops
Lori Henry, Northeast Aboriginal Health Council	29	19-Oct-01 Quesnel
John D. Herbert	193	
Gerry Herkel, St. Michael's Centre Extended Care Hospital	331	09-Nov-01 Surrey
Pat Hernstedt, Kersley Womens' Institute	281	
George Heyman, B.C. Government and Service Employees Union	366	07-Nov-01 Surrey 08-Nov-01 Surrey
Sharron Higgins, Directorate of Agencies for School Health	409	25-Oct-01 Victoria

Dr. Ken Hill		09-Nov-01 Surrey
Lorna Hillman, Family Caregivers Network Society	408	
Dr. William Hills	275	02-Nov-01 Kimberley
Glen Hillson, Persons with AIDS Society	365	07-Nov-01 Surrey
Dan Hingley		26-Oct-01 Courtenay
Dr. Kendall Ho, Faculty of Medicine, University of B.C.	197	08-Nov-01 Surrey
Douglas F Hockley	267	
Al Hodgkinson, West Coast Prostate Awareness Society	87	
Marguerite Holgate	95	
Michael Holland, Glacier View Lodge	101	26-Oct-01 Courtenay
Steve Holowka, The Cerebral Palsy Association of British Columbia	617	
Frieda Home	113	26-Oct-01 Courtenay
Dr. Euan Horniman	333	09-Nov-01 Surrey
Joanne Houghton, Food First Organization	184	30-Oct-01 Prince George
Norma Howes	590	
Tim Hoy	554	
York Hsiang, Association of Chinese Canadian Professionals		08-Nov-01 Surrey
Diana Hu	284	
Valerie Huber	506	
Colleen Hughes	647	
Robert Hulyk, B.C. Medical Association	384	
Dr. C. Hume, Greater Trail Community Health Council	468	
Michael Humer, Royal Inland Hospital	159	31-Oct-01 Kamloops
Maurie L. Hurst	564	
John Huston	83	
Louise Hutchinson	356	08-Nov-01 Surrey
Dr. Rosalyn Ing, Institute for Aboriginal Health	351	08-Nov-01 Surrey
Dr. Duncan Innes	207	01-Nov-01 Kelowna
Rita Jack, Collaborative Vision Society, Aboriginal Planning Training Centre		31-Oct-01 Kamloops
Bill Jackson	103	26-Oct-01 Courtenay
Dennis Jackson, Federal Superannuates National Association	604	
Robert Jackson, Castlegar and District Health Council	390	07-Nov-01 Surrey
Edna Jensen	667	
Val Jensen, Hospital Employees Union, Northern Region	11	18-Oct-01 Fort St. John
Michael Jessen, Citizens for Better Health Care	606	
Kathy Jessome, Hospital Employees Union, Northern Region		18-Oct-01 Fort St. John
Mary Johannson	153	
Lily Johansen	529	
Allan Johnson, Money Concepts	405	
Andrew Johnson, AIDS Vancouver		07-Nov-01 Surrey

Howard Johnson, Denominational Health Association	285	
Leanne Johnson	491	
Joy Johnston	93	
Sally Johnston, Quesnel Healthy Heart Committee		19-Oct-01 Quesnel
Don Jones	332	09-Nov-01 Surrey
Doreen Jones	73	
Brenda Jordison	127	
Vernon Joseph, Hagwilget Village Council		17-Oct-01 Terrace
Vincent Joseph, Tl'azt'en Nation		19-Oct-01 Quesnel
Patricia Juno, Queen Alexandra Centre for Children's Health	447	
Dr. Jon Just, Royal Inland Hospital	158	31-Oct-01 Kamloops
Lisa Kallstrom, Health Association of B.C.	286	08-Nov-01 Surrey
Ted Kampa, Nicola Valley Community Health Advisory Council	166	31-Oct-01 Kamloops
Jan Kamstra	150	
Lynett Kane	495	
Annie Kaps	509	
Pat Kasprow, New Vista Society	331	09-Nov-01 Surrey
Michael Keelan		26-Oct-01 Courtenay
Dr. Bert Kelly, Northern Medical Society	182	30-Oct-01 Prince George
Robert Kelly, Terrace and Area Health Council	49	17-Oct-01 Terrace
Malcolm Kendall		25-Oct-01 Victoria
Frances Kenny, Parents Forever	670	
Melissa Kerry	674	
Dolly Kershaw, Thompson-Okanagan-Kootenay Aboriginal Health Council	173	31-Oct-01 Kamloops
Sidney Kettner	700	
Viola Kiess	327	08-Nov-01 Surrey
Linda Kilby	78	
David Kincade		31-Oct-01 Kamloops
Betty King, Vancouver Island Chelation Society	39	
James C. King	21	
Mayor Colin Kinsley, City of Prince George	425	
Mayor George Kirkwood, Town of Comox	521	
Helen Klassen, Arthritis Society of B.C.	235	02-Nov-01 Kimberley
Ann Klees, Senior Centre of Qualicum Beach		26-Oct-01 Courtenay
Gay Klietzke, Kamloops Hospice Association	626	
B.L. Klingensmith	273	
Andreas Kluftinger	247	
Cathleen Kneen	511	
Antoinette Knight, Catholic Women's League of Canada	277	
Michael Knight	552	

Ian Knipe, 'Namgis First Nation	112	26-Oct-01 Courtenay
John Knoch, Quesnel and District Community Health Council	35	19-Oct-01 Quesnel
Tom Knowles	289	08-Nov-01 Surrey
Laurie Knox	651	
Ed Koch	381	07-Nov-01 Surrey
Rosemary Kodak	543	
Jim Koen, Canadian Drug Manufacturers Association	322	
Paul Komer, Prevent Alcohol and Risk Related Trauma in Youth Program	232	02-Nov-01 Kimberley
Mayor Andy Kormendy, Village of Ashcroft	160	31-Oct-01 Kamloops
David Kornell, Sun Pointe Village	201	
John and Nora Koury	482	
Ian Kovnats		25-Oct-01 Victoria
Taiho Krahn	558	
Murry Krause, Central Interior Native Health Society		30-Oct-01 Prince George
Ann Krauseneck, Prince George and District Labour Council	431	
Johann B. Krebs	548	
Haida Kristiansen	577	
H. Kroeker, City of Merritt	683	
Robert Kucheran, B.C. Pharmacy Association	387	07-Nov-01 Surrey 25-Oct-01 Victoria
Dr. Valerie Kuehne, University of Victoria	392	09-Nov-01 Surrey
Carol Anne Kunicki, Family Caregivers Network Society	408	25-Oct-01 Victoria
Klotz Kwan	705	
Neil Kyle	329	09-Nov-01 Surrey
Jamie Kyles	85	
Jim Lamb	169	31-Oct-01 Kamloops
Janice Lane	129	
Casey Langbroek	525	
Monika Lange, Families for Early Autism Treatment of B.C.	51	17-Oct-01 Terrace
Michelle K. Langfeldt	130	
Bonnie Lantz, Registered Nurses Association of B.C.	367	07-Nov-01 Surrey
Dr. Andrew Larder, East Kootenay Community Health Services	241	02-Nov-01 Kimberley
Casey Larochelle, United Native Nations	350	
S.W. Laurie, Penticton Regional Hospital Alumni Association	446	
Patrick Lauzon, Merck Frosst Canada Ltd.	610	
Michael Lawrence	90	
Rudy Lawrence, Council of Senior Citizens Organizations of B.C.	354	08-Nov-01 Surrey
Evelyn H. Lazare	498	
Gloria Lazzarin, Quesnel and District Palliative Care Association	32	19-Oct-01 Quesnel
Jean Leahy	88	

Dudley Leather, Quesnel and District Community Health Council	35	19-Oct-01 Quesnel
Andrea Leblanc		17-Oct-01 Terrace
Robert Lees	271	
Chris Leischner, Prince George FAS Network	614	
Malja Leivo, AIMS BC	486	
Joy Lennox	572	
Wolf F. Leopold	270	
Dr. Jacobus LeRoux		19-Oct-01 Quesnel
Janet and Corney Les	261	
Heather Bev Lever, Canada's Research-Based Pharmaceutical Companies	443	
Diane Lewis, Comox Valley Nursing Centre	100	26-Oct-01 Courtenay
Karel Ley, Stroke Recovery Association of B.C.	395	09-Nov-01 Surrey
Barbara Lindsay, Alzheimer Society of BC	362	
Victor Ling, B.C. Cancer Agency	220	01-Nov-01 Kelowna
Greg Linton, Terrace and District Medical Society	55	17-Oct-01 Terrace
Irena Lipovszky, Coronary Health Improvement Project	175	30-Oct-01 Prince George
Susan Lissack	303	
Charlotte Lochhead	370	07-Nov-01 Surrey
Andrea Loeppky, GlaxoSmithKline Inc	461	
Dr. John Loh	585	
Bob Long, Cariboo-Chilcotin Regional Hospital District	34	19-Oct-01 Quesnel
Teresa and Bo Lonn	508	
Mitch Loreth, Brain Injury Association of BC	411	
D. Loubardeas	544	
Chief Moses Louie, Lower Similkameen Indian Band	211	
Mable Louie, Carrier Sekani Family Services	186	30-Oct-01 Prince George
Roderick Louis, Patient Empowerment Society	346	07-Nov-01 Surrey
Richard J. Lowe	89	
Mardi Lowe-Heistad, Speech-Language Pathology Health Services	515	
John Luton, Greater Victoria Cycling Coalition	605	
Dr. Richard Lutz		17-Oct-01 Terrace
Janice Macdonald, Dietitians of Canada	619	
Tracy MacDonald, Central Cariboo-Chilcotin Community Health Council	33	19-Oct-01 Quesnel
Nancy Macey, Delta Hospice Society	602	
Jessie MacGregor, AIDS Society of Kamloops	172	31-Oct-01 Kamloops
Gwyne Mack, Regional District of Comox Strathcona	276	
Garry MacKenzie	302	
Isobel MacKenzie, Peninsula Community Services		25-Oct-01 Victoria
Ronald G. MacKenzie	259	
Gordon MacKinnon	416	25-Oct-01 Victoria

Lucy MacKinnon, Catholic Women's League of Canada	277	
Brian MacLure, Boundary Health Council	389	07-Nov-01 Surrey
Malcolm MacLure, Ministry of Health Planning		24-Oct-01 Victoria
Dugald MacMillan, Port Alice Hospital	442	
Halle MacMullen		26-Oct-01 Courtenay
Glen Maddess	320	
Mr and Mrs Mah	189	
Barbara Makota	652	
Ida Makro, Concerned Citizens of Ashcroft and Cache Creek		31-Oct-01 Kamloops
Marjorie Mansell, B.C. Old Age Pensioners Organization	288	08-Nov-01 Surrey
Donald Manson		30-Oct-01 Prince George
John T. Manton, We Care Home Health Services	449	
George Markides, Port Alice Hospital	442	
Doug Marrie, Campbell River-Nootka Community Health Council	613	
Marilyn Marsden	61	
Blair Marshall	664	
David Marshall	451	
Georgina Marsom	499	
Georgina Martin, Central Interior Native Health Society		30-Oct-01 Prince George
Mel Martin, Canadian Reflex Sympathetic Dystrophy Network	40	
Floris Martineau, Old Age Pensioners Organization	36	
Ruth J. Masters	62	
Dr. Stephen Matous		26-Oct-01 Courtenay
Stacy Mayoh	638	
John McAulay, Elk Valley and South Country Health Council	238	02-Nov-01 Kimberley
Peter McCorduck	334	09-Nov-01 Surrey
Rosanne McCorduck		08-Nov-01 Surrey
Donna McCrea, Three Bridge Community Health Council	624	
Wendy McCrea, Osteoporosis Society of Canada	609	
Bob McCuaig		31-Oct-01 Kamloops
Rich McDaniel, North West Regional Hospital District	675	
Bill McDonald		09-Nov-01 Surrey
Paul McDonell, Simon Fraser Health Region	325	08-Nov-01 Surrey
Susan McDougall	492	
Anne McFarlane, Ministry of Health Planning	68	24-Oct-01 Victoria
Brenda McFetridge	63	
Dr. Gerald McFetridge		19-Oct-01 Quesnel
Tom McGregor, B.C. Coalition of People with Disabilities	321	08-Nov-01 Surrey
Dr. Rob McGuinness, Northern Medical Society	182	
Dr. Jan McIntosh	217	01-Nov-01 Kelowna
Wayne and Sandra McIntyre	594	

Andrew McKay, University College of the Cariboo	174	31-Oct-01 Kamloops
Dr. Brian McKay	210	01-Nov-01 Kelowna
Lael McKeown	42	17-Oct-01 Terrace
Sue McKinnon, Brain Injury Association of B.C.	5	25-Oct-01 Victoria
Linda McLaughlin	507	
George McLean, Cardiac Society of B.C.	319	08-Nov-01 Surrey
C. Robert McLeod	630	
Dennis McMahon, Comox Valley Community Health Council	104	26-Oct-01 Courtenay
Mike B. McMahon	265	
Tom McMahon	167	31-Oct-01 Kamloops
Terry McMillan	146	
Frank R. McMiller, Coronary Health Improvement Project of BC	441	
Ray McNabb, B.C. Retired Teachers' Association	317	08-Nov-01 Surrey
Frank McNair	228	
Sylvia McNeil, Village of Tahsis	305	
Debra McPherson, B.C. Nurses Union	349	09-Nov-01 Surrey
Verna McRory, Nelson and Area Health Council	694	
Bill McSeveney, Campbell River-Nootka Community Health Council		26-Oct-01 Courtenay
Alice McSweeney		09-Nov-01 Surrey
Mike Mearns, Aboriginal Health Association of B.C.	3	10-Oct-01 Victoria
Colleen Mero		19-Oct-01 Quesnel
Marla Mills	279	
Margaret Milner		02-Nov-01 Kimberley
Andrew S. Mitchell	15	
John H. Mitchell	136	
Beth Moewes, Three Bridge Community Health Council	624	
Ida Mohler, Terrace and Area Health Watch Group	52	17-Oct-01 Terrace
Fanny Monk	402	31-Oct-01 Kamloops
Dr. Terrence Montague, Merck Frosst Canada Ltd.	610	
Kim Montgomery, Family Violence Resource Centre	380	07-Nov-01 Surrey
Blake Mooney	398	09-Nov-01 Surrey
Linda Moorcroft	688	
Dr. Jean Moore, Canadian Mental Health Association		07-Nov-01 Surrey
Cheryl Morgan, North West Aboriginal Health Council	54	17-Oct-01 Terrace
Bob Morris	573	
Gail Morrison, South Cariboo Community Health Council	246	
Ian Morrison	192	
Agnes Mosebach	699	
Dr. Russell Mosewich	157	31-Oct-01 Kamloops
Harry C. Mosley	262	

Dr. Maxine C. Mott, Nursing Education Council of British Columbia	459	
Naomi Muelleden	710	
Cheryl Muhle	81	
Florence Mulhern	122	
Ian H. Munro	200	
David Murchie	490	
Dr. Kathy Murphy	274	02-Nov-01 Kimberley
Timothy and Evelyn Murphy	426	
Captain John Murray, Salvation Army	355	08-Nov-01 Surrey
Susan Murtagh	222	
Susan Murtagh, Kelowna General Hospital - Community Asthma Care Centre	679	01-Nov-01 Kelowna
Jean Mutch	269	
Dr. Sandy Nash	205	01-Nov-01 Kelowna
Karen Neal, Supportive Assisted Living Association		01-Nov-01 Kelowna
Pat Neale, South Fraser Health Region		07-Nov-01 Surrey
Jennifer Neely	415	25-Oct-01 Victoria
Andria Negenman, Kwantlen University College	618	
Laura Neil	418	25-Oct-01 Victoria
David Nelson, Sight-testing Opticians of BC	643	
Al Nemeth	310	08-Nov-01 Surrey
Joanne Neubauer, Action Committee of People With Disabilities		25-Oct-01 Victoria
Andrew Neuner, North Peace Health Council	9	18-Oct-01 Fort St. John
Rosa Neville, B.C. Registered Nurses in Private Practice	147	
Norris Nevins		08-Nov-01 Surrey
Barbara Newbigging	407	25-Oct-01 Victoria
Pat Niblett	516	
Yvonne Nielsen	194	
Alix Nilsson, Creston and District Health Council		02-Nov-01 Kimberley
John L. Nimmo	65	
Dr. Don Nixdorf, B.C. Chiropractic Association	399	08-Nov-01 Surrey
Michelle Norman	526	
Adam North Peigan, Fraser Valley Aboriginal Health Council	372	07-Nov-01 Surrey
Richard Novak	445	
Joe Novotny, Fort Nelson-Laird Community Health Council	313	
Joe Novotny, Peace Liard Health	448	
Bob Nuyens, Nelson and Area Health Council		07-Nov-01 Surrey
Debra Oakman, Regional District of Comox Strathcona	276	
Mayor Chris O'Connor, Village of Lytton	165	31-Oct-01 Kamloops
Larry Odegard, Health Association of BC	286	08-Nov-01 Surrey
Edward O'Donnell	26	

Elizabeth Odynsky	452	
Martin Oets, Kootenay Boundary Community Health Services Society	364	07-Nov-01 Surrey
Kate O'Keefe	149	
John Olsen	111	26-Oct-01 Courtenay
Christopher Olson, Thin Air Productions	204	
Barry O'Neill, CUPE	469	
Dr. Carole Oosthuizen, Prince George FAS Network	614	
Dr. J.H.C. Oosthuizen	298	
Doug Orr, Kamloops Society for Alcohol and Drug Services	170	31-Oct-01 Kamloops
John Ostaf	324	08-Nov-01 Surrey
Marilyn Ota-Stevenson, Vancouver Native Health Society	328	
Charles Ottewell, Provincial Brain Injury Program, Lower Mainland and Fraser Valley		07-Nov-01 Surrey
Michael Ovenell		01-Nov-01 Kelowna
Helen R. Overnes, Oliver Women's Institute	484	
Melissa Ozard	574	
Emma Palmantier, Northeast Aboriginal Health Council	29	19-Oct-01 Quesnel
Xiaochuan Pan, Millennium Clinic of Traditional Chinese Medicine	60	
Theresa Parent	551	
Anita Parr	14	18-Oct-01 Fort St. John
Dr. Michael Parrish, Hornby and Denman Community Health Care Society	115	26-Oct-01 Courtenay
Barbara Parson	587	
Kirby Patton	347	
Georgina Paul	234	02-Nov-01 Kimberley
Deborah Pawar, Prince George FAS Network	614	
Patricia Peach	377	07-Nov-01 Surrey
Dr. Shaun Peck, Ministry of Health Planning	4	10-Oct-01 Victoria
Jacquelyn Peitchinis	299	
David Pellerin, B.C. Hospital Maintenance and Tradeworkers Association	340	09-Nov-01 Surrey
Murli Pendharkar	689	01-Nov-01 Kelowna
Mayor Larry Pepper, Port Alice Hospital	442	
Roy Pepper	338	09-Nov-01 Surrey
Dr. S.A. Perkins	306	
John Petrie, Cardiac Society of B.C.	319	08-Nov-01 Surrey
Dr. Barrie Phillips	50	17-Oct-01 Terrace
Gwen Phillips, Ktunaxa/Kinbasket Tribal Council	237	02-Nov-01 Kimberley
Harminder Phungura	553	
Chief Harry Pierre, Tl'azt'en Nation		19-Oct-01 Quesnel
Sheila Pike	297	

Marilyn Piters, South Fraser Health Region	642	
George Plant	566	
Dr. Howard Platt, Ministry of Health Services	8	10-Oct-01 Victoria
W.A. Plumridge	153	
W.B. Pogue	92	
Shaunee Pointe, First Nations Chief's Health Committee	546	08-Nov-01 Surrey
Connie Poling	556	
Amy Pollen	376	07-Nov-01 Surrey
Neleena Popatia, Psychiatric Mental Health Advanced Practice Nurses	565	
Gordon Porter, User Friendly Homes Ltd.		07-Nov-01 Surrey
Ana Porzecanski	291	
Dr. Anne Pousette, Northern Medical Society	182	17-Oct-01 Terrace
Fritz Praat	707	
Mayor Sylvia Pranger, District of Kent	620	
June Prenty	80	
Jackie Pretty		07-Nov-01 Surrey
Sharon Prinz	637	
John Przywara, Supportive Assisted Living Association		01-Nov-01 Kelowna
Susan Purdom, Sunshine Coast Peer Counselling for Seniors Association	475	
Frank Radelja	91	
Jack Radford	412	25-Oct-01 Victoria
Raymond Raj	38	
Marylynn Rakuson, Greater Trail Community Health Council	391	07-Nov-01 Surrey
Murray Ramsden, Okanagan-Similkameen Health Region	202	01-Nov-01 Kelowna
Sandra and Dante Ramunno	454	
Dr. Gary Randhawa, Kelowna General Hospital	225	01-Nov-01 Kelowna
W. Rasmus	520	
Mabel Jean Rawlins-Brannan, Community Social Planning Council of Greater Victoria	450	25-Oct-01 Victoria
Rosemary Rawnsley, Alzheimer Society of B.C.	692	
Iris Reamsbottom	369	07-Nov-01 Surrey
Walter Redford	524	
Dr. Bill Redpath	44	17-Oct-01 Terrace
Denise Reed	151	
Judy Reed		31-Oct-01 Kamloops
Mike Reed, South Okanagan Simillkameen Brain Injury Society	209	01-Nov-01 Kelowna
Joan Reekie	488	
Joan Reichardt, Nelson and Area Health Council	542	
Barry Reid, Regional Housing Resource Centre		01-Nov-01 Kelowna
Elva Reid, The Canadian Federation of University of Women	311	

Lorna Reid, Arthritis Society	230	
Maria Reid, Fraser Valley Aboriginal Health Council	372	07-Nov-01 Surrey
Andrea Reimer, Green Party	496	
E. Reimer, City of Merritt	683	
Gerri Reinhard	709	
M. Reitsma-Street	304	
Adele Relkoff, Health Sciences Association of B.C.		02-Nov-01 Kimberley
Ted Renner, Elk Valley and South Country Health Council	238	02-Nov-01 Kimberley
John Restakis, Canadian Co-operative Association, B.C. Region	336	09-Nov-01 Surrey
David Reynolds, Watson Wyatt	343	09-Nov-01 Surrey
Dave Richardson, Northern Interior Regional Health Board		30-Oct-01 Prince George
Ross Richardson	648	
Al Richmond, Cariboo-Chilcotin Regional Hospital District	34	19-Oct-01 Quesnel
Claire Riedel, Columbia Valley Health Council		02-Nov-01 Kimberley
Robert Riedlinger	361	08-Nov-01 Surrey
Evelyn Rigby, The Catholic Women's League of Canada	277	
Yvonne Rigsby Jones	489	
Pieter Rijke	132	
Elizabeth Riley, Children's and Womens Health Centre of BC		08-Nov-01 Surrey
Rick Riley, Greater Trail Community Health Council		07-Nov-01 Surrey
Don L. Ritchey	263	
Grant Roberge, Central Vancouver Island Health Region	116	26-Oct-01 Courtenay
Renee Robert, Family Violence Resource Centre	380	07-Nov-01 Surrey
Kerrie Roberts, Physiotherapy Association of BC		30-Oct-01 Prince George
Penne Roberts, Island Deaf and Hard of Hearing Centre	518	
Daphne Robertson	386	07-Nov-01 Surrey
Hugh Robertson, Central Cariboo-Chilcotin Community Health Council	33	19-Oct-01 Quesnel
Daphne Robinson, Villiage of New Aiyansh		17-Oct-01 Terrace
Magdalen Robinson	400	09-Nov-01 Surrey
Rick Robinson, South Peace Health Council	28	18-Oct-01 Fort St. John
Laurie Rockwell	706	
Dr. Patricia (Paddy) Rodney	353	08-Nov-01 Surrey
Daniel Roitberg, Lower Mainland Drug Freedom; Commercial Health Centre; New Beginnings	397	09-Nov-01 Surrey
Bernice Rolls	458	
Anne Ross, Health Sciences Association of B.C.		31-Oct-01 Kamloops
Maureen Ross	219	01-Nov-01 Kelowna
Shirley Ross, B.C. Nurses Union		09-Nov-01 Surrey
Thomas Rothery, Federal Superannuates National Association, Central Okanagan Branch No. 7	218	01-Nov-01 Kelowna
Hilary Routley, Arthritis Society of B.C.	235	02-Nov-01 Kimberley

Liisa Rowat	681	
Angéle Rowe	214	01-Nov-01 Kelowna
Allison Ruault, Cariboo Health	615	
Brian Ruddell	541	18-Oct-01 Fort St. John
John Russell, Mental Health Monitoring Coalition	393	09-Nov-01 Surrey
Noreen and Jim Rustad	503	
Dr. John Ryan, Northern Medical Society		30-Oct-01 Prince George
Gert-F. and Renate Sander	471	
Horst Sander	179	
Nicole Sander	444	
Glen Sanford, B.C. Coalition of People with Disabilities	321	08-Nov-01 Surrey
Glen Sanford, Home Support Action Group		26-Oct-01 Courtenay
Ermil John Santick	191	
Marlene Sapergia	138	
Margaret Saulnier	46	17-Oct-01 Terrace
Dr. Joseph Schaafsma, University of Victoria	539	
Martha A Scheel	257	
Sue Scheiber, Arthritis Society	230	01-Nov-01 Kelowna
Brian Schmidt, B.C. Cancer Agency	375	07-Nov-01 Surrey
Eleanor Schmidt	142	
H.E. Schmidt, Saint Mary's Hospital	645	
Dr. Gerhar Schumacher, Royal Inland Hospital	156	31-Oct-01 Kamloops
Bob Scott	58	19-Oct-01 Quesnel
L. Scott, Quesnel School District	704	
Lorine Scott	575	
David Seggie, Kitimat Health Watch	463	
Russ Seltenrich	43	17-Oct-01 Terrace
Beryl Senger	593	
Andre Serzisko		25-Oct-01 Victoria
Bill Seveney, Comox Valley Community Health Council	104	
Teresa Shandl	252	
D.J. Sharman	641	
Pat Shaw	13	18-Oct-01 Fort St. John
Fern Shawchek		18-Oct-01 Fort St. John
Garth Sheane	18	
Sharon Shepherd, Central Okanagan Community Health Advisory Committee	600	
R. Sherwood, City of Merritt	683	
Ada Shillinglaw-Deans	359	08-Nov-01 Surrey
Dawne Shong	582	
Graham Shuttleworth	497	08-Nov-01 Surrey

Alan Sideen	580	
Helen Sideen	581	
Rod Silliphant	123	
Dr. Bill Simpson, Northern Medical Society	182	
Patrick Simpson, User Friendly Homes Ltd.	378	07-Nov-01 Surrey
Ruth Simpson, Health Sciences Association of B.C.	240	02-Nov-01 Kimberley
Annerose Sims	422	
Jim Sinclair, B.C. Federation of Labour		08-Nov-01 Surrey
Gurnaik Singh Brar		08-Nov-01 Surrey
Ausma Smith, Three Bridge Community Health Council	624	
Elaine Smith	17	
Eric Smith	19	
Richard Smith	661	
Rhonda Snook		26-Oct-01 Courtenay
Norma Soderholm	595	26-Oct-01 Courtenay
Jim Soles, University Presidents' Council of B.C.	414	25-Oct-01 Victoria
Gerald Solowan	571	
Rose Soneff, Williams Lake Environmental Society	623	
Larry Sorken	94	
Kim Spangberg	557	
Rhonda Spence, Canadian Union of Public Employees B.C.		08-Nov-01 Surrey
Joy Spencer-Barry, Queen Alexandra Centre for Children's Health	612	
Byron Spinks	165	31-Oct-01 Kamloops
J.B. Sporre	532	
Mayor Heather Sprout, Village of Sayward	512	
Geoffrey Squires, B.C. Pharmacy Association	387	25-Oct-01 Victoria 07-Nov-01 Surrey
Linda St. Arnault	187	30-Oct-01 Prince George
Dennis St. Germain, Health Systems Management	337	09-Nov-01 Surrey
Janice St. John	476	25-Oct-01 Victoria
Jerry Stanger, Provincial Brain Injury Program, Lower Mainland and Fraser Valley	360	07-Nov-01 Surrey
Sally Stevenson	106	26-Oct-01 Courtenay
Cindy Stewart, Health Sciences Association of B.C.	348	
Michael Stibbs	654	
Reg Stowell	2	17-Oct-01 Terrace
Karen Strachan	656	
Amanda Strand, Kwantlen University College	618	
Else Strand, Central Vancouver Island Health Region	116	26-Oct-01 Courtenay
Linda M. Strand	16	
Dr. Donald Strangway	24	17-Oct-01 Terrace
Maureen Strom	456	

Laurie Strorch, Prince George FAS Network	614	
Brenda Stubbs, Arthritis Society, B.C. and Yukon; Surrey Community Group	394	09-Nov-01 Surrey
Avril Sullivan	424	
Rae Supeene, Hepatitis C Society of Canada	97	26-Oct-01 Courtenay
Marion Suski, Riverview Hospital	383	07-Nov-01 Surrey
Dr. Michelle Sutter, Northern Medical Society	182	
K. Swanson, Port Alice Hospital	442	
Nancy and Gerald Swartz	480	
Julie Tam, Canadian Drug Manufacturers Association		08-Nov-01 Surrey
Lesley Tannen, Desert Rose Society: People With Disabilities Network	227	01-Nov-01 Kelowna
Larisa Tarwick		17-Oct-01 Terrace
Donald Taylor, Northern Vancouver Island Brain Trauma Society	114	26-Oct-01 Courtenay
Dr. Edward Taylor	535	
Marilyn Teegee, Carrier Sekani Family Services	186	
John Tegenfeldt, Ministry of Health Planning		24-Oct-01 Victoria
Dr. Becky Temple, North Peace Health Council	9	18-Oct-01 Fort St. John
Marlene Thio-Watts, Prince George FAS Network	614	
Mary Thirsk, Stroke Recovery Association of BC	335	09-Nov-01 Surrey
Bob Thomas	559	
Minnie Thomas, Carrier Sekani Family Services	186	
Dr. Alan Thomson, Ministry of Health Services	6	10-Oct-01 Victoria
Hugh Thompson		31-Oct-01 Kamloops
Darrell Thomson, B.C. Medical Association	384	
Donald Thomson	517	25-Oct-01 Victoria
Brenda Thorlakson, Vernon and District Hospice Society	215	01-Nov-01 Kelowna
Steve Thorlakson, Mayor, City of Fort St. John, Peace River Regional Hospital District		18-Oct-01 Fort St. John
Hadrianna Thorpe	453	
Dr. Paul Tinari, Pacific Institute for Advanced Study	611	
Joanne Tobie	584	
Wendy Tolksdorff	680	
Anthony Toth, B.C. Pharmacy Association	387	
Zoe Towle, Professional Association of Residents of B.C.	326	08-Nov-01 Surrey
Alex Turner		26-Oct-01 Courtenay
Dr. Kevin Turner	164	31-Oct-01 Kamloops
W.D. Turner	481	
Dr. David Turpin, University of Victoria	392	
Mr. and Mrs. Tom Tylka, Community Audiology Centre	536	
Carole Usher, Prince George FAS Network	614	
Corena Usher, Kamloops Pro-Life Society	162	31-Oct-01 Kamloops

Dr. David Usher	467	
Mickie and Terrie Uyede	479	
Jim Vaillancourt, Creston and District Health Council		02-Nov-01 Kimberley
Fred Valdes, Vision in Motion Community	330	09-Nov-01 Surrey
Dawn van den Camp	64	
Diana Van der Zande	686	
C. van Mossel, University of Victoria	663	
Catherine van Mossel	664	
Hank Van Ryk, H & H Total Care Services	598	
Michael Van Ziffle	687	
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Klari Varallyai, Physiotherapy Association of B.C.	98	26-Oct-01 Courtenay
Christine Veenstra	561	
Ken Veldman, Terrace Economic Development Authority	56	
Paul Vermeulen, Kimberley Community Health Council	233	02-Nov-01 Kimberley
Rhonda Viray-Cailler, Prince George FAS Network	614	
Laila Virding	522	
Thomas Virtue	519	
Harry Vogt	698	
Birgitta von Krosigk, The Canadian Legal Network for Children with Special Needs	599	
Owen Vroom	79	
Sophia Wagner	660	
Marvin Wai, T-Fact Canada Corp. Ltd.	290	
Roger Walker, Cranbrook Health Council		02-Nov-01 Kimberley
Shirley Walker	510	
Liisa Wallace	430	
Margaret (Maggie) Walters		09-Nov-01 Surrey
Dr. K. K. Wan, Association of Chinese Canadian Professionals	357	08-Nov-01 Surrey
Dr. Caroline Wang, Vancouver Medical Association	309	08-Nov-01 Surrey
Dorothy Wardwell	255	
Terry Webber, Caregivers Association of BC	314	
Cameron Webster	569	
Debbie Weddell	534	
Dr. Brian Weinerman, B.C. Cancer Agency	406	25-Oct-01 Victoria
Peter H. Weis	125	
Carol Weremy, Quesnel and District Palliative Care Association	32	19-Oct-01 Quesnel
Mayor Teunis Westbroek, Town of Qualicum Beach	110	26-Oct-01 Courtenay
Genevieve Westcott	501	
Marilyn Wheeler, Robson Health Association	691	
Dr. Philip White, Kelowna Medical Society	208	01-Nov-01 Kelowna

Fran White, Thompson Health Region Board	163	31-Oct-01 Kamloops
Jaci White	417	25-Oct-01 Victoria
Sue White, Aboriginal Health Council, Region 4	109	
Judy Whitehouse	199	
Allan Wiebe	278	
Diane Wiebe	278	
Lenore Wild	708	
Margo Wilgosh	1	
Laura Williams, Castlegar and District Community Health Council	634	
Audrey Wilson, Aboriginal Health Council, Region 4	109	26-Oct-01 Courtenay
Earl D. Wilson	668	
Galt Wilson, University of British Columbia	82	
Galt Wilson	181	30-Oct-01 Prince George
James Wilson, Kwakiutl District Council	118	26-Oct-01 Courtenay
Susan Wilson		02-Nov-01 Kimberley
Marleen Wirtz, Coronary Health Improvement Project	231	01-Nov-01 Kelowna
Lacey Woloshyn, Kwantlen University College	618	
Ronald Wood, ProMed Associates Ltd.	363	
Daniel Woodrow	96	26-Oct-01 Courtenay
Lynnette Wray, Community Healing and Intervention Program	243	02-Nov-01 Kimberley
Dr. Bernice Wylie	587	
Julian Wynne-Smith	315	
Clement Yargeau	437	
Gisele Yasmeen	307	
Dr. Brad Yee	596	07-Nov-01 Surrey
Lorne Yelland, Kelowna General Hospital, Respiratory Therapy Department		01-Nov-01 Kelowna
Susan York	466	
Kathleen M. Young, Cariboo Community Health Services Society	607	
Marilyn Young	295	08-Nov-01 Surrey
Wilma Young, Supportive Assisted Living Association	221	
Charlene Yow, Native Health Centre	171	31-Oct-01 Kamloops
Stephanie Yurkin, Kwantlen University College	618	
Nancy Yurkovich	352	08-Nov-01 Surrey
Jill Zacharias	250	
Gary Zak	22	
Pat Zanon, South Fraser Health Region	312	
Ron Zapp, BC Centre for Disease Control	603	
Arlene Zuckernick	547	