

A Vision For Health Care:

Building a Responsive Health Care System

Submitted by
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CUPE Research
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Executive Summary

The introduction of medicare, first in Saskatchewan, and then across the country, was one of the greatest achievements in public policy that Canadians have benefited from. But much has changed in the last forty years and the original vision of public health insurance that covered physician and hospital services no longer meets all of the health needs of Canadians.

The Commission on Medicare, established by the Saskatchewan government June 2000, is charged with reviewing the challenges facing the health care system in our province and developing recommendations for change. The Canadian Union of Public Employees, representing 12,000 front line health workers in Saskatchewan, has developed this brief that outlines our vision for a renewed health care system in this province.

There are many critical challenges facing our health care system that must be addressed in this review. The changing demographics of the Saskatchewan population (an aging population, rural depopulation, the changing nature of families, increase in people with disabilities, and an increasing aboriginal population) require new approaches to the delivery of health care. Not only do demographic changes demand new services and new delivery models, but we must examine how these changes impact on the health care workforce.

Another challenge facing our health care system is how to ensure stable and appropriate allocation of funding to the system. Health care costs are not spiraling out of control but, rather, have remained somewhat flat in

constant dollars between the start of health reform in 1993 and 1997. The real challenge is to develop a clear vision of how and where health dollars are spent. Although the percentage of total provincial government spending on hospitals dropped from 60% in 1976 to 36% in 1999, the proportion of spending on physicians increased from 16.6% in 1976 to 19.6% in 1999. This indicates that we are still far from a true wellness model.

As the provincial government attempts to control health spending, more of the costs of health care are being picked up by individuals either privately or through insurance plans. Between 1992 and 1996 the average Saskatchewan family has paid 25.5% more out-of-pocket for health care services. Public spending on health care, as a proportion of all health expenditures in the province, has dropped from 82.8% in 1983 to 74.1% in 1999.

The development of a new delivery model for health care is another challenge for this government. Although health reform attempted to integrate acute, long-term and home care services, there is still more coordination needed. The system is still fragmented and the kinds and levels of services provided by health districts varies tremendously. Furthermore, the provincial government needs to play a stronger role in the development of standards and policies that apply to all health districts.

A renewed health care system would recognize the social and economic factors that influence health. The creation of Community Health Centres that employ a wide range of health and social services workers would be an essential component of this renewed system. Community Health Centres would be the entry point for citizens accessing health services. They

would work collaboratively with communities and other government agencies to promote and improve the health of citizens.

Critical to a renewed health system is the creation of healthy workplaces. Health care has the highest rate of injury claims filed with the Workers Compensation Board of all sectors in the province. High workload, understaffing, and higher care needs of patients and residents in health care have all contributed to high injury and disability rates. Health care also has a high rate of part time and casual employment: only 41% of all health care workers in the province work full-time (only 37% of rural health workers are full time). Many health care workers are forced to work several part-time and casual jobs to make ends meet.

A healthy workplace also necessitates the replacement of hierarchical workplaces with multidisciplinary team approach. All health care workers need to fully use all their skills in a cooperative team approach to health care delivery. This will ensure higher quality and a better continuity of care for patients.

The Commission on Medicare must also examine effective governance models that ensure community participation and accountability structures between the health districts and the provincial government. It is our view that *The Health Districts Act* should be amended to outline specific responsibilities and duties of the CEOs of health districts, in the same manner that *The Education Act* details the responsibilities of Directors of Education and Secretary-Treasurers and Superintendents.

Finally, we urge the provincial government to expand the range of health services that are publicly delivered. We believe that the services

covered by the provincial health insurance plan need to be expanded to include: a broader range of home care services, light levels of nursing home care, pharmacare program, reinstatement of the school-based dental program, expanded rehabilitation and occupational therapy services and midwifery.

I. Introduction

The Canadian Union of Public Employees (CUPE) represents approximately 12,000 health care workers in the province of Saskatchewan. Our members are front line health care workers that provide valuable services in hospitals, health care centres, long-term care and home care. They are dietary, laundry and housekeeping aides, x-ray and lab technicians, Licensed Practical Nurses, maintenance and cleaners, clerical workers, special care aides and home care aides.

Our members are the admitting clerks that take patients' information when they arrive at a hospital. They are the Licensed Practical Nurses that check patients' pulses and vital signs. Our members are the ones who change bedsheets and bedpans, keep the floors clean and free of germs, the ones who prepare the food and help patients eat and take blood tests and x-rays so that doctors have the information needed to diagnose health problems.

As CUPE members we are proud of the work we do. Without our members, the health care system could not function.

We are presenting this brief to outline our views on how the health care system in our province could be improved. As health care workers, we want to see changes that will ensure that our families and members of our communities receive timely and high quality services. Everyone should have access to health care services regardless of ability to pay or where you live. Unfortunately this understanding of medicare is constantly under attack.

That is why we need to take bold steps now to protect our health care system.

II. Challenges Facing Health Care

We applaud the government for the establishment of the Commission on Medicare. It is obvious that our health care system is facing many pressures that must be addressed before small fissures cause the whole system to crack. We will identify what we consider to be some of the most critical challenges facing our health care system today. There will, undoubtedly, be other challenges identified by different stakeholders.

The most significant challenges facing our health care system that we have identified are:

- changing demographics in the province
- stable funding and the effective use of financial resources
- more effective delivery of health care services
- the creation healthy workplaces and retention of health care workers
- democratic governance and community involvement in our health care districts

1. Changing Demographics

The changing demographics of the Saskatchewan population will have a tremendous impact on the nature of health care services that will be required and how services should be delivered in the future. The most significant demographic changes include an aging population, a declining rural population and the out-migration of youth, changing family structures, an increase in disabilities and an increasing aboriginal population.

An Aging Population

There a number of factors that should be considered with respect to an aging population. In Saskatchewan, as across the country, we will see a higher proportion of seniors as the baby boomers continue to age over the next two decades. In our province, however, the aging population is of greater concern in rural Saskatchewan where we also experience an out-migration of youth to the cities or other provinces. This has tremendous implications for health care delivery in rural areas where traditionally there has been family or other social networks present to provide informal care to seniors and ill family members. Instead there will be greater demands on our health care system to provide the services that allow rural seniors to maintain independence and a healthy life.

It is also important to note that the health care workforce is also aging. The challenge for our province is to develop a comprehensive human resources plan to provide retraining and training opportunities for current and new health care workers.

Declining rural population

We can also expect that the rural population will continue to decline in the province as the economic crisis in agriculture forces more farmers off the land. Between 1976 and 1996 the rural population declined from 409,995 to 363,059. In 1976, 44.5% of the province's population was rural and by 1996 only 36.7% was rural. Although Saskatchewan is still viewed by many

as being primarily an agricultural province, just over one-third of the population lived in rural areas in 1996.

Table 1
Saskatchewan Urban and Rural Population Trends, 1976-1996

Year	Total Pop	Urban	% Urban	Rural	% Rural
1976	921,325	511,330	55.5	409,995	44.5
1986	1,009,615	620,195	61.4	389,420	38.6
1996	990,237	627,178	63.3	363,059	36.7

Source: Statistics Canada, Census of Canada.

The majority of the decline in the rural population, however, was the result of people leaving farms. When we examine the statistics for the farm and non-farm population in rural Saskatchewan, we see that the non-farm population has been stable in the last 20 years increasing from 217,425 in 1976 to 222,714 in 1996, or an increase of 2.4%. The farm population decreased by 27% in that same period. So although the overall urban/rural split is increasing, the population base in the non-farm areas of rural Saskatchewan is stable and will continue to require access to health care services.

Table 2
Saskatchewan Rural Population Trends, 1976-1996

Year	Total Rural	Farm	Non-Farm
1976	409,995	192,570	217,425
1986	389,420	161,500	227,920

1996	363,059	140,345	222,714
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Source: *Statistics Canada, Census of Canada*

Changing nature of families

The changing nature of families must also be considered in the development of health care policy. As pointed out by Janet E. Fast and Norah C. Keating in a Discussion Paper for the Canadian Policy Research Networks, we have seen tremendous changes in the nature and role of families in the past three decades¹. A drop in the rate of childbirth and a sharp increase in divorce and remarriage rates have resulted in smaller, less stable and more complex family environments. With women's increased participation in the labour force and the trend for seniors to live longer, there are new pressures and responsibilities being placed on families.

Even the most contemporary of policies still are based on assumptions of homogeneity among families and clear lines of family obligation. When the reality is quite different, there is great potential for isolation, lack of resources and lack of support for those in need. Alternatively, when individuals are forced to assume responsibility for caring for those toward whom they feel little if any obligation, the potential for strained family relationships and even abuse increases. That is, policies can fail to achieve their goals, or even exacerbate the very situation they were intended to correct simply because they are based on outdated notions of family structure and relationships².

In the development of new models for health care, policy makers must take into consideration the changing nature of families and ensure that changes to health services do not negatively impact on families' caregiving

¹ Janet E. Fast and Norah C. Keating, "Family Caregiving and Consequences for Carers: Toward a Policy Research Agenda," CPRN Discussion Paper No. F/10, January 2000, pp.5-7.

² *ibid.*, p.7.

capacity. Likewise, workplace policies and hours of work must take into account the changing demands being placed on workers and their families.

Increase in disabilities

Fast and Keating also discuss the future increase in demands on caregivers as the number of people with disabilities increases. Population trends in aging, an increase in new illnesses and disease, advances in medical science and increased chances of survival after serious injury or illness has meant that our society is seeing higher numbers of people with disabilities than before. In 1991 there were four million Canadians, or 15 percent of the population, living with some sort of disability. Those numbers are expected to increase³.

Family members are increasingly expected to care for ill or disabled family members with complex medical conditions. Often the individuals do not have the medical knowledge or emotional capacity to fulfill these needs. A redesign of our health care system has to take into consideration the increase in disabilities, the capacity of family members to provide care and the role of publicly funded home care to provide needed support.

An increasing aboriginal population

The ethnocultural make up of Saskatchewan is rapidly changing. The Federation of Saskatchewan Indian Nations has projected that by the year 2015, one-fifth of the province's population will be of aboriginal origin. In

1995, 13% of Saskatchewan's population was aboriginal and 87% was non-aboriginal.⁴ The shift in population makeup is the result of a declining non-aboriginal birthrate and an increasing aboriginal birthrate.

The changing nature of the Saskatchewan population poses several challenges for our health system. We need to ensure that our health system is culturally sensitive to the needs of aboriginal people, we need to address health issues that are specific to aboriginal people and we need to ensure that we have a more representative workforce.

2. Health care funding

Although all provincial governments have been raising concerns about the costs of our health care system, all evidence proves that our publicly-administered health care system is more efficient and cost-effective than the private health care system in the United States. Drs. Steffie Woolhandler and David Himmelstein from The Center for National Health Program Studies at Harvard Medical School have thoroughly detailed how the Canadian health care system is indisputably less expensive and bureaucratic than the U.S. system⁵. They point out that Canada spends about 9% of GNP on health care compared to 14% for the U.S. One of the biggest differences is in administrative costs: in 1995 the U.S. spent \$995 per capita on health care bureaucracy compared to \$248 per capita in Canada⁶.

³ *ibid.*, pp.8-9.

⁴ Federation of Saskatchewan Indian Nations, *Saskatchewan and Aboriginal Peoples in the 21st Century*, 1997.

⁵ Drs.Steffie Woolhandler and David U. Himmelstein, *For Our Patients, Not for Profits: A Call for Action*, The Center for National Health Program Studies, Harvard Medical School, Cambridge,1998.

⁶ *ibid.*, pp. 116-118.

That cost difference will likely widen even more as the U.S. system is currently going through dramatic cost increases in health insurance premiums. Aetna US Healthcare, one of the largest insurance companies in the United States, is expecting annual premium increases of between 11 and 13 percent this year and next. A state worker in California with family coverage in an HMO through Aetna will pay \$52.40 a month out of pocket next year compared to \$12.46 this year⁷.

Despite the obvious advantages of a public system, the calls for a two-tiered system and for increased private involvement in health care continue to emerge from the platforms of Reform and conservative politicians. The lack of federal government commitment has opened the door for the privatization pushers who are using the crisis caused by underfunding to their advantage. The federal government's financial support to health care has dropped to a scant 13% of health spending. First and foremost, our health care system needs an increase in federal funding to the historical levels of 50/50 cost sharing.

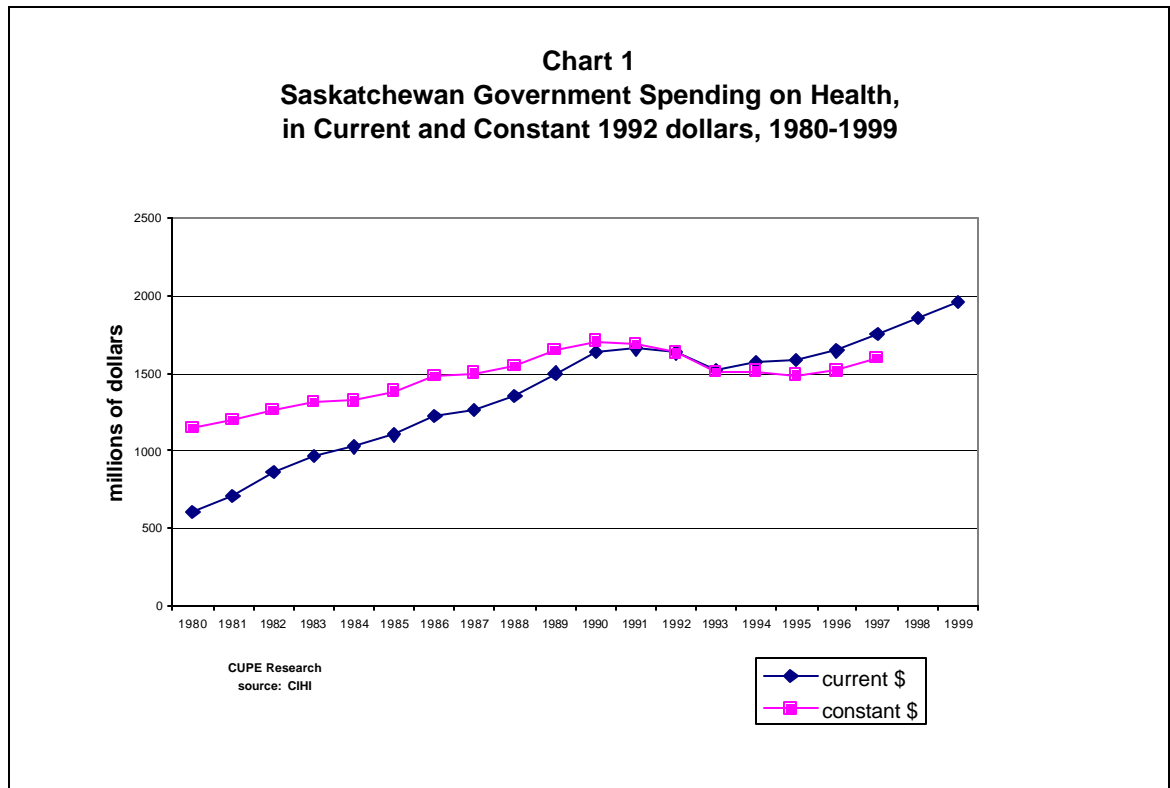
How are our health dollars spent?

Secondly, we believe that the provincial government needs to present its statistics on health care spending in a different context. While it is true that provincial spending on health care has continually increased over the last two decades, it is not accurate to say that spending is out of control and will consume the majority of the provincial budget if not contained. From 1980 to 1990, provincial government spending on health care increased significantly. In current dollars, health care spending increased from \$500

⁷ Bernard J. Wolfson, "Santa Ana, Calif.-Based Health System Warns of Higher Medical Premiums," *Knight-Ridder Tribune*, August 4, 2000.

million in 1980 to \$1.7 billion in 1990. The budget cuts in the early 1990s reversed that upwards trend and then spending on health gradually increased again in the mid to late 1990s to close to \$2 billion.

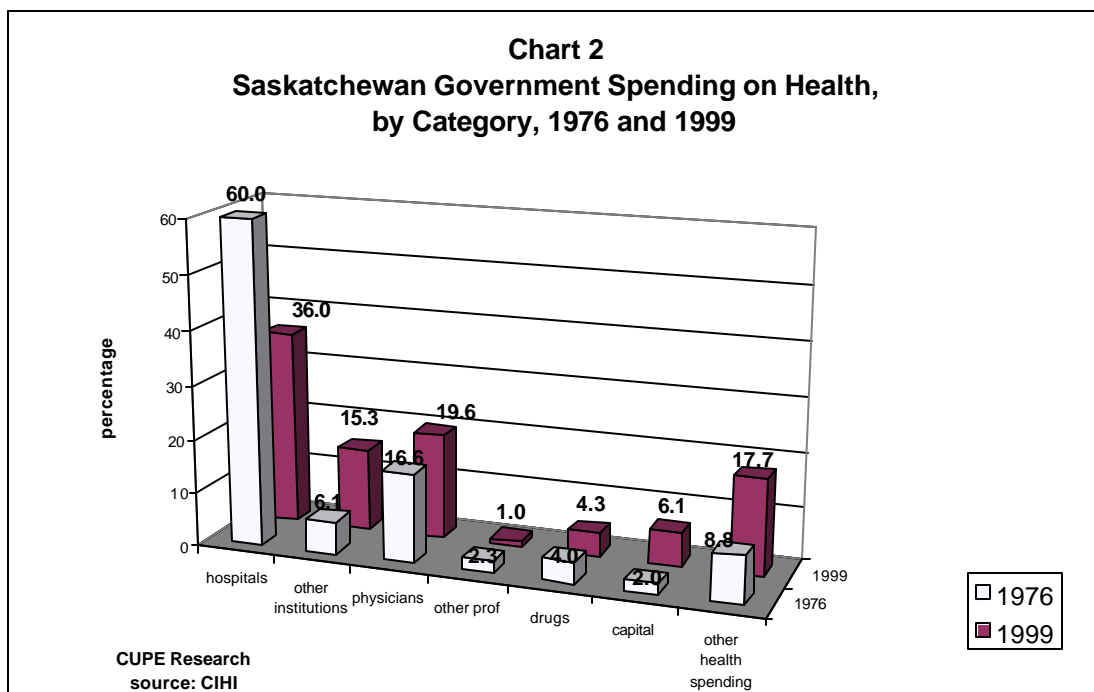
Examining health care spending in constant dollars, however, reveals that government spending has remained somewhat flat since 1993 and that 1997 spending in constant dollars was below 1989 levels (see Chart 1).



The biggest challenge is to develop consistent and clear policies on how and where health dollars are spent. Chart 2 compares Saskatchewan government spending on health care by category in 1976 and 1999. The most dramatic change has been the drop in spending on hospitals. In 1976 hospitals consumed 60% of total government spending on health but by

1999 hospitals only accounted for 36% of health spending. The proportion of health spending on physicians, however, increased from 16.6% in 1976 to 19.6% in 1999⁸. Provincial government spending on physicians rose most dramatically between 1990 and 1999 from 15.2% to 19.6% of health expenditures.

Although the wellness model was expected to focus more on community-based care and the promotion of good health, government spending on physicians has increased rather than decreased. We consider physicians to be the key driver behind health care costs. The provincial government must take measures to ensure that physicians are making appropriate billings to the health insurance plan that fall within acceptable clinical guidelines.



⁸ Canadian Institute for Health Information, *National Health Expenditure Trends, 1975-1999*, Ottawa, 1999, p.368.

Increase in private health spending

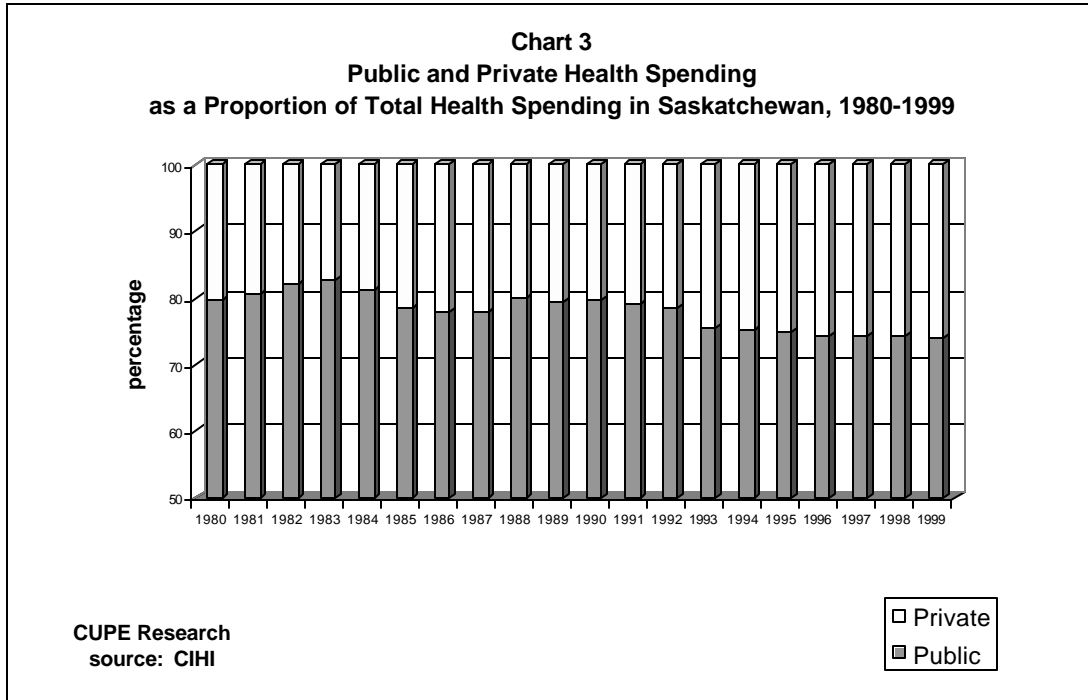
In the past decade we have seen an increase in the amount of health spending that is private. As provincial governments cut health budgets and deinsure health services, individuals were expected to pick up a greater share of the costs of health care. Some people are fortunate to have workplace extended health care plans that pay for some of those health services that the government no longer funds. Others are not so fortunate and have to pay for these additional services out of their pocket.

In 1992 the average Saskatchewan family paid \$864 out-of-pocket for health care services. By 1996 that amount had increased by 25.2% to \$1,082⁹. This was the four-year period when the majority of provincial government cuts to health care took place, including the major changes to the prescription drug plan.

In 1983, only 17.2% of health expenditures in the province were private but 1999 private spending will make up 25.9% of all health spending¹⁰. In the same period public spending on health as a percentage of all health spending dropped from 82.8% in 1983 to 74.1% in 1999.

⁹ Statistics Canada, *Household Expenditures*, cat. 62-555-XPB.

¹⁰ Canadian Institute for Health Information, *National Health Expenditure Trends, 1975-1999*, p.107.



3. Effective delivery of health care services

Health care reform in the early 1990s had many well-intentioned objectives. The new wellness model was expected to coordinate health care services between acute, long-term and home care sectors, place less emphasis on institutional care and promote more community-based care. The delivery of health services would be more streamlined and patients would receive the appropriate care in the most appropriate setting.

Health care reform, however, did not deliver all that it promised. As part of the wellness model's shift from institutional to community-based care, 52 hospitals were closed or converted to community health centers by the

provincial government. The delivery of home care fell under the responsibility of health districts so that greater coordination could take place between the acute and home care sectors. While this represents a very positive change, today we have health districts coordinating home care but the levels and kinds of service vary significantly across the health districts

The wellness model was supposed to be a new model for the delivery of health services. Yet physicians remain the entry-point to the health system and their remuneration has increased to close to one-fifth of government spending on health. Our union believes there is a vast underutilization of the skills of health care workers that needs to be tapped. Our health system remains hierarchical with physicians being the one profession that controls access to health services and is most responsible for driving the costs of these services. Further in our brief we will outline our vision for the creation of multi-disciplinary teams in health care.

4. The Creation of Healthy Workplaces

In our view, an important challenge for our health system -- that often is overlooked until a crisis is reached -- is the creation of healthy workplaces. A healthy workplace is important not only for the health of health care workers but also for the users of our health system because healthy workers provide better quality service. A healthy workplace is also important for the retention of health care workers -- an issue that has reached crisis proportions recently.

Our union is currently conducting a workload survey of our members who work in health care. We do not have the results of that survey completed but

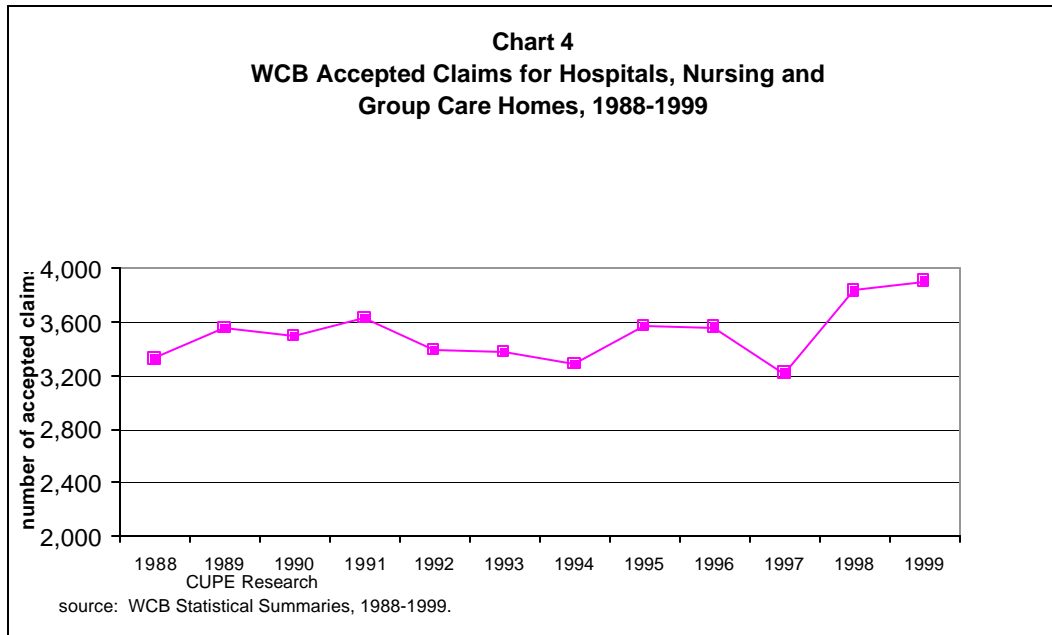
we have consistently heard from our members that their workload has increased to unbearable levels. There are a number of factors contributing to increased workload. Most significantly is the reduction in workers from the health care system. The funding cuts in the mid-1990s resulted in layoffs and the reduction of hours assigned to many positions. Secondly, with the cuts in funding to Level I and II nursing homes and the early discharge policies of hospitals, health care workers are caring for patients that have higher care needs. There has been no comparable improvement in staff/patient or staff/resident ratios to cope with higher patient acuity.

Injury Rates High

The impact of workload or the generally unhealthy working conditions in the health care sector can be seen in the injury rates of workers in this sector. *Since 1993 (with the exception of the one year of 1997), health care has been the industry with the highest number of workplace injuries in the province.* It is important to note that the data we use only refers to injuries that are reported to the Workers Compensation Board. This does not include injuries that are not reported or statistics on the number of health care workers on short-term or long-term disability.

Prior to 1993 industries such as the Building, Construction and Trades and Trucking had a higher number of injury claims with the Workers Compensation Board. In 1988 health care injury claims represented 9.3% of total claims with WCB but had grown to 12.4% of total claims in 1999.¹¹ The continual high level of injuries in health care is indicative of the impact of understaffing and high workloads.

¹¹ Saskatchewan WCB, Statistical Summary, Claims Reported, 1999 and 1988.



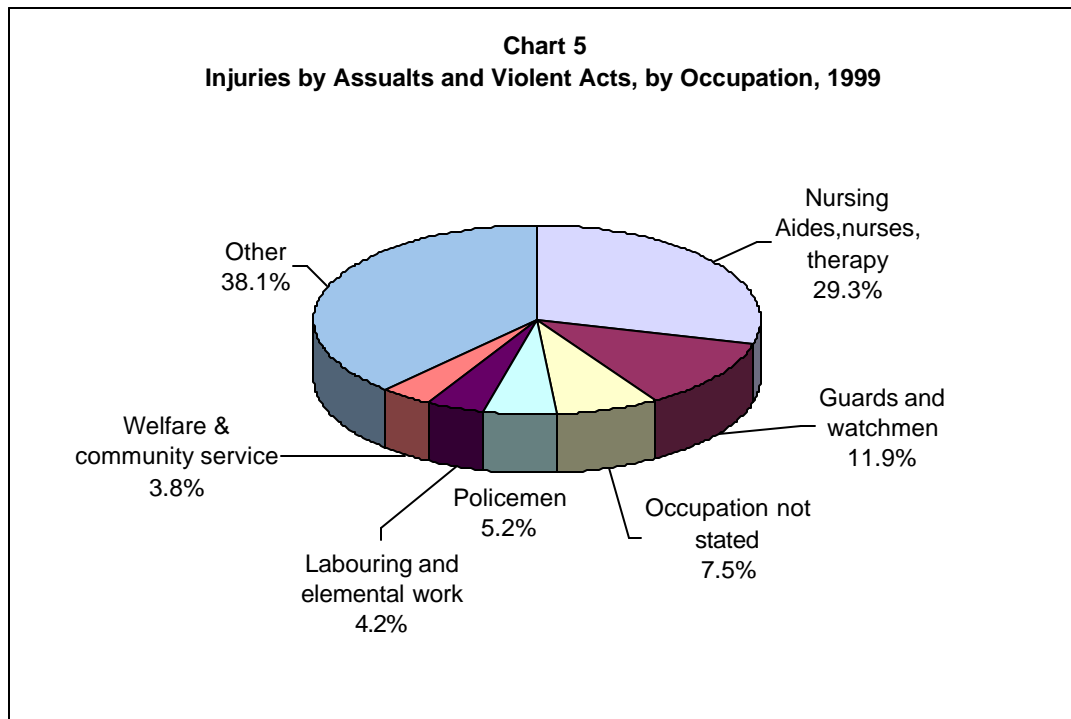
Injuries as the result of violence

Health care workers also incur a high number of injuries as the result of assaults or violent acts (see Table 6). Nursing Aides and Orderlies – many of whom would be our members – filed 70 claims with the Workers Compensation Board in 1999 for injuries resulting from assaults or violent acts. Guards and watchmen had the second highest number of assaults with 57 claims, followed by Graduate Nurses with 40 such incidents. Policemen and detective filed 25 claims for injuries from violence.

The combined occupations of Nursing Aides, Orderlies, Graduate Nurses, Nursing Assistants and Therapy accounted for close to 30% of all injuries resulting from violence filed with the WCB in 1999. Again it is worth emphasizing that these statistics reflect only those who filed claims with

WCB. The incidence of violence in the workplace could indeed be much higher.

It is not surprising that there are high levels of assault in health care workplaces. The combination of understaffing, heavy workloads and patients with higher levels of acuity has created a stressful and volatile work environment. It is ironic that the health care institutions that are supposed to cure patients are the same places that are injuring health care workers.



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Source: Saskatchewan WCB Statistical Summary, 1999.

5. Democratic governance and community involvement

Another key challenge for our health system is to ensure true community involvement and the democratic governance and accountability of our health districts. Health districts are responsible for close to \$2 billion annually. It is important that these health care funds are spent wisely and in the best interests of the citizens of this province.

There are a number of shortcomings in the current model of governance for our health districts:

- Health district boards are only partially-elected. The Minister of Health appoints one-third of the members of health district boards;
- Most health district boards have adopted the Carver model of governance that concentrates power into the hands of CEO's;
- *The Health Districts Act* outlines the responsibilities of district health boards but not of CEOs. *The Education Act*, on the other hand, details the duties and responsibilities of school division boards, Directors of Education (section 109) and Secretary-Treasurers or Superintendents (sec 110);
- The provincial government fully funds the health districts and provides final approval of health budgets. The majority of health districts incurred deficits in the past year in order to maintain services but then were required by the Minister of Health to further reduce their budgets. We question whether the capitation model for funding health districts is working. There needs to be a review of the current method of funding districts to ensure that it meets the health care service needs of Saskatchewan citizens.

III. Our Vision for Health Care

Canadians have believed that our health care system is one of the best in the world and the one public service that sets us apart from our neighbours to the south. This year, however, a World Health Organization ranking of countries' overall health systems placed Canada in 30th place¹². Most politicians were surprised by this ranking but we should not be that surprised. Our health care system has been under tremendous strain in the last decade. The federal government has reneged on its commitment to health care by having drastically cut its contributions to health care costs. The funding crisis, coupled with waiting lists and problems in recruiting and retaining certain classifications of health care workers, has raised concerns about how well our health care system is doing.

Yet most of the headlines about a health care system in crisis focus on acute care. The broader issues about how health care is structured, how services are delivered or what kinds of services are provided have received little attention. Even though one of the objectives of health reform in the early 1990s was to improve coordination of health planning and delivery of services, we still have a system that is fragmented (as in the case of ambulance services and affiliates) and dominated by top-down administrative structures.

We would like to outline what our vision for a renewed health care system would look like. We believe that the model we propose would

¹² The World Health Organization, *The World Health Report 2000*, Annex Table 1, pp. 152-155.

improve access to health care and the quality of services delivered, especially to Saskatchewan residents who live outside of Regina and Saskatoon.

In brief, our vision for a renewed health care system would have the following elements:

- a system that recognizes the socio-economic factors that influence health status and works collaboratively with communities and other government agencies to improve the health of Saskatchewan residents;
- the creation of community health centres that use a multi-disciplinary approach to health care;
- a strong system of regional hospitals that provide a full range of diagnostic and surgical services and an effective emergency response capacity;
- the integration of institutional and community care services that ensures that patients receive the appropriate care at the appropriate time;
- an expansion of the health care services covered and delivered within the public sector;
- fully-elected, democratic health boards that respond to and involve their communities in health planning.

1. Rethinking Health care:

Social and Economic Factors that Affect Health

Our health care system has changed significantly since the introduction of medicare. Today health care includes a broader range of health services -- such as home care, chiropractic and other alternative therapies, -- and an increased use of medical technologies and prescription drugs. Yet medicare only covers the costs of physicians and hospitals. When provincial health insurance plans were first being introduced in Canada, health care services consisted primarily of physicians and hospitals. Prior to medicare, a major illness or injury could leave people financially bankrupt or in lifetime debt¹³. Publicly funded health insurance attempted to address this by covering the two most essential elements of health services at the time.

Today all Canadians are guaranteed access to physician or hospital services regardless of their income. Yet this alone does not guarantee the attainment of good health for all Canadian citizens. Nor does it take into account the other kinds of health services not covered by medicare that are essential to good health. For example, while Canadians from all income levels are equally likely to have visited their family doctor in the past year, only about 40% of low income Canadians saw their dentist in the previous year. In contrast, 80% of high income Canadians visited a dentist¹⁴.

Health care policy and planning must recognize the various social and economic factors that affect people's health. There is ample evidence that poverty, poor housing, low education levels and environmental conditions influence people's health. Michael Rachlis and Carol Kushner argue in their book, *Strong Medicine*, that the increase in life expectancy of Canadians in

¹³ See Helen Heeney, *Life Before Medicare: Canadian Experiences*, Ontario Coalition of Senior Citizens Organizations, 1995.

¹⁴ Canadian Institute for Health Information, *Health Care in Canada: A First Annual Report*, 2000. www.cihi.ca.

the first half of the 20th century had more to do with better housing, clean water, sewage treatment and safe food than because of doctors and medicines.¹⁵

Often good social and economic policies and programs can improve health status more so than traditional health care services. Rachlis and Kushner describe the social and economic policies implemented by the French government in the early 1980s to reduce the number of premature births in that country:

[T]he French government began paying women to attend prenatal sessions and provided them with food supplements during pregnancy. Maternal leave before delivery was expanded to nine weeks. Pregnant women in Paris were given thirty minutes off at the beginning and end of each working day so they wouldn't have to cope with the most hectic part of rush-hour traffic. The results of these policies were impressive – rates of prematurity fell by 30 percent and the rate of very-low-birthweight babies dropped by half!¹⁶

The approach taken by France to reduce the number of premature births is a clear example of how broader social programs are crucial when addressing many health problems. That government combined education, food supplements and workplace policies to tackle the problem of premature births.

In 1994 the Federal, Provincial and Territorial Advisory Committee on Population Health released a report that acknowledged the socio-economic

¹⁵ Michael Rachlis, M.D. and Carol Kushner, *Strong Medicine*, 1992, pp. 9-11.

¹⁶ *ibid.*, page 14.

factors that influenced health. The strategy adopted by the Federal, Provincial and Territorial Ministers of Health included addressing:

- *living and working conditions* (income, employment, social status, social support networks, education and social factors in the workplace);
- *physical environment* (physical factors in the workplace, housing conditions, as well as other aspects of the natural and human-built environment);
- *personal health practices, individual capacity, and coping skills* (behaviours that enhance or create risks to health); and,
- *health services* (services to promote, protect, maintain and restore good health).¹⁷

Despite this broad recognition by all levels of government of the socio-economic influences on health, most health care reform in the last decade has focused on the health care system itself. Governments across Canada closed hospitals, cut back health care staff (particularly in acute care) and delisted many health services that used to be covered under provincial health insurance plans.

While governments have focused on restructuring the health care system, we continue to witness a growing gap between rich and poor, a critical decline in affordable housing, increased child poverty, and high levels of un- and under-employment in this country. There is strong evidence that children growing up in poor families tend to have lower health status, are at greater risk for premature birth and low birthweight, have increased risks of injury and stress, and have difficulty forming secure and trusting

relationships early in life¹⁸. Research has also shown that people with meaningful, well-paid work and who have a degree of control over their working conditions are generally healthier than workers in stressful, low paid jobs.¹⁹

This review of our health care system has to examine the broader social and economic factors that influence health. This may require alternative funding methods or the development of new programs from the Department of Health. The assessment of community health needs and the planning of social and health programs should not be the exclusive role of health districts but part of broader provincial health strategies. It is also important that the provincial government and health districts use a gender perspective when conducting health needs assessments and developing health programs. Women are often the main caregivers and have different health needs that are often missed when health districts plan health services.

Accepting the social and economic factors that influence health means that other government departments must be involved in a new provincial health strategy. All government agencies must work together cooperatively to create healthy public policies that improve health status of Saskatchewan residents. A few examples of such policies would be:

- an increase in the minimum wage
- pay equity legislation that covers both the public and private sector
- an expansion of social housing

¹⁷ Monica Townson, *Health and Wealth: How Social and Economic Factors Affect our Well Being*, p.9.

¹⁸ Canadian Public Health Association, *Health Impacts of Social and Economic Conditions: Implications for Public Policy*, Ottawa, March 1997, pp.12-13.

¹⁹ *ibid.*, pp 19-22.

- changes to the *Labour Standards Act* that provide for increased vacation time, paid family leave days and reduced working hours
- the creation of a Workers Health Centre that focuses on work-related illness and disease
- increased funding to day cares and early childhood education
- improved staffing to reduce workload in health facilities (injury rates in the health care sector are the highest of occupational sectors)
- reinstatement of the school-based children's dental program

These are but a few ideas for social and economic policies and programs that we believe will contribute to improved health of Saskatchewan residents.

2. A new health care delivery model

Our vision for renewed health care would revamp the current structures for delivering health services. The new health care delivery model would establish more effective regional lines for health districts to ensure that all health districts are able to deliver a broad range of health services to their population. We promote the strengthening of regional hospitals that provide a comprehensive range of services and the creation of multi-disciplinary community health centers.

More effective regionalization

The creation of 30 health care districts plus two northern districts in the early 1990s was a tumultuous period in our province. The regionalization of health care was politically sensitive for communities and stressful for health care workers who weathered tremendous change.

Because of the political sensitivity of regionalization, the provincial government did not impose the geographic lines of the health districts but allowed communities to voluntarily create the boundaries of the new districts. The Canadian Union of Public Employees believes that the Medicare Commission needs to review the current system of regional health districts as part of its overall review of health care in the province. The question that needs to be asked is: does the current system of regional health districts allow for the most effective and highest quality delivery of health services to Saskatchewan residents?

The size of geographical territory and the number of residents covered varies significantly by health district. For example, the number of residents within the health districts ranges from 11,000 to 235,000.²⁰ The average population within the province's health districts is 31,000 – the lowest of any province. In our neighbouring provinces, the average population in a health district is 114,000 in Manitoba and 164,000 in Alberta.²¹ In fact, if one excluded Regina, Saskatoon and the northern health districts, the average population in Saskatchewan health districts would be less than 20,000.

²⁰ *1998 Saskatchewan Health Employer Survey*, Saskatchewan Health, 1999, appendix 12.

²¹ "Regionalization in Canada," HEALNet Regionalization research Centre, May 1999, p.4.

The average population in the districts may become even smaller if trends in rural depopulation continue. Between 1976 and 1996 the urban population increased by 22.7% and the rural population declined by 11.4%.²²

The broad range of territory and population between health districts has led to a number of inefficiencies. Smaller health districts are unable to provide the same range of services that other larger districts provide. This is largely because smaller districts have smaller budgets because they are funded on the basis of population within the district. However, the same administrative structures may exist for districts of different size, resulting in inefficiencies and higher administrative costs.

In the most recent Saskatchewan Health Employer Survey (1998), the number of health service managers per 1,000 population varies significantly between health districts. The largest health district in the province (Saskatoon) reported 203.1 FTE health service managers, or 0.9 FTEs for every 1,000 people. Regina, the second largest health district, only reported 66.7 FTEs, or 0.3 FTEs per 1,000 population²³.

Many smaller health districts reported a higher density of managers. Swift Current Health District, with a population of 20,400, had the highest level of managers at 1.5 FTEs per 1,000 population. Health districts with similar size of population as Swift Current reported half the level of managers. Touchwood Qu'Appelle had 0.7 FTEs per 1,000 population, North East had 0.8 FTEs per 1,000 population and Southwest had 0.5 FTEs per 1,000 population. Some of the variance may be the result of different ways of reporting or categorizing staff. Nonetheless the statistics reveal huge differences in administrative levels between health districts.

²² Statistics Canada, Census data.

The range of health services provided by the districts also varies. This is not surprising as smaller districts have smaller budgets and less ability to fund a wide range of services. For example, although health promotion and preventive health are supposed to be key elements of the restructured health system, many health districts do not employ a health educator. According to the 1998 Health Employer Survey, twelve of the thirty-two health districts did not employ a health educator²⁴.

Another area of concern is that many residents outside of Regina and Saskatoon do not have access to a full range of diagnostic services. In each new regional health district, diagnostic services should be expanded so that residents have timely access to these services. This will not only reduce pressures on the two largest health districts, but it will reduce the personal expenses of residents who no longer have to travel to receive needed services.

A restructuring of health districts that provided for fewer but larger districts would allow for a more efficient distribution of resources and delivery of services. Each health district would be expected to provide the same range of services to ensure that all residents in the province had access to the similar kinds of service. Once residents are able to access a broader range of services in their own health district, they would be less likely to travel to Regina and Saskatoon for health services other than certain specialist and surgical services. This should alleviate pressures on the two major urban health districts.

²³ 1998 Saskatchewan Health Employer Survey, appendix 12.

²⁴ *ibid.*

Enhanced regional hospitals

The revitalized health district system would also include the enhancement of regional hospitals. Regional hospitals would provide a full range of diagnostic and surgical services to the population in their region. For citizens outside of Regina and Saskatoon, this would provide closer and more timely access to these services. It would also help alleviate the pressures on the two main urban health districts' surgical load.

According to the Task Team on Surgical Waiting Lists, seventy percent of all surgery in the province is performed in Saskatoon and Regina.²⁵ The report identified Prince Albert and Moose Jaw as two other possible health districts that could provide more "secondary level surgical care." The provincial government would have to address the high capital equipment needs of health districts before this would be possible.

Emergency Services

Connected to the regional hospitals would be a new provincial publicly delivered emergency or ambulance service. Currently emergency services in the province are provided in a fragmented way and by a mix of private and public providers. There is little coordination between the various providers of emergency services between districts.

We recommend a complete overhaul of emergency services and the creation of a provincially-funded and coordinated system. There is a need

for levels of funding and service to be consistent across districts in order to ensure equitable access for all Saskatchewan residents. The provincial government should develop provincial standards for emergency services, including provincial standards and a program for the training of all emergency medical personnel.

Creation of Community Health Centres

Key to the new health care system would be the establishment of community health centres similar to community clinics or the Quebec CLSC (Centre local services communautaire). Community health centres would become the entry point for residents accessing the health care system. The centres would provide a broad range of health services and would be staffed by a multi-disciplinary team of health care providers.

The Community Health Centres would provide or coordinate a full range of health services such as:

- 24-hour primary care and emergency nursing
- co-ordinated home care services (nursing, personal care, home and yard maintenance services)
- respite and adult day care services

²⁵ Dr. J. Stewart, McMillan, *Report of the Task Team on Surgical Waiting Lists*, March 1999, p.2.

- visiting health professionals such as physicians, specialists, chiropractors, optometrists, physiotherapists, occupational therapists, social workers, public health nurses
- health education programs
- counselling and mental health services
- dental care

The multidisciplinary team approach to health care would fit into the conception that health status is influenced by various social and economic factors. The Community Health Centres' approach to health would be a comprehensive birth to death system that focuses on prevention, health promotion, social support and the treatment of illness.

Community Health Centres would be linked to the acute care and emergency services of regional hospitals. Twenty-four hour nursing would ensure immediate response to emergency situations in the community with the possibility of ambulance transport to the nearest regional hospital. Nurse practitioners could play a stronger role in diagnosis and treatment and consult with physicians on more serious health problems.

In Quebec, the CLSCs are the exclusive providers of home care, public health and certain specialized services for individuals, such as programs for children's mental health. Most CLSCs have extended hours (evenings and some weekends) providing an alternative to private walk-in clinics and emergency departments.

In Saskatchewan we have the cooperative model of the community health clinics. The clinics employ a broad range of health providers including

salaried physicians, nurses, nutritionists, counsellors, optometrists, physiotherapists and pharmacists.

Our union strongly supports the model of interdisciplinary teams working together to provide health services. The current model in most health facilities is a top-down structure that does not fully acknowledge or use the skills of all health care workers. We believe that there should be an expanded role for all health care workers in the new health care system.

The Community Health Centres would be modeled on a combination of the CLSCs and the community clinics' multi-disciplinary approach to health. The community health centres would treat more than just the immediate illness and instead provide a wide range of health and social services that enable people to become and remain healthy.

Non-urgent use of emergency wards

Community health centres could also address the problem of non-urgent use of emergency wards. Because health centres would provide a multi-disciplinary approach to health and provide 24-hour nursing, the health care staff would be able to deal with a wide-range of health and social problems affecting their clients.

A recent study published in the Canadian Medical Association Journal found that just 24 people accounted for 616 visits to the St. Paul's Hospital emergency department in Vancouver in a one year period²⁶. The study found that homeless people, substance abusers, those with mental or social

²⁶ "Frequent Flyers' abuse St.Paul's ER services," The Vancouver Sun, April 4, 2000, p.A1.

problems and others with chronic or complex health problems such as HIV/AIDS represent the heaviest users of the emergency department. The study identified and tracked 24 'frequent flyers' (as they called the frequent users of emergency) and a multidisciplinary team developed a care program for each patient to use alternative resources and agencies outside the hospital. The total number of visits by the study group declined from 616 to 175 in the second year. Although the study reduced waiting times in emergency, one of the co-authors stated that the real goal of the program was to provide "effective, efficient, appropriate care."

The Vancouver example illustrates the need to provide a broad range of health and social services. Many of the demands placed on our health system require a variety of agency responses and program supports.

The limited hours of most doctors' clinics also creates additional pressures on emergency wards. People faced with a health problem after regular clinic hours may not be able to determine if they require medical treatment. They normally have the choice of ignoring the potentially dangerous situation or going to an emergency ward for what may be a non-urgent medical condition. We would like to see community health centres with extended hours to address non-urgent medical needs.

Telephone Health Advice Line

Another example of how to provide alternative medical services is a telephone advice system called Info-Sante, an innovative service developed by Quebec's CLSCs. Info-Sante uses registered nurses from the CLSCs to

provide telephone advice on health matters to residents from 8 a.m. until midnight.

An evaluation of the phone system found that about 90 percent of users found the line useful and said the phone assistance was all they needed to deal with their health problem. Ninety percent also claimed they could handle the problem themselves if it recurred. Info-Sante also prevented people from having to go to an emergency department. Seventy-five percent of users said they would have visited their doctor or gone to emergency if they had not been able to call Info-Sante²⁷.

Although not as extensive a program, the Regina Community Clinic provides telephone advice by doctors on-call after regular office hours. According to the clinic's administration, the clinic has not evaluated this service but believe that this service may have averted unnecessary trips to the emergency department.

The provincial government should conduct a pilot project for a health advice phone line to determine its impact on non-urgent emergency room use.

Alternatives to fee-for-service

CUPE has long argued for the elimination of the fee-for-service method of compensating physicians. Fee-for-service encourages an overuse of the health system as doctors are the ones who control the number of tests, prescriptions and follow-up visits of the patient. Under the current system, it is easy for a doctor to increase his or her income by ordering

²⁷ *Blended Care*, Discussion Paper by the BC Union of Nurses, Hospital Employees Union and BCGSEU, October 1999, pages 28-29.

additional or unnecessary tests and requesting follow-up examinations that may not be necessary.

A study of community clinics in the early 1980s by the Saskatchewan Department of Health found that community clinic patients had fewer days in hospital and lower prescription drug costs than similar patients treated by private practice doctors.²⁸

Saskatoon community clinic patients had 31% fewer days of inpatient stay, 24% fewer separations (stays in hospital) and an average length of stay that was 9% shorter than that of private-practice patients. The only services for community clinic patients that were higher than those of private practice patients were for GP and specialist services. These costs may be higher because physicians spend more time with patients than doctors paid by fee-for-service. Nonetheless, the total cost of all health services covered were 13% lower for community clinic patients in Prince Albert and 17% lower for similar patients in Saskatoon.

Physicians should be paid a salary, as are other health care providers. We believe that such a change in compensation would help control rising health care costs.

Physicians should also become direct employees of the health districts and in that way become more accountable for the services they provide. It is impracticable to charge health districts with the task of evaluating and planning the delivery of health services to their populace when the gatekeepers to the health care system (physicians) are not directly

²⁸ *Community Clinic Study*, Saskatchewan Health, 1983.

accountable to the health district. We need to develop checks and balances to ensure that physician practices fall within the objectives of health reform.

3. Strategies for Long Term Care: Ensuring Appropriate Care in the Appropriate Setting

Another key aspect of a reformed health system as we envision it would be greater integration and coordination of acute, long-term and home care services. This integration will ensure that residents receive the appropriate care in the appropriate setting at the right time. Because of the demographic trends in aging, and the fact that seniors tend to have higher usage of the health care system, the provincial government needs to develop a comprehensive provincial strategy for long term care.

Home Care

A recent study on home care in British Columbia concluded that providing services to elderly patients in their home rather than in an institution saves the health system money unless the patient is unstable. The study found that the health system saves an average of \$8,000 per year for each patient cared for in the community rather than in a facility. However, when patients are unstable and move frequently from home to hospital, it is more efficient to keep them in an extended-care facility. The research revealed that costs to the health care system skyrocket each time

there is a transition from home to emergency, or from home to a nursing home.²⁹

Although the main purpose of the study appears to be to bolster the arguments for home care, we would caution any blind adherence to the idea that home care is always better and cheaper. Policy makers and health planners also need to take into consideration the other finding of the study: that home care is not a cheaper alternative if the patient is unstable. Institutional care is still a necessary component of our health care system and needs to be closely integrated with community-based care.

Furthermore, an increased reliance on home care should not be done without an appropriate assessment of the burden of informal care on the patient and family members. The underlying assumption of health planners is that patients will have the support of family members and friends to provide additional care and support in the home. More often than not, women are the ones who are burdened with the care of elderly. In 1996, 153,615 people in Saskatchewan reported having provided unpaid care to seniors.³⁰ About 60% of those who reported unpaid care to seniors were women. Women tended to provide more hours of unpaid care to seniors than men.

Research from the Saskatchewan Health Services Utilization and Research Commission revealed that 60 percent of patients who required home care did not receive any.³¹ The research also estimated that the value

²⁹ "Costs much lower if elderly patients receive home care, *Globe and Mail*, November 29, 1999, p. A3.

³⁰ 1996 Census, Statistics Canada.

³¹ "Research is skimpy on how much is saved," *Globe and Mail*, March 22, 1999, p.A9.

of unpaid caregiver time was worth \$564 and out-of-pocket expenses at \$94.

The shift in responsibility for the elderly is creating its own set of health problems for the family members who provide informal care. This past fall, a study of rural women in Saskatchewan found that half the women interviewed said their health had deteriorated since they began caring for aged or disabled family members.³² The women reported stress headaches, chronic back pain, depression and emotional and physical exhaustion as they try to fill the gaps left by home care.

The above study, funded by the Prairie Women's Health Centre of Excellence, also found that rural women were providing health services for which they felt unqualified, such as giving injections, hooking up dialysis machines, dispensing medications and lifting family members. These are the tasks that should normally be done by paid home care workers but most health districts have caps on the number of hours of home care services provided to people in their homes.

The other concern raised by the study is the fact that in rural Saskatchewan, many young people are leaving their communities leaving behind an aging populace with fewer family and social supports. There are fewer caregivers in the communities and most of them are aging themselves, making it more difficult to provide the informal care needed. Two-thirds of the caregivers in the study were between the ages of 50 and 70 and found it emotionally and physically draining to provide care for family members suffering from often complex medical conditions.

This situation must be addressed when the provincial government funds home care and as health districts plan for home care delivery. Funding levels must be adequate to ensure that home care recipients receive a full range of services and that costs are not shifted onto informal caregivers. Services like respite care and day care programs provide a needed break for the informal caregivers.

Contrary to the recent study by the Health Services Utilization and Research Commission on home care, we believe that services such as housekeeping and meal preparation, increasingly being cut back because they are not seen as "core" health services, must be increased. These services allow the elderly and the chronically ill to remain in their homes longer and provide a better quality of life for seniors. Other important services that should be covered under home care are yard work (grass cutting, snow removal) and house maintenance and repairs.

As quoted in the *Globe and Mail*, Steven Lewis, former head of HSURC, explained the importance of homemaking services:

"Not giving Mrs. Smith a homemaker is not going to kill her, but [having one] may prevent her from being in a situation where she falls and breaks a hip, or it may delay her admission to a nursing home by six months some five years down the road."³³

The provincial government needs to fund high quality levels of home care services that are consistent across health districts. In order to have close integration and cooperation between the various sectors – acute, long-

³² JoAnn Jaffe and Bonnie Blakley, *Coping as a Rural Caregiver: The Impact of Health Care Reforms on Rural Women Informal Caregivers*, Prairie Women's Health Centre of Excellence, 1999.

³³ "Research is skimpy on how much is saved," *Globe and Mail*, March 22, 1999.

term and home care – health care providers and patients need to know that the necessary level of care will be there when they need it. Without an assurance that a patient will receive necessary care levels, it becomes difficult for health providers in the acute care setting to discharge a patient.

One example of this is in a recent report on surgical waiting lists. The Task Team on Surgical Waiting Lists found that patients from outside the Regina Health District had an average surgical stay that was 1.3 days longer than patients whose home was within the Regina district. The Task Team commented that, “we understand that some of this is due to surgeons’ reluctance to discharge patients without knowing the extent of services available to the patients if they return to their home district.”³⁴

In our view, surgeons should not have to hesitate about what resources are available in other health districts. The provincial government should establish minimum standards for home care required in every health district and ensure close coordination between acute and home care services.

We also strongly believe that home care services need to be covered by our health care insurance plan. The National Forum on Health Care recommended national coverage after broad consultations across the country in the mid-1990s.

Personal Care Homes

³⁴ Report of the Task Team on Surgical Waiting Lists, p.7.

Personal Care Homes existed in this province prior to 1991 but it wasn't until 1991 that the government first regulated them by passing *The Personal Care Homes Act*. Regulations to the *Act* limited the number of beds in a personal care home to ten.

The context in which personal care homes operated changed with two government actions: in 1992 the government stopped funding Level I and II nursing homes as part of its health reform; and, in 1996 the government changed the regulations to increase the limit on the number of beds from 10 to 40. This change to the regulations meant that personal care homes were moving from being small "family" environments for the elderly to becoming large institutions.

Currently there are 239 personal care homes with a capacity of 2,204 beds in the province. Since 1996 when the limit on the number of beds was raised we have seen a dramatic increase in the number of personal care homes with more than ten beds. From 1996 to May 2000 the number of homes with more than ten beds has increased from 32 to 46, or by 43.8%. In just the last year the number of homes with more than 10 beds increased by 15% and the number of homes with ten beds or less decreased by 10.6%³⁵.

Table 3
Personal Care Homes in Saskatchewan

		Jan	May	% change	% change
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³⁵ Saskatchewan Health, *Health Renewal is Working: Progress Report*, October 1996; and information from the Community Care Branch, Saskatchewan Health.

	1996	1999	2000	1996-2000	1999-2000
Total number of personal care homes	243	256	239	- 1.6	- 6.6
Total number of personal care home beds	1,629	2,087	2,204	+ 35.3	+ 5.6
Number of homes with 10 beds or less	n/a	216	193		- 10.6
Number of homes with more than 10 beds	32	40	46	+ 43.8	+15.0

CUPE Research

Sources: Saskatchewan Health, Health Renewal is Working: Progress Report, October 1996; information from Community Care Branch, Saskatchewan Health

The growth of large personal care homes is a major concern for our union because it represents an expansion of private health services. There is obviously still a need for light care for the elderly but the government has chosen not to fund this level of care. As our population continues to grey, the need for supportive living arrangements or light levels of supportive care will continue to grow. We believe that there should be public -- or at the very least non-profit -- options available to the public.

We also have concerns about personal care homes because they operate outside the public health care system resulting in a break in the coordination of health services. What procedures are in place to ensure that residents of personal care homes are assessed and transferred to level 3 or 4 nursing homes at the appropriate time? What level of coordination exists between the health districts and the personal care homes? What protections do senior citizens have to prevent being overcharged for the services provided? What training and compensation does the employer provide to staff?

In our experience, personal care homes are creating low-wage ghettos. Private operators pay low wages to staff and charge high resident fees in order to make a profit. This was the case when Carol Krieger purchased the Pioneer Place in Weyburn in the early 1990s and laid off workers who were earning between \$9.87 and \$10.95 an hour. The former nursing home workers were told they could reapply for their jobs at minimum wage³⁶.

We are also concerned about the sale of publicly-built nursing homes to personal care home operators at bargain-basement prices. Once the government or health districts sell off public assets, it becomes difficult and costly to rebuild or expand public facilities in the future. Although health facilities do not show up on the government books as capital assets, they are considered valuable assets once they are purchased by private operators.

The government must amend the regulations to The Personal Care Home Act so that personal care homes can not have more than 10 beds. Funding for Level I and II nursing homes must be re-established.

4. Creating Healthy Workplaces

As the largest health care union in the province, we have major concerns about the working conditions in health care. As we outlined in section II of this brief, health care workers are suffering from high levels of workload and workplace injuries. It is ironic that the major cause of poor health among health care workers is the health care system itself. The Medicare

³⁶ Murray Mandryk, "NDP has itself to blame for nursing home issue," *The Leader-Post*, May 24, 1996.

Commission must take a serious consideration of how we can create healthy workplaces in our health care system.

Workload/Staffing Levels

As mentioned previously, the workload of health care workers has increased dramatically over the past decade. High workload is the result of fewer staff doing the job and patients with higher levels of care. When the provincial government changed the funding to nursing homes to cover only Level 3 and 4, there was no corresponding increase in staff levels. The increase in care levels means that staff are doing more lifting and placing greater strains on their backs.

In addition, health care employers in general have stopped replacing staff on sick leave. The impact of non-replacement creates a vicious circle: staff go on sick leave because of stress and injuries, the employer does not replace those on sick leave thus creating higher workloads and more injuries. In many long term care facilities there is only one staff person on the night shift responsible for dozens of residents.

We are appalled by the fact that many health care employers are receiving rebates from the Workers Compensation Board, despite their horrific workplace injury record. Some health care workers are being denied WCB and short-term disability, or are tossed between the two income replacement programs. In the end, the cost of injuries in health care ultimately comes back to the provincial government: the government funds the health districts who pay WCB premiums. Instead, the provincial

government should fund better staffing levels which should reduce injury rates and reduce the costs to WCB.

We urge the provincial government to establish minimum staffing ratios in health care. We believe that minimum staffing ratios will reduce stress and injury rates and improve the quality of care to patients.

Casualization of the workforce

The other impact of past restructuring has been the degradation of full-time jobs into part-time and casual jobs. Only 41% of health care workers in this province have full-time jobs while 34.5% work part-time and 24.5% work on a casual basis.³⁷ In rural Saskatchewan the numbers look even worse: only 37% of health care workers have full-time positions.

The casualization of the health care workforce has created a number of problems for both the workers and the employers. The other-than-full-time workers juggle their lives around the schedules of their employer or various employers within the district, working two or three or perhaps more part-time and casual jobs. This creates tremendous stress on workers and their families as they try to make a living and still have a life with their family.

Part-time work also has a negative impact on benefits and pensions of health care workers. Health care workers' pensions are extremely low in comparison to other public sector pensions. Part-time contributions will almost guarantee that health care workers retire in poverty. It is important to emphasize that the majority of health care workers in the province are

women who may have absences from the workforce because of childrearing responsibilities.

For employers, the high numbers of part-time and casual workers has made it increasingly difficult to schedule workers who work in several positions with several employers.

One of the goals of this health review must be to address the problem of working hours. We need to convert more of the part-time and casual positions into full-time positions so that health care workers have greater security in working hours. We also ask for the government's support for our goal to reduce annual working hours of health care workers in our bargaining unit to 1872 or a 36-hour workweek. A reduced workweek would help to create more full-time positions, help workers balance work and family commitments, reduce poverty and reduce the negative health impacts of shift work.

In British Columbia, the Hospital Employees Union achieved a 36-hour work week in the 1993 round of bargaining. The standard work week was reduced from 37.5 to 36 hours with no loss in pay. In Quebec, an agreement between CUPE and their provincial government in 1994 introduced pilot projects for a shorter work week in selected hospitals. Employees normally working 35 hours per week instead worked 32 hours in four days and received 34.5 hours of pay. This resulted in an additional 35 days off per year.

³⁷ 1998 Saskatchewan Health Employer Survey, Saskatchewan Health, 1999.

Fully utilize the skills of all health care workers

The model of a multi-disciplinary team of health workers is key to the creation of a healthy workplace. We believe that a team approach, rather than a top-down structure, creates a healthier work environment and improves the quality of care.

CUPE is pleased that the provincial government has passed legislation that enables LPNs to do tasks within their full scope of practice. We urge the government to proclaim the legislation as soon as possible.

In the past year, our union has taken a proactive position of meeting with Health District Boards across the province to urge them to fully utilize the skills of Licensed Practical Nurses (LPNs). We found that most LPNs in the province are not being used to their full scope of practice. LPNs are trained to do a broad range of tasks yet are not assigned all of those duties. Many of the LPNs who have worked in the health care system for more than 15 years or who have come from other provinces have complained that they used to do more tasks than they are now permitted to do. Our LPN Operating Room Technicians report that they are under utilized and that if they were assigned more tasks they could help address surgical waiting lists.

In the rural health districts, there are many LPNs employed as nurse aides or in other positions because there are not enough LPN positions in their district. In South Country Health District, for example, we estimated at the end of 1999 that there were 24 LPNs in that district yet only 4.9 full-time equivalent positions in the district (including the major affiliate in

Gravelbourg).³⁸ This represents a tremendous under use of skills in that health district.

The Task Team on Surgical Waiting Lists also identified the need to develop a comprehensive human resource policy to address recruitment, retention and training of health personnel. The Task Team recommended that "a mechanism be developed to study the scope of practice of health disciplines to determine if an alternative deployment of human resources would benefit the system."³⁹ We believe that there is room for greater utilization of health care professionals such as LPNs in the health care system. The employment of LPN ORTs (Operating Room Technicians) to their full scope of practice could help alleviate the back log in operating rooms.

Although we provided examples only of how LPNs should be better utilized, we would like to emphasize that all health care staff could have their skills better used. For example, home care aides in one health district reported that they do office work or paper shredding in their time between clients. They could instead spend more time with clients doing additional duties for them.

Staff Retention and Human Resource Planning

³⁸ *Brief Regarding the Utilization of Licensed Practical Nurses*, Presented to the South Country District Health Board by CUPE Local 1481, CUPE Research, October 7, 1999, p.6.

³⁹ Dr. J. Stewart McMillan, Report of the Task Team on Waiting Lists, March 1999, p.10.

In the last number of years all health districts have been plagued with shortages of certain health care classifications such as Registered Nurses, specialists and technical staff. The shortages have created tremendous demands on the health care system, leading to measures such as the extensive use of overtime and closure of operating rooms.

There has been much speculation as to what created the shortage of registered nurses and specialists from wages to working conditions to a shortage of education seats. Another possible reason for this shortage that we would like to put forward is that the massive cuts and layoffs that took place at the onset of health reform eliminated a large number of health care professionals from the system.⁴⁰ Drastic restructuring and cuts to health care pushed many health professionals such as technicians and nurses to look for job opportunities elsewhere.

We use this example to point out that restructuring cannot be done without a clear understanding of what the impact of that restructuring will be. Scarce health professionals will not want to remain in a health care system that is underfunded and understaffed. Blind cost-cutting today may have disastrous effects on our health care system in the long run. The high workload and stress in health care are two other factors contributing to staff retention problems.

Human resource planning must be done province-wide in cooperation with the health districts and health care unions. This planning must take into consideration current and future staffing levels and needs. An audit of

⁴⁰ Murray Dobbin, "Ten Tax Myths," *CCPA Monitor*, Ottawa, October 1999, p.23. Statistics Canada data revealed that Canada lost 1,104 nurses to the United States in 1996. That's almost eight times more than the number of computer scientists (148) that left Canada for the United States in the same year.

the health care staff and skills currently in the system should be used to determine how to best utilize the resources already in the system as well as plan for future needs. A provincial training strategy should be developed that provides assistance to health care workers who wish to upgrade their skills into higher and needed classifications.

Labour relation matters

Although the restructuring of bargaining units addressed a number of problems in health care labour relations, there is a need for further improvements in the labour relations area. One area in particular that needs to be addressed is the duplication of human resources departments within health districts and the affiliates. This duplication has created inefficient use of human resources within health districts.

It is our view that there should be one human resources department within each health district and that all personnel matters fall within the responsibilities of the health districts. To achieve this, the provincial government should amend *The Health Districts Regulations* to state that all human resources and labour relations matters fall under the jurisdiction of the health districts.

We also propose that the provincial government be a partner at the bargaining table with health care unions and the Saskatchewan Association of Health Care Organizations (SAHO). The provincial government provides all the funding to health districts yet is not a partner at the bargaining table.

In contrast, the provincial government only funds 40% of the costs of K-12 education and is at the bargaining table with the Saskatchewan Teachers' Federation and the Saskatchewan School Trustees' Association.

5. Governance and Administrative Issues

Fully-elected democratic health district boards

CUPE has long held the position that we need fully-elected, democratic and publicly-accountable boards in our health care districts. Currently our health district board members are mostly elected and partially-appointed by the provincial government. We believe that the provincial government should amend *The Health Districts Act* to provide for fully-elected boards. Health care boards need to be accountable to the people and the communities they serve and we believe this is possible only with elected boards.

We have a number of concerns with respect to the government appointments to health district boards. The argument that had been advanced by the government was that the government needed the ability to appoint members to health district boards in order to ensure broad representation from equity groups. There is ample evidence that many of the appointments were not made on this basis.

For example, Garf Stevenson, former head of the Saskatchewan Wheat Pool, was appointed to the Regina Health District Board. While Mr. Stevenson has the same right as any other citizen to put forward his candidacy in health board elections, we don't believe he belongs to any under-represented group in society. We are also concerned about the Minister of Health's recent appointments of three businessmen to the Regina Health District ostensibly to improve the financial management of the health district. It is our position that health district board members should be elected to serve the citizens in that district and that financial management be the responsibility of managers hired for that purpose.

We also have concerns about the Carver model of governance that has been adopted by many health districts. The main concept behind the Carver model is that boards should only be involved in developing vision statements and policies, not administrative issues. The Carver model concentrates power into the hands of the CEO and leaves board members in the dark on many issues. We believe that this diminishes the democratic accountability of the board structure.

Accountability to government

In addition to being accountable to citizens, health district boards must be more accountable to the provincial government. Because health districts receive their full funding from the provincial government, they should be responsible for providing a standard set of services and programs. Home care is one example where each health district has established its own level of services covered.

The provincial government must also clarify its role in the development of health policies and in the delivery of health services. While regional health districts are responsible for planning and delivering services that meet the specific needs of citizens in their regions, the provincial government is ultimately responsible for the overall health planning and strategies in the province. The World Health Organization expresses the responsibilities of governments in this way:

Governments should be the “stewards” of their national resources, maintaining and improving them for the benefit of their populations. In health, this means being ultimately responsible for the careful management of their citizens’ well-being. Stewardship in health is the very essence of good government. For every country it means establishing the best and fairest health system possible. The health of the people must always be a national priority: government responsibility for it is continuous and permanent.⁴¹

We believe that the provincial government needs to play a stronger role in the development of provincial health care strategies and provincial standards that all health districts must adhere to. The provincial government must provide the leadership in the creation of a health care system that provides the best health care possible to citizens of this province.

Citizen involvement

⁴¹ WHO, *The World Health Report 2000*, p. 117

It is important to note, however, that accountability within health districts is not exclusively about electing board members. Our health districts also need to ensure more participation from citizens in the community in the planning and evaluation of health services and programs. The boards need to be elected but they also need to have citizen involvement. Although annual public meetings as required by legislation are important, health districts need to find new and innovative ways of reaching out to and involving the public, consumers and key stakeholders.

In Quebec, the Regional Boards include representation from the community organizations, public and private institutions, socio-economic groups, and municipalities. Members of the board are elected at Regional Assemblies held every three years. The CLSCs also have elected boards comprising members of the community, consumers, medical staff and employees, of the foundation attached to the agency and the executive director of the agency.

The Quebec model allows for broad representation and encourages representation from community groups. Because a large number of the board of directors are elected at public Regional Assemblies, there is a strong accountability feature built in.

Another option would be the creation of citizen advisory committees that advise the district health boards on social and equity issues.

Administrative structures

We would also like to see major changes made to the administrative structures of the health care districts. We believe that too many funds have

been channelled into the creation of administrative positions instead of directing those funds into front-line workers. There is also a duplication of administrative structures between the health districts and the affiliates. In the Regina Health District, for example, the district has its own massive human resources department and each affiliate also has its own human resources and payroll structures.

This duplication and over administration of our health care system takes money away from front line services where it is needed the most.

There is also the question of what is fair compensation for CEOs and other top administrators in our health system. The *Saskatoon Star-Phoenix* revealed last year that the CEO of the Saskatoon Health District, Jim Ferguson, received a salary of approximately \$177,000 a year⁴². That was more than twice the salary paid to the mayor of Saskatoon in 1998 (\$80,125), \$80,000 more than what the City of Saskatoon City Manager earned in 1998 (\$97,367) and significantly more than what the Premier of this province in 1998/99 (\$108,656)⁴³.

The Health Districts Act should be amended to include duties of Chief Executive Officers as the *Education Act* lists duties of Directors of Education and Secretary-Treasurers of School Divisions.

6. Enhance Public Services

⁴² Jason Warick, "CEO's salary jumps: health district executive receives hefty pay increase," *The Star-Phoenix*, January 13, 1999, p. A1.

⁴³ Government of Saskatchewan, *Public Accounts*, 1998-99, p.77; and , *Legislative Assembly of Saskatchewan Members' Handbook*, June 1999, pages 5 & 7. The Premier earned the basic \$57,455 as MLA plus \$51,201 for Premier's duties.

Although all levels of governments have been raising concerns about the rising costs of health care, we feel that there are strong arguments for expanding the range of services that are publicly delivered. In 1983, the provincial government's spending on health care accounted for 75.9 percent of total health expenditures in the province. By 1999 the government's share of health expenditures had dropped to 64.8 percent.⁴⁴ Only the provinces of New Brunswick, Ontario and Alberta spent proportionately less than Saskatchewan on health care in 1999.

There are many areas where we feel the government should be covering the costs or enhancing the public delivery of these services.

- Expand Home Care

Home care plays a critical role in our health care delivery system, especially since the provincial government embarked on health care reform. The kinds of services provided under home care differs between health districts. The number of hours of certain services that are publicly provided before charging for services also varies.

We believe that the costs of home care should be fully covered by the provincial health insurance plan and that the level and kind of services provided should be expanded. The provincial government should develop a provincial standards and levels of care that all health districts will be expected to provide.

- Increase public delivery of long-term care

⁴⁴ Canadian Institute for Health Information, *National Health Expenditure Trends, 1975-1999*, Ottawa, 1999, p.119.

Considering the changing demographics of our province, it is critical that the government develop a comprehensive provincial long term care strategy that looks at enhancing the public delivery of long-term care. There is a need to address the problem of personal care homes and their operation outside of the public health system.

A provincial strategy for long-term care would look at increased public support to seniors housing, public alternatives to personal care homes, and the expansion of home care services.

- Pharmacare Program

The provincial government needs to increase its funding to the prescription drug plan. Saskatchewan has the highest deductible of any province in the country. As a first step, the province should cover prescription drugs and other medical supplies of home care clients. The provincial government should also lobby the federal government to reduce the number of years drug patents are in effect.

- Reinstatement of the Children's School Based Dental Program

The provincial government should reinstate the school-based dental program that was dismantled by the Devine government in the 1980s. The program was the ideal of a community-based and delivered preventive program and was internationally recognized. By providing dental care and education about dental hygiene in the schools, all children were guaranteed access to dental services and developed a good healthy start.

- Rehabilitation and occupational therapy

Many hospitals and health districts could have expanded their provision of rehabilitation and occupational therapy services for private insurance or workers compensation claims. Instead we have seen a growth of private therapy clinics and an expansion of the Canadian Back Institute providing these services.

By expanding the public delivery of rehabilitation and occupational therapy, the government will ensure coordination of health services to the individual. This fits into our vision of a coordinated and integrated health system that promotes the health of the whole person.

- Midwifery

In 1999 the provincial government passed legislation to legalize midwifery in the province. Unfortunately, the government chose not to fund midwifery services thus making midwifery an expensive option for expecting mothers.

Midwives play an important role in the care of expectant mothers and their newborn children in most European countries and developing nations. Midwife-attended births are less likely to involve Caesarean.

In North America, child birth has become the exclusive domain of physicians and obstetricians and therefore has become highly medicalized. Canada has a higher level of Caesarean sections than the maximum level recommended by the World Health Organization. In 1997/98, 18.7% of

hospital births in Canada were by Caesarean, up from 17.7% five years earlier. The World Health Organization recommends that no more than 10 to 15% of births be by Caesarean.⁴⁵

Although we applaud the provincial government for passing legislation to legalize midwifery, we believe that this legislation will not enable midwives to practice in this province unless the provincial government fully funds this service.

⁴⁵ Canadian Institute for Health Information, *Health Care in Canada 2000*.

IV. Conclusion

Our health care system is the social program most cherished by Canadians. Most of us consider health care a social right, one of the benefits of being Canadian. We shudder at the thought of the American private system where over 40 million Americans are uninsured or where a major illness can leave someone bankrupt.

Medicare is at a crossroads and the time to act is now. Clearly there is a need for the federal government to show its commitment to medicare by increasing its share of health care funding back to the levels prior to the CHST cuts and gradually back to 50%. We strongly support the provincial government's demands for increased federal funding.

But there is also need to re-examine how our health care services are delivered, to expand services covered under medicare, and to develop social and economic policies that would improve the health status of citizens. We agree in general that our health care system should be about more than just doctors and hospitals but it appears to us that such statements too often become the rationale for cutting back front line workers in acute care while doctors remain untouched.

We believe that our proposed model of community health centres would create a new approach to health care delivery in this province. The use of multidisciplinary health care teams would replace the traditional, physician-centred approach to health care. While physicians would continue to play an important and specialized role in the treatment of illness, other

health professionals and health care workers would have an expanded role in encouraging health.

The coordination between the Department of Health and other government and non-governmental agencies will enable us to develop a broader approach to health care. Health care is about the whole person and we need to recognize the various social and economic factors that affect our health. Although the provincial government raises concerns about rising costs, we need to also analyze the broader social costs of not providing expanded health care services. In the end, there will be costs to the provincial government, if not through the Department of Health budget then through the budgets of Social Services or Education or Justice.

We encourage the government to take a strong initiative and create a model of health care that will be replicated across the country. Our small province has shown creativity and courage before. We can do it once again.

Summary of Recommendations

Rethinking Health Care

1. A renewed health care system must focus on the social and economic determinants of health.

2. All provincial government departments must work together cooperatively to implement healthy public policies that improve health status of Saskatchewan residents, such as:
 - an increase in the minimum wage
 - pay equity legislation that covers both the public and private sector
 - an expansion of social housing
 - changes to the *Labour Standards Act* that provide for increased vacation time, paid family leave days and reduced working hours
 - the creation of a Workers Health Centre that focuses on work-related illness and disease
 - increased funding to day cares and early childhood education
 - improved staffing to reduce workload in health facilities (injury rates in the health care sector are the highest of occupational sectors)
 - reinstatement of the school-based children's dental program

Health Care Delivery

3. The provincial government must review the current structure of regional health districts to ensure the most effective and highest quality of delivery of health services to Saskatchewan residents.
4. The provincial government should develop a list of standard services that must be delivered by all health districts.
5. The provincial government should enhance the services of regional hospitals to ensure a full range of diagnostic and surgical services.
6. The government should create a provincially-coordinated and publicly-delivered ambulance emergency service.

7. The government should establish multidisciplinary Community Health Centres that provide primary care to Saskatchewan residents. Community Health Centres would provide 24-hour nursing services and be the entry point to the health care system.
8. The provincial government should eliminate the fee-for-service method of paying physicians and instead pay physicians by salary.
9. Physicians should become employees of the health districts and accountable for all the services they provide.
10. The provincial government should develop a comprehensive provincial strategy for long-term care that examines increased public support for housing, home care and long term care.
11. Home care services should be expanded to provide a broader range of services, such as increased homemaking and yard work, and an increase in respite services to support family caregivers.
12. The provincial government should increase funding to home care and establish a standard set and a minimum level of home care services to be provided by every health district.
13. The provincial government should re-establish funding to level I and II nursing home care and restrict the number of beds in private and personal care homes to 10.

Creating Health Workplaces

14. The provincial government must increase funding for staffing levels and establish minimum staffing ratios for health care institutions.
15. The provincial government should support the creation of more full-time positions and the reduction of working hours in health care.
16. The health district employees should develop strategies to fully utilize the skills of all health care workers.

17. The provincial government, in conjunction with the health districts and health care unions, should develop a provincial strategy for the retention and retraining of health care workers.
18. The provincial government should amend The Health Districts Regulations to state that all human resources and labour relations matters fall under the jurisdiction of the health districts. This would eliminate the duplication of these functions within the health districts and affiliates.
19. The provincial government should be a partner at the bargaining table with SAHO and the healthcare unions (as it is with the SSTA and teachers).

Governance Issues

20. District health boards should be fully-elected to ensure accountability to citizens in their region.
21. The provincial government must play a stronger role in the planning and delivery of health care services.
22. District health boards must find new and innovative ways of involving and consulting with the public, consumers and stake holders.
23. The provincial government should review the level of administrative positions within health districts and affiliates with the goal of reducing such positions and increasing the number of front line workers.
24. The provincial government should establish maximum salary levels for CEO's and other high level administrators.
25. The provincial government should amend The Health District Act to outline the duties and responsibilities of CEO's.

Enhance Public Services

26. The provincial government should expand the public delivery and funding to the following services:

- home care
- long term care
- pharmacare
- children's school-based dental program
- rehabilitation and occupational therapy
- midwifery

References

B.C. Union of Nurses, Hospital Employees Union and BCGSEU. *Blended Care*. Discussion Paper. October 1999.

Canadian Institute for Health Information. *National Health Expenditure Trends, 1975-1999*. Ottawa. 1999.

Canadian Public Health Association. *Health Impacts of Social and Economic Conditions: Implications for Public Policy*. Ottawa. March 1997.

Canadian Union of Public Employees. *Brief Regarding the Utilization of Licensed Practical Nurses*. CUPE Research. 1999.

Dobbin, Murray. "Ten Tax Myths." *CCPA Monitor*. Ottawa. October 1999.

Fast, Janet E. and Norah C. Keating. "Family Caregiving and Consequences for Carers: Toward a Policy Research Agenda." *CPRN Discussion Paper No. F/10*. Ottawa: Canadian Policy Research Networks. January 2000.

Globe and Mail. "Costs much lower if elderly patients receive home care." November 29, 1999.

Globe and Mail. "Research is skimpy on how much is saved." March 22, 1999.

HEALNet Regionalization Research Centre. "Regionalization in Canada." May 1999.

Health Services Utilization and Research Commission. *The Impact of Preventive Home Care and Seniors Housing on Health Outcomes*. Saskatoon. May 2000.

Heeney, Helen. *Life Before Medicare: Canadian Experiences*. Ontario Coalition of Senior Citizens Organizations. 1995.

Jaffe, JoAnn and Bonnie Blakley. *Coping as a Rural Caregiver: The Impact of Health Care Reforms on Rural Women Informal Caregivers*. Prairie Women's Health Centre of Excellence. 1999.

Kouri, Denise, Jackie Dutchak, Steven Lewis. *Regionalization at Age Five: Views of Saskatchewan Health care Decision-Makers*. HEALNet. Saskatoon. December 1997.

Lewis, Steven. *Regionalization and Devolution: Transforming Health, Reshaping Politics?* Occasional Paper No. 2. HEALNet. Saskatoon. October 1997.

Mandryk, Murray. "NDP has itself to blame for nursing home issue." *The Leader-Post*. May 24, 1996.

McMillan, Dr. J. Stewart. *Report of the Task Team on Surgical Waiting Lists*. Saskatchewan Health. March 1999.

Morris, Marika, Jane Robinson and Janet Simpson. *The Changing Nature of Home Care and Its Impact on Women's Vulnerability to Poverty*. Ottawa. Status of Women Canada. November 1999.

National Forum on Health. *Canada Health Action: Building on the Legacy*. The Final Report of the National Forum on Health. Ottawa. 1997.

Rachlis, Michael and Carol Kushner. *Strong Medicine: How to Save Canada's Health Care System*. Toronto. HarpersCollins. 1994.

Saskatchewan Health. *Community Clinic Study*. 1983.

Saskatchewan Health. *Health Renewal is Working: Progress Report*. October 1996.

Saskatchewan Health. *1998 Saskatchewan Health Employer Survey*. 1999.

Saskatchewan Workers Compensation Board. *Statistical Summary Reports*. 1988-1999.

Statistics Canada. Census data 1976-1996. Ottawa.

Townson, Monica. *Health and Wealth: How Social and Economic Factors Affect our Well Being*. Ottawa. The Canadian Centre for Policy Alternatives. 1999.

Warick, Jason. "CEO's salary jumps: health district executive receives hefty pay increase." *The Star-Phoenix*. January 13, 1999.

Wolfson, Bernard J. "Santa Ana, Calif-Based Health System Warns of Higher Medical Premium." *Knight-Ridder Tribune*. August 4, 2000.

Woolhandler, Dr. Steffie and Dr. David U. Himmelstein. *For Our Patients, Not for Profits: A Call for Action*. The Center for National Health Program Studies. Harvard Medical School. Cambridge. 1998.

World Health Organization. *The World Health Report 2000*. Geneva. 2000