Chapter 12. The Health Field Concept and Strategies for the Future

The ideas proposed in this paper provide a universal framework for examining health problems and for suggesting courses of action needed for their solution. Because they are comprehensive, they have a unifying effect on all the participants in decisions which affect health, bringing together into one common front:

1. the health professions,
2. the health institutions,
3. the scientific community,
4. the educational system,
5. municipal governments,
6. provincial governments,
7. the federal government,
8. the business sector and trade unions,
9. the voluntary associations, and
10. the Canadian people as individuals.

The Health Field Concept disregards questions of jurisdiction which may be important to governments but are not of primary concern to the people of Canada when their health is at stake. It identifies requirements for health without regard to the niceties of professional or sectoral boundaries, and it focuses attention on the broad and important factors underlying the health of the population.

In putting the Health Field Concept to work, that is, in using it for analysing federal health policy, it was found that HUMAN BIOLOGY, ENVIRONMENT and LIFESTYLE were national in character and that problems in these areas
tended to pervade Canada’s population with little regard for provincial boundaries, always excepting purely local environmental matters. Protecting the food supply from contamination and drugs from being abused, as well as recognizing alcohol abuse, smoking, obesity, lack of physical fitness, chronic illness, mental illness, venereal disease and traffic deaths as national health problems, opens up corridors in which federal leadership can function with considerable jurisdictional freedom as long as it leads, reinforces and supplements, without duplication or conflict, the goals and services of the provinces, and respects the provincial ascendancy in health care services. In short, the first three elements of the Health Field Concept are open to federal initiatives in addition to those which are already under way. (see Chapter 7)

Turning to the expressed and latent needs and wants of the Canadian people, this paper responds strongly to the recent trends and attitudes of Canadian society. The preservation and enhancement of the environment are the goals of a very strongly felt need and constitute a powerful current of popular opinion. In the lifestyle area, nutrition and weight control, as well as mass physical recreation, are subjects of growing interest, indicating an increased desire by many Canadians to break out of an unhealthy pattern of living. These and similar national lifestyle concerns can be eased by measures growing out of the Health Field Concept, assuming such measures are wisely chosen and respond to Canadian needs.

For a more particular community, that of the research scientists, this paper not only gives due recognition to the need for research in basic human biology, but also points out the necessity of linking up the purposes and uses of health research to problems in the environment, in lifestyle and in the delivery of care.

For the health professions, who often despair of getting patients to act on their advice to reduce self-imposed risks, and of governments to attack the underlying causes of sickness and death, this paper offers them the opportunity to recruit powerful forces to their cause.

Voluntary associations, dedicated to increasing the awareness of Canadians of the factors influencing health and to the gravity of specific diseases, will more easily be able to identify and marshal the assistance of those who share their goals.

Neglected segments of the Canadian population, in terms of health, can look forward to getting more of the attention they deserve. The chronically ill, the aged, the mentally ill, the economically-deprived, the troubled parents, and others who either are at high risk or are receiving insufficient health care, can expect that programs for populations will increasingly recognize and respond to their needs.
The federal role suggested by this paper constitutes a promising new departure. In the past the Federal Government has limited its activities in the health field to its traditional responsibilities such as quarantine medicine and the protection of the food supply, to product safety, to ensuring accessibility to personal health care through substantial financial assistance to provincial health insurance plans, and to financing research. The basis for concentrating its interests in these areas has been the belief that the improvement of personal health care was the principal means of raising the level of health of the Canadians. In 1973, for example, the federal contribution to provincial health insurance plans was 2,300 millions of dollars, and financial barriers to medical and hospital care have largely been eliminated.

The evidence uncovered by the analysis of underlying causes of sickness and death now indicates that improvement in the environment and an abatement in the level of risks imposed upon themselves by individuals, taken together, constitute the most promising ways by which further advances can be made.

Accordingly, it is the intention of the Government of Canada, first, to maintain at a high level the services and support provided through its present activities in health protection, research and the financing of personal health care. To these will be added measures directed at specific national health problems, chosen in consultation with provinces, consumers, professions and associations according to their gravity and incidence, and aimed at removing or reducing the factors underlying sickness and death.

Some of these measures in time will no doubt be directed at environmental factors, others will be directed at lifestyle risks, still others will expand the horizons of health research, and yet others will encourage more personal care services to neglected parts of the Canadian population. In every case the measures will be based upon the expressed interest and concern of all those who contribute to the health of Canadians, including in particular the people themselves.

Since direct health care is already consuming some 7% of the wealth that Canadians produce annually, it is evident that the rate at which the Government of Canada can expand its activities in the field of health is severely limited by financial considerations. It is also true that measures directed at the prevention of illness will take some time before they are translated into savings in the costs of providing curative health services.

These two factors make it imperative that the measures developed in consultation with provinces, professions and associations be chosen with great care, and with due regard for the costs and benefits that can be anticipated. In choosing the measures, consideration will be given to a number of factors, among which will be:
1. the gravity of the health problem,
2. the priorities of those who share in decision-making,
3. the availability of effective solutions, results of which are measurable,
4. the costs involved, and
5. the multiplier effect of federal initiatives in marshalling and accelerating support from all those who make vital contributions to raising the level of health or who have a key role in controlling the cost of health services.

With the foregoing considerations in mind, and with the recognition that the good health of Canadians is an objective that shines brightly above the thicket of jurisdictions and special interest groups, the Government of Canada proposes to take steps that will start the nation on the road to levels of health even higher than those that Canada now enjoys.

In taking these steps, the Government of Canada, in cooperation with others, will pursue two broad objectives:

1. To reduce mental and physical health hazards for those parts of the Canadian population whose risks are high, and
2. To improve the accessibility of good mental and physical health care for those whose present access is unsatisfactory.

In pursuit of these two objectives, five strategies are proposed:

1. A Health Promotion Strategy aimed at informing, influencing and assisting both individuals and organizations so that they will accept more responsibility and be more active in matters affecting mental and physical health.
2. A Regulatory Strategy aimed at using federal regulatory powers to reduce hazards to mental and physical health, and at encouraging and assisting provinces to use their regulatory powers to the same end.
3. A Research Strategy designed to help discover and apply knowledge needed to solve mental and physical health problems.
4. A Health Care Efficiency Strategy the objective of which shall be to help the provinces reorganize the system for delivering mental and physical health care so that the three elements of cost, accessibility and effectiveness are balanced in the interests of Canadians.
5. A Goal-Setting Strategy the purpose of which will be to set, in cooperation with others, goals for raising the level of the mental and physical health of Canadians and improving the efficiency of the health care system.
In implementing these strategies much analysis and consultation within the framework of this paper is still needed. This will be undertaken in respect of the following possible courses of action.

For the Health Promotion Strategy some possible courses of action among others could be:

1. The development for the general public of educational programs on nutrition.
2. The enlistment of the help of the food and restaurant industries in making known the caloric value and nutritional content of the food they sell.
3. Educational campaigns to increase awareness of the gravity and underlying causes of traffic accidents, deaths and injuries.
4. Activities to promote a more widespread understanding of the gravity and underlying causes of coronary-artery disease.
5. Measures to lift the veil from mental illness, and to create a more realistic sense of urgency in respect of the gravity of this problem.
6. Information to increase awareness of the hazards of self-medication.
7. Further information campaigns to increase public awareness of health problems due to the abuse of alcohol, drugs, tobacco and to venereal disease.
8. Encouragement among employers of programs designed to ease the transition from employment to retirement.
9. Reinforcement of successful programs for making life more interesting for the aged.
10. Promotion and coordination of school and adult health education programs, particularly by health professionals and school teachers.
11. Direct awareness activities tailored to the responsibilities of specific sectors for the reduction of self-imposed and environmental health risks including business, trade unions, governments, voluntary associations and action groups, communities, professions, parents and teachers.
12. Continued and expanded marketing programs for promoting increased physical activity by Canadians.
13. Enlistment of the support of the educational system in increasing opportunities for mass physical recreation in primary and secondary schools, in community colleges and in universities.
14. Promotion of the development of simple intensive-use facilities for more physical recreation including fitness trails, nature trails, ski trails, facilities for court games, playing fields, bicycle paths and skating rinks.

15. Continued pressing for full community use of present outdoor and indoor recreation facilities, including gymnasiums, pools, playing fields and arenas.

16. Continued and reinforced support for sports programs involving large numbers of Canadians.

17. Encouragement of private sports clubs to accept more social responsibility for extending the use of their facilities to less-privileged segments of the Canadian population.

18. Extension of present support for special programs of physical activity for native peoples, the handicapped, the aged and the economically-deprived.

19. Enlistment of the support of women's movements in getting more mass physical recreation programs for females, including school children, young adults, housewives and employees.

20. Enlistment of the support of employers of sedentary workers in the establishment of employee exercise programs.

21. Enlistment of the support of trade unions representing sedentary workers in obtaining employee exercise programs.

22. Increase in the awareness of health professionals of factors affecting physical fitness.

23. Completion of the development of a home fitness test to enable Canadians to evaluate their fitness level.

For the Regulatory Strategy some possible courses of action among others could be:

24. Regulations for improving the nutritional content of food.

25. Consultation with the Department of Justice in respect of the laws against driving while impaired by alcohol.

26. Increased control of advertising for products which are so frequently or deeply abused as to constitute serious hazards to health.

27. Increased control of health hazards due to air, water, food, noise and soil pollution to the extent that the power to legislate with regard to these may fall into federal jurisdiction.
28. Increased control of death hazards from communicable diseases, radiation, medical devices and cosmetics.

29. Increased control under the Hazardous Products Act over the advertisement, importation and sale of household products the possession or use of which is accompanied by some significant accident hazard or danger to health.

30. Assistance to the Provinces in promoting the acceptance by the public of regulations passed pursuant to provincial legislation making compulsory the wearing of seat-belts in motor vehicles.

31. Regulations governing child-resistant closures on drug products.

For the Research Strategy some courses of action among others to be explored include:

32. An ongoing dialogue between health planners and the research community on the priorities for mission-oriented health research while preserving for the research community the setting of priorities in basic research.

33. The implementation of a regular National Health Survey to determine the prevalence and nature of acute and chronic mental and physical illness, to permit an assessment of the health status and needs of Canadians and to measure changes in status and needs.

34. The institution of a special program for identifying health status indicators and high-risk segments of the Canadian population, for the evaluation of the nature and gravity of mental and physical health risks, and for the proposal of measures to abate the level of risk.

35. Measures to help integrate, improve and use, on a national basis, the data and statistics being recorded at various government and institutional levels.

36. The establishment of a well-designed comprehensive system for the reporting of accident statistics which would, among other things, identify accident-associated products.

37. The promotion of increased support for research on underlying causes of coronary-artery disease.

38. Support for more research on the causes and treatment of mental illness.

39. The support of projects designed to evaluate the results of present mass-screening programs and to test the effectiveness of future ones.
40. The establishment of a National Drug Abuse Institute covering all abusive drugs including psychotropic drugs, both licit and illicit, alcohol and cigarettes, and responsible for gathering statistics, supporting research, evaluating preventive and treatment measures and recommending policy.

41. The undertaking of a broad continuing study into the ways and means of effectively informing the Canadian people on changes in behaviour which will significantly reduce self-imposed risks.

42. The continuation and strengthening of present research into the effect of the physical environment on health.

43. The establishment of a program for assessing the effect of social and environmental change on health including the calculation of risk factors due to lifestyle.

44. The continuation of support for research on physical and mental fitness and for fitness testing.

45. Continued and increased support for research into better ways of providing health care.

46. Continued support for research consistent with the scale of the health care industry.

For the Health Care Efficiency Strategy it is important to note that the word “efficiency” in this context is not limited to the narrow economic meaning of low cost per unit of production, but includes, as well as cost, the other two important elements of accessibility of service and the effectiveness of results. For this strategy, some measures that could be considered among others are:

47. Pursuing a method of financing health care that will provide incentives for providing satisfactory care at the lowest cost, and will permit the extension of pre-paid care to additional essential services.

48. Strengthening industrial and emergency health services, including the training of personnel.

49. The identification, treatment and follow-up of Canadians with high blood pressure.

50. The support of programs aimed at reducing the risk of premature coronary-artery disease, including weight-control, exercise, stress-reduction and anti-smoking.

51. The identification, treatment and follow-up of Canadians suffering from a high serum cholesterol level (hypercholesterolemia).
52. Support for programs for increasing the number and skills of professions dealing with mental health and mental illness including particularly nurses, social workers, health educators and teachers.

53. The subsidy of programs for training counsellors on alcoholic problems and their treatment.

54. The promotion of employer programs for employees with alcohol problems.

55. The support of home visit and other programs for helping chronically ill and aged people to stay in their communities.

56. The development and support of programs of professional training in gerontology and geriatrics, including physicians, nurses and health support personnel.

57. A continued adherence to the principle that accessibility to ambulatory, institutional and home care must be based upon the perceived needs of the public.

58. Making continued federal support for the training of health professionals conditional upon effective measures to ensure that health manpower is better distributed geographically, among specialties and according to economic levels served.

59. The continued extension of the role of nurses and nurse practitioners in the care of the mentally ill, in the care of the chronically ill, in the provision of home care, in family counselling on preventive health measures, both mental and physical, and in the abatement of environmental hazards and self-imposed risks.

60. The organization and administration of an improved drug information system to physicians so that they will make a more effective and objective use of drugs.

61. The continued promotion of the establishment of community health facilities that are physically and professionally integrated.

62. The introduction of practical measures, including the use of expert committees, to diminish the time between the latest medical knowledge and the application of that knowledge in the practice of medicine.

63. The encouragement of the development of regional bodies with comprehensive authority over the delivery of health care in their respective regions.
64. The enlistment of the support of pharmacists in establishing, under physician direction, a follow-up system on the compliance of patients with drug therapy.

65. Work with genetics counsellors in improving the use and availability of genetic services to Canadians.

66. The continuation and extension of assistance to Provinces in their campaign against venereal disease.

67. The examination of the possibility of integrating authority over federal treatment services, including those for veterans, Indians, Eskimos, Northern Territories, and penitentiary inmates.

For the Goal-Setting Strategy, which applies to the four foregoing strategies, consultation will be intensified so that a rational array of specific goals can be established, providing a united and reinforced sense of direction for those who work in the health field. A goal has a time limit and is stated in quantitative terms. Possible courses of action include among others:

68. The development of specific reductions in the incidence of major mortality and morbidity.

69. The establishment of specific dates by which reductions in mortality and morbidity are to be achieved.

70. The development of specific improvements in the efficiency of the health care delivery system, including improvements in cost performance, accessibility of care, and the effectiveness of results.

71. The establishment of specific dates by which improvements are to be achieved.

72. The setting of standards of care in both mental and physical health care systems.

73. The extension of national standards of nutrition to include definite recommendations on safe levels of intake for hazardous substances occurring naturally in food.

74. A renewed commitment toward the health goals of the World Health Organization and the Pan American Health Organization.
Conclusion

The foregoing formulation of two broad objectives, five main strategies and seventy-four proposals constitutes a conceptual framework within which health issues can be analysed in their full perspective and health policy can be developed over the coming years. Since all of the propositions do not have equal weight, and since authority for their pursuit is widely dispersed among governments, professions and organizations, the Working Paper does not attempt to pre-judge jurisdictional and financial issues nor to set priorities for other levels of government. Limitations on the availability of funds will require that expanded initiatives be carefully paced in relation to the ability of the economy to absorb them without adding to existing levels of taxation. With the Health Field Concept and this Working Paper, however, there will be a much clearer picture of the options available. In the end – by individuals, by society and by governments – choices must be made.
References

Annex A. Panorama of Mortality in Canada

The enclosed chart gives a broad overview of the prevailing causes of death* for each sex and age group in Canada (1971). It demonstrates the importance of the contribution of our lifestyle to mortality up to middle age, for example motor vehicle accidents, cirrhosis of the liver, heart disease, etc. It also emphasizes the different mortality patterns and rates for males and females.

The causes included are responsible for at least 5%** of the deaths within each sex and age group, thus one cause may be important only relative to certain age and sex groups, such as leukemia among young children. The 13 first cause-groups used in this chart represent two thirds of the total deaths after the age of 5.

**PITFALLS TO AVOID**

As indicated in note 2 on the chart, the areas of the circles are proportionate only to the absolute number of deaths, therefore one is unable to determine if the mortality rate of one group is greater than another by simple comparison between two circles. The mortality rate, expressed in “per thousand”, for each age and sex group is obtained by dividing the number of deaths (d) by the corresponding population (p).

Shown hereunder are 3 examples of pitfalls resulting from ignorance of this fact:

- a) The number of deaths among males aged 30 to 34 (1,090) is less than that of the preceding age group, 25-29 (1,176) although the mortality rate among males aged from 30 to 34 (1,090/860.7 = 1.25 per thousand) exceed that of the 25-29 group (1,176/860.7 = 1.47 per thousand)

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** The arbitrary criterion of 5% has been selected so as to limit the causes to a manageable number. It must be noted that some causes of death listed are identical to those of the classification used (motor vehicle accidents: AE 138, Breast Cancer: A 54...) whereas others correspond to groupings representing a more comprehensive entity (other accidents: AE 139-146, respiratory diseases: A 89-96, gastro-intestinal cancer: A 46-49, and cancer of the uterus and ovary: A 55, 56, 58D).
b) In the same way, deaths among women over 80 are more numerous than those among men of the same age group (23,285 and 21,016), nevertheless the mortality rate in women is less than that of the men from the same age group ($\frac{23,285}{20,133} = 116$ per thousand, $\frac{21,016}{18,893} = 150$ per thousand).

c) The fact that suicide disappears from the chart after age 45 for females and age 50 for males is not due to a decrease in incidence but merely to a decrease in importance compared to other causes.
CANADA 1971

Major causes of death for each sex and age group

Causes principales de décès pour chaque tranche d’âge et de sexe

Legend Légende

Motor vehicle accidents
Accidents de véhicule à moteur AE 138
Suicide AE 147
All other accidents
Autres accidents
Respiratory diseases
Maladies respiratoires A 59-96
Cirrhosis of liver
Cirrhose du foie A 102

Lung cancer
Cancer du poumon A 51
Breast cancer
Cancer du sein A 54
Gastro-intestinal cancer
Cancer gastro-intestinal A 49-69
Cancer of the uterus and ovary
Cancer de l’utérus et de l’ovaire A 58D
Leukemia
Leucémie A 59
Coronary heart disease
Maladies coronariennes A 63
Cerebrovascular accident
Maladies cérébrovasculaires (congestion cérébrale) A 85
Cancer of the uterus and ovary
Cancer de l’utérus et de l’ovaire A 58D
Other arteriosclerotic diseases
Autres formes d’artériosclérose A 86
All other causes
Toutes les autres causes

Scale Échelle

(number of deaths) (nombre de décès)

4,000
1,000

Notes Notes

1) In each circle major causes of death are arranged in decreasing order of magnitude.
2) The area of each circle is proportional to the number of deaths in each sex and age group. (The death rate can be calculated using the two figures under each circle.)

Based on: Vital Statistics, 1971, Catalogue 84-201, Statistics Canada