PROVINCE OF BRITISH COLUMBIA

Department of Health

ANNUAL REPORT

1976

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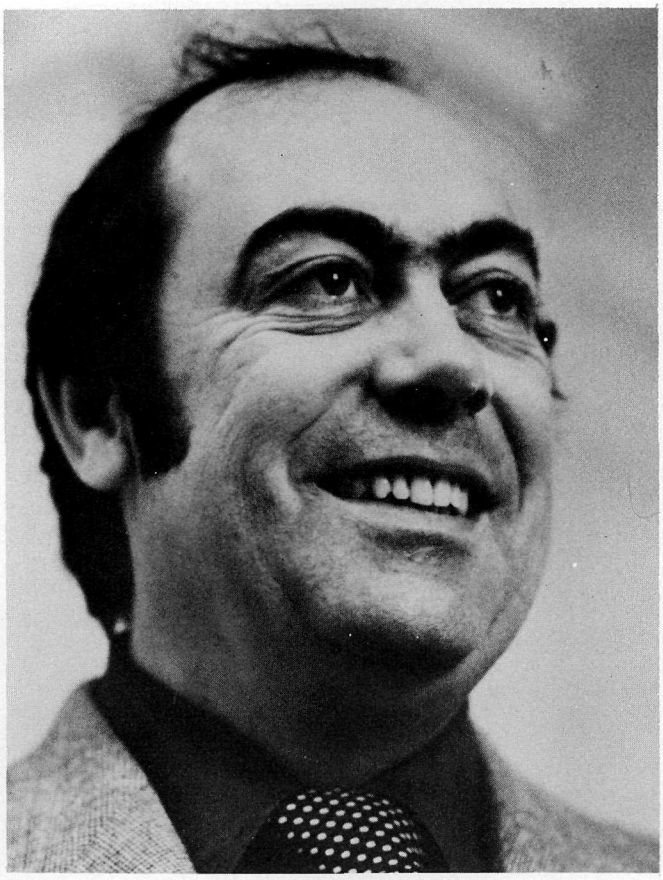


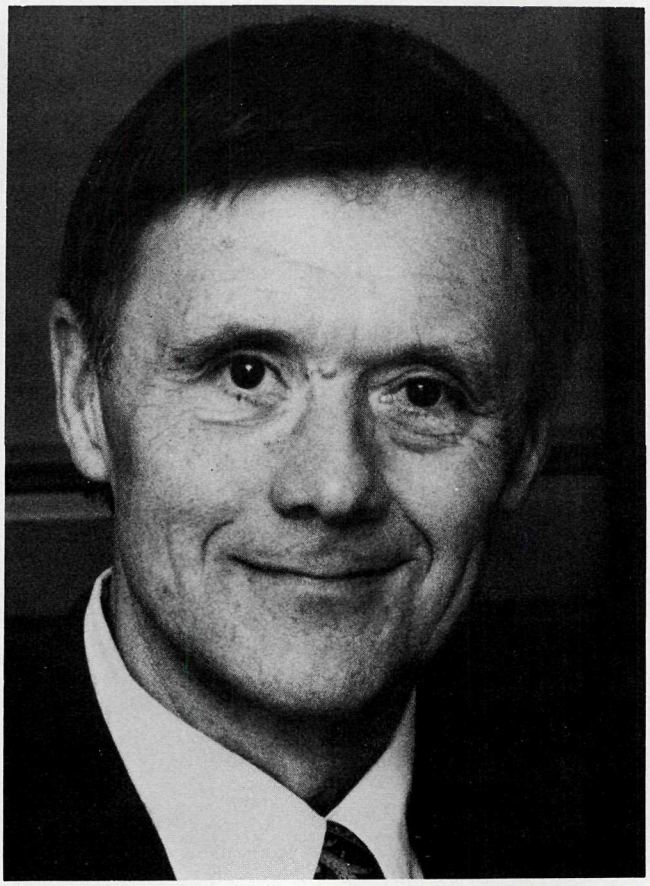
To Colonel the Honourable WALTER S. OWEN, Q.C., LL.D.,
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The undersigned respectfully submits the Annual Report of the Department of Health for the year 1976.

R. H. McCLELLAND
Minister of Health

Office of the Minister of Health,
Victoria, B.C., January 31, 1977.



DEPARTMENT OF HEALTH, VICTORIA, B.C., January 31, 1977

The Honourable R. H. McClelland,
Minister of Health, Victoria, B.C.

SIR: I have the honour to submit the Annual Report of the Department of Health for 1976.

J. W. MAINGUY
Deputy Minister of Health

DEPARTMENT OF HEALTH

THE HONOURABLE R. H. MCCLELLAND, *Minister of Health*

J. W. MAINGUY, *Deputy Minister of Health*

N. S. WALLACE
Senior Financial Adviser

W. DIETIKER
Director of Data Processing

W. F. LOCKER
Director of Personnel

F. G. TUCKER
Consultant in Mental Health

J. S. BLAND
Consultant in Geriatrics

M. L. CHAZOTTES[1]
Director of Health Education and Information

COMMUNITY HEALTH PROGRAMS

G. R. F. ELLIOT
Deputy Minister, Community Health Programs

J. H. DOUGHTY
Acting Director of Administration

W. D. BURROWES
Acting Director, Division of Vital Statistics

H. J. PRICE
Comptroller

PUBLIC HEALTH PROGRAMS

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Associate Deputy Minister and Provincial Health Officer

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Director, Division of Environmental Engineering

L. M. CRANE
Director, Division of Public Health Nursing

A. A. LARSEN
Director, Division of Epidemiology

F. MCCOMBIE
Director, Division of Dental Health Services

R. G. SCOTT
Director, Division of Public Health Inspection

P. WOLCZUK
Director, Division of Community Nutrition

G. D. ZINK
Director, Division of Speech and Hearing

SPECIAL HEALTH SERVICES

J. H. SMITH
Director, Bureau of Special Health Services

W. J. BOWMER
Director, Division of Laboratories

C. E. BRADBURY
Director, Division for Aid to Handicapped

H. K. KENNEDY
Director, Division of Venereal Disease Control

L. D. KORNDER
Director, Division of Occupational Health

F. D. MACKENZIE
Director, Division of Tuberculosis Control

[1] Appointment effective August 16, 1976.

MENTAL HEALTH PROGRAMS

A. PORTEOUS
Associate Deputy Minister

H. W. BRIDGE[2]
Co-ordinator of Adult Psychiatric Services

F. A. MATHESON[3]
Comptroller

M. M. LONERGAN
Consultant in Nursing

MRS. F. IRELAND
Co-ordinator of Boarding-homes

R. S. MCINNES
Co-ordinator of Mental Health Centres

A. G. DEVRIES
Consultant in Psychology

J. B. FARRY
Consultant in Social Work

D. FERNANDEZ[4]
Planning and Research Officer

British Columbia Youth Development Centre
P. H. ADILMAN, *Director, Residential and Day Unit*
D. C. SHALMAN, *Director, Psychological Education Clinic*

Greater Vancouver Mental Health Services
J. D. KYLE, *Executive Director*

Burnaby Mental Health Services
W. C. HOLT, *Director*

Victoria's Integrated Services for Child and Family Development
A. KERR, *Acting Director*

MEDICAL AND HOSPITAL PROGRAMS

W. J. LYLE
Deputy Minister, Medical and Hospital Programs

HOSPITAL PROGRAMS

J. G. GLENWRIGHT
Associate Deputy Minister

P. M. BREEL
Senior Director

C. F. BALLAM
Senior Medical Consultant

A. C. LAUGHARNE[5]
Director, Hospital Finance Division

J. D. HERBERT
Director, Administrative Services

H. R. MCGANN[6]
Director, Hospital Consultation and Inspection Division

R. H. GOODACRE
Director, Research Division

G. F. FISHER
Director, Hospital Construction and Planning Division

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[2] Resigned effective September 15, 1976.
[3] Retired effective October 31, 1976.
[4] Appointment effective January 15, 1976.
[5] Appointment effective October 12, 1976.
[6] Appointment effective May 1, 1976.

Medical Services

G. A. Stewart[7]
Chairman

D. H. Weir
Chairman (pro tem.)

D. M. Bolton
Senior Medical Consultant

A. W. Brown
Executive Manager, Plan Administration

R. A. Munro
Director of Financial Services

Commissions, Etc.

H. F. Hoskin
Chairman, Alcohol and Drug Commission of British Columbia

D. H. Weir
Chairman, Emergency Health Services Commission

P. Ransford
Executive Director, Emergency Health Services Commission

F. G. Tucker
Chairman, Forensic Psychiatric Services Commission

J. Duffy
Executive Director, Forensic Psychiatric Services Commission

J. Bainbridge
Director of Government Health Institutions

A. A. Larsen
Chairman, Provincial Adult Care Facilities Licensing Board

M. Dahl
Chairman, Provincial Child Care Facilities Licensing Board

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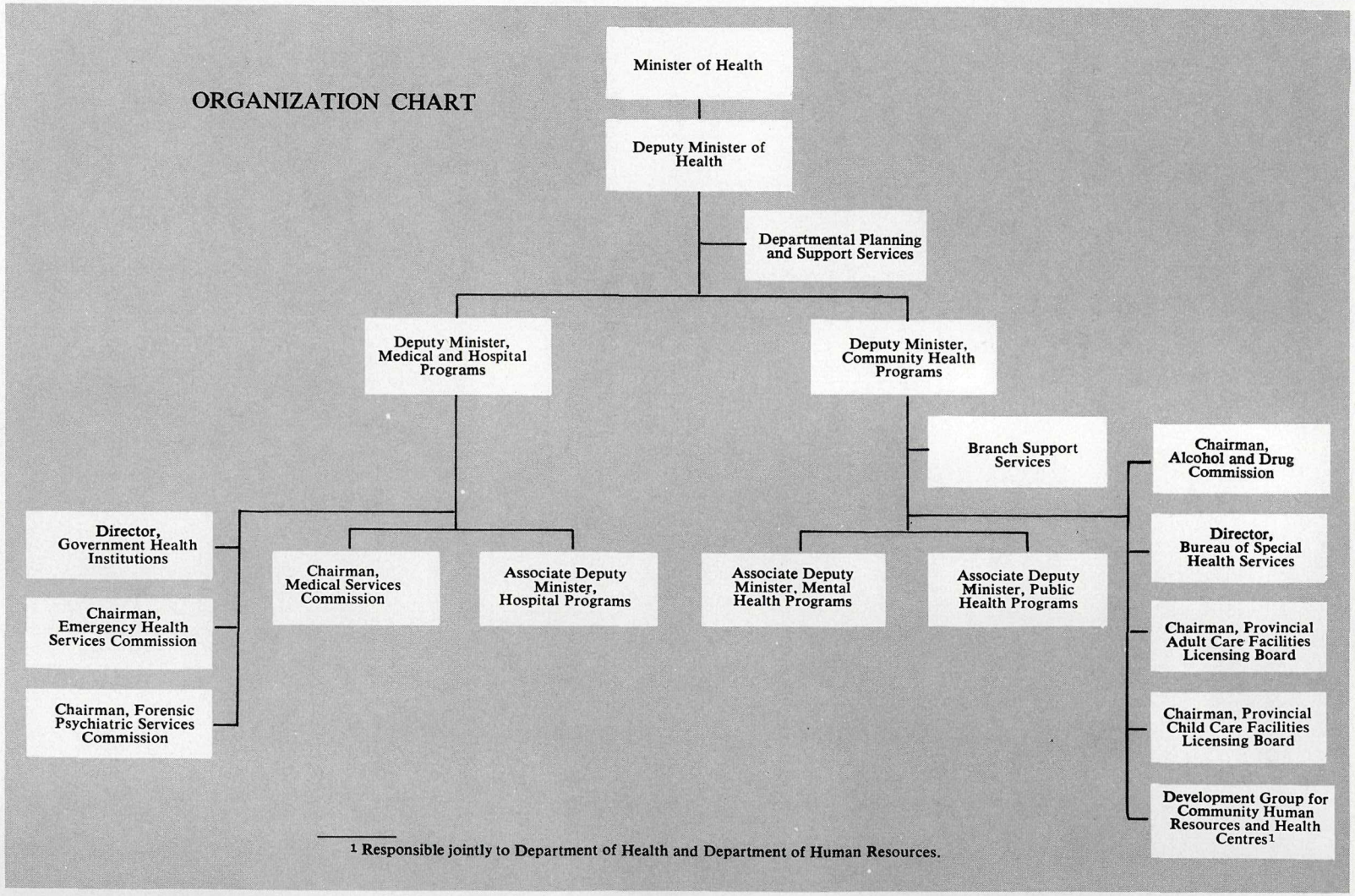
[7] On retirement leave effective June 4, 1976.



[1] Responsible jointly to Department of Health and Department of Human Resources.

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YEAR IN REVIEW

THE YEAR IN REVIEW

The year was one in which federal-provincial discussions paved the way for marked changes in the funding arrangements for medical and hospital care in Canada. In June, the Prime Minister of Canada presented a proposal to the provinces which offered annual cash payments and the transfer of tax revenue potential to the provinces, in lieu of Federal Government sharing of 50 per cent of the cost of medical and hospital programs in Canada. Under the proposed arrangement, federal funding would no longer be directly related to program cost.

In presenting the federal proposal, the Prime Minister pointed to some basic general conditions which provinces would have to meet to qualify for the federal funding, but emphasized that the arrangement would give provinces more flexibility in planning and in administering programs to meet their individual needs. However, it was clear to the provinces that the Federal Government would be transferring to them more financial risk should medical and hospital costs rise much faster than the growth of the economy.

By the year-end, the Federal Government and the provinces had concluded their discussions along the following lines: All provinces would agree to cancellation of their sharing agreements under the *Hospital Insurance and Diagnostic Services Act*. These agreements would otherwise have continued until 1980. The new system for financing medicare and hospital insurance would commence April 1, 1977. The federal contribution would be made up of approximately 50 per cent tax revenue potential and 50 per cent cash transfer. Under the cash portion, equal *per capita* grants based on federal contributions in 1975/76 would be escalated thereafter by a three-year moving average of the gross national expenditure *per capita*.

This new arrangement will bring to an end the form of sharing hospital care which has been in existence since 1958 and the sharing of physician services which started in 1968.

In addition to the above, the federal offer regarding sharing of costs for certain low-cost alternatives to high-cost care, which have been under discussion for some time, was replaced at the end of 1976 with a proposal to provide lump sums for this purpose in the block payments under the new financing formula. Services such as personal care, intermediate care, home care, and certain forms of ambulatory services were included in this proposal. Other aspects of health care could continue to be shared under the Canada Assistance Plan or other similar social service legislation. Discussions on this option were still under way at the year-end.

In the face of the economic pressures of rising health costs, the Government of British Columbia announced the first increase in medical insurance premiums since the beginning of the plan in 1965. Following the inauguration of the federal-provincial sharing arrangements in 1968, the medical plan had been able to build up reserves. In recent years these reserves had been depleted and additional funding was being required from consolidated revenue. The monthly premiums of $5, $10, and $12.50 for single persons, couples, and families respectively were increased to $7.50, $15, and $18.75. The rates of premium subsidy continued as before for those unable to pay full premiums.

Co-insurance charges for hospital care were increased for the first time since 1954, with a charge of $4 per day replacing the previous levy of $1 per day. Extended-care patients under 19 years of age were to continue on the $1-per-day co-insurance arrangement.

There were significant developments in the field of medical teaching. A future increase in the output of the medical school at The University of British Columbia

was announced. In connection with this development, the Minister of Health and the Minister of Education outlined a plan for the development of medical teaching facilities. In addition to a new 240-bed hospital on the campus, it was stated that more than $5 million will be spent on extra space for teaching medical sciences at the university and more than $13 million will go to provide interim teaching facilities at four Vancouver hospitals—Vancouver General Hospital, St. Paul's Hospital, Shaughnessy Hospital, and the new pædiatrics-maternity complex.

Administrative arrangements were set up to foster rapid completion of these facilities, both at the university and at downtown teaching hospitals. It was indicated that further funding would be provided in the future for teaching space at the downtown hospitals. This would be used for facilities forming part of the long-range planning of those hospitals.

A new financing approach was established whereby the Department of Education will contribute substantial funds to medical teaching facilities, both on the campus and downtown. Hitherto, such funds have been provided by the Department of Health and from the federal Health Resources Fund.

The campus hospital is to be a relatively unspecialized unit which will concentrate on teaching facilities for first- and second-year medical students.

The Minister of Health indicated in November that, after considerable review, new referral units for the Province for pædiatrics and for maternity should be provided side-by-side on the site of Shaughnessy Hospital. This project would consist of 200 pædiatric beds and 90 maternity beds. The units would be operated by the New Children's Hospital Society and the Salvation Army Grace Hospital respectively. The facilities would phase out the existing Children's Hospital, the Health Centre for Children at the Vancouver General Hospital, the Grace Hospital, and certain maternity beds at other hospitals.

Evaluation of the Community Human Resources and Health Centres at Houston, Granisle, James Bay (Victoria), and the Queen Charlotte Islands was commenced during the year. These centres, operating under local boards, seek to integrate and provide under a single administration a wide range of basic services, including social service, public health nursing, and primary medical care. The evaluation is to determine whether this form of organization is likely to provide results superior to the more traditional arrangement.

The audit committee is composed of six representatives drawn from the B.C. Association of Social Workers, British Columbia Medical Association, Registered Nurses' Association of British Columbia, The University of British Columbia, Department of Human Resources, and the Department of Health. The results of the audit will be completed for review in 1977.

To facilitate provision of integrated service, the Department has also assisted in developing small structures to house physicians and staff of various agencies providing health and social services. During 1976, units were completed at Lumby, Pender Harbour, and Mayne Island.

The approval of structures for the integrated housing of health and social service personnel was announced for Terrace, Prince George, Vernon, and Kamloops.

There was an expansion in the program and activities of the Forensic Psychiatric Services Commission during the year. In May a forensic clinic opened in Victoria, housed at the Victoria Mental Health Centre. Initially this is to serve southern Vancouver Island. In August a new forensic clinic opened in Vancouver to serve the Lower Mainland. This clinic incorporates the former unit situated at the Vancouver General Hospital. Both new units provide assessment, treatment,

consultation, and follow-up for the mentally ill offender who can be handled on an out-patient basis.

The hearing conservation program was expanded to cover 10 more centres in the Province, and this brings the number of areas now covered by the program to 15.

A vision care task force was established in September to plan for a co-ordinated vision care system for the population.

At the year-end, Government approval had been given for a program which will bring improvement in air ambulance service for patients who need it, and an extended training program for ambulance crews. The policy set out would include new ambulance fee schedules. One effect of the new ambulance policy will be to greatly reduce long-distance patient transfers by road and make air ambulance service available between the more remote areas of the Province and major treatment centres without heavy cost to the patient.

The new arrangement called for a Provincial dispatch office to be established at Victoria to co-ordinate and arrange all long-distance patient moves within the Province, whether by air or road ambulance. Decisions as to the most suitable means of transport will be made by the patient's physician in consultation with the Provincial dispatch centre. They will operate in co-operation with the existing Rescue Co-ordination Centre, which will continue to be involved in emergency mercy flights.

The year under review was the first in which Government-operated hospitals had functioned under the new organizational structure. There was a review of the roles of these hospitals with particular attention being directed to Riverview Hospital. The staff of Government hospitals have responded with gratifying results to the administrative changes, and senior staff are confident that administrative improvement will continue. Working arrangements between the hospitals and the Department of Public Works have been improved immensely over the past year.

On July 15, 1976, the Education Centre at Riverview Hospital was transferred to Douglas College, New Westminster. As more educational activities have been transferred from hospitals to educational institutions, centres such as this have tended to become under-utilized. It is expected that the transfer will provide Douglas College with badly needed facilities and at the same time provide a stimulating and co-operative arrangement between the hospital and the college.

Two organizational changes should be noted within the Department. Increased emphasis on health education and the dissemination of health information were reflected in the creation of a new Division of Health Education and Information in the Departmental support services. The new division incorporates the former Division of Public Health Education of Community Health Programs and the various information services in the Department.

As part of the general Government reorganization, the agency, Action B.C., was moved from having its primary contact with the Department of Health to a more direct relationship with the Department of Recreation and Conservation. This organization had considerable success in promoting the awareness of good health through activity and sound nutrition. It is expected that, notwithstanding the new organizational arrangement, the Department of Health will continue to work in close co-operation with Action B.C.

At the end of 1975 the Alcohol and Drug Commission had been transferred to the Department of Health from the Department of Human Resources. There were a number of developments relating to the Commission in 1976. In July the Narcotic Addiction Services, the Alcohol and Drug Counselling Services, and

the Youth and Family Counselling Services were transferred from the Vancouver Resources Board to the Alcohol and Drug Commission.

Government approval was given for a 30-bed residential treatment centre for the Lower Fraser Valley to provide an intensive therapy program.

A detoxification unit was approved for Maple Cottage on the Woodlands School site to serve South Burnaby, New Westminster, Surrey, Richmond, Delta, and Coquitlam. The initial capacity of this unit will be 20 beds with a potential for expansion to 35 or 40 beds.

Eighteen major hospital programs were completed or substantially completed in 1976, involving about $33.5 million in capital cost. At the year-end there were 4,320 extended-care beds with about 1,570 additional beds under planning or construction. Of these, about 500 new beds are expected to open early in 1977.

The number of days of care paid in public hospitals in British Columbia by Hospital Programs was reduced somewhat over 1975. In all, the estimated days of care were 3,371,036, a decrease of 42,594 days from the actual 1975 figure. The reduction in the days of care was in part the result of increased use of the Home Care Program, but another factor was a withdrawal of services from seven major hospitals by the Hospital Employees' Union, Local 180. The work stoppage in these hospitals ranged from a few hours to 16 days. Final resolution of the differences between the hospitals and the union was brought about by the passage of the *Hospital Services Collective Agreement Act* (Bill 75), on June 9, 1976.

The increasing use of the community mental health teams appears to have had a direct relationship with the lessening pressure of admissions to Government-operated mental hospitals.

With the exception of an increased incidence of gonorrhœa, there were no serious outbreaks of communicable disease in 1976, nor were there any major outbreaks of food poisoning. In the case of gonorrhœa, it was reported that a penicillin-resistant strain has been identified in this Province. This strain has been reported in three provinces of Canada so far and in a total of 11 countries.

The world-wide increase in malaria affected the Province and some 200 cases were diagnosed. For the most part, those affected were new immigrants or returning residents who had travelled to tropical countries.

Immunization programs against the so-called swine influenza were much in the public eye during the year. These programs arose out of concern over an outbreak of influenza in the United States in which a strain of swine influenza virus similar to that which caused the 1918/19 pandemic of influenza appeared to be indicated. The Federal Government arranged the purchase of vaccine from a number of countries.

Two types were purchased—a vaccine to provide protection against both the more common A/Victoria strain, as well as the A/New Jersey 76 (Swine Flu) strain; and a vaccine which would provide protection against A/New Jersey only. The policy in British Columbia was to proceed immediately upon receipt of the dual-purpose vaccine to immunize persons with chronic illnesses, as well as the aged. Commencement of the program for swine flu alone was to await confirmation of a further case of swine flu anywhere else in the world.

At the year-end the situation was as follows: The dual-purpose program had been carried out for the chronically ill and the elderly. It was halted pending investigation of a higher than normal incidence of Guillain-Barré syndrome (paralysis) in the United States, which the Surgeon-General there suggested might be linked to the flu vaccine.

The routine use of smallpox vaccine has been discontinued as this disease appears to have been brought under world-wide control.

The two leading causes of death both showed increases in mortality during the year. For heart disease, the deathrate was 262 per 100,000 population compared to 258 in 1975. Despite the increase, the 1976 rate is still well below the rates being recorded five or more years ago. The cancer death rate was at its highest for some years in 1976, a rate of 160 per 100,000 population being recorded. This was above the figure of 156 for 1975 and well above most rates of recent years.

While accidental deaths continued at a high level, an encouraging decline was shown in 1976. The rate was 74 per 100,000 population, down from 78 in 1975 and 86 in 1974. Within this category, 36 per cent of deaths resulted from motor-vehicle accidents, down from 39 per cent the previous year. The infant mortality rate in 1976 was down to 14.4 per 1,000 from a figure of 15.4 in 1975.

DEMOGRAPHIC FEATURES

The preliminary population count for the Province according to the 1976 Census was 2,406,212. This is subject to some slight upward adjustment when people enumerated at temporary addresses and living outside the country are added to the population counts at their usual place of residence. The final census population will still be somewhat below the estimated count for the Province and this will necessitate adjustment of the population figures for the inter-censal period 1972 to 1975. In turn, this will require recalculation of the vital statistics rates which will have been somewhat understated by the use of the higher population estimates.

On the basis of the preliminary 1976 census population count and revised estimates of the population from 1972 to 1975, the birthrate reached a low of 15.1 per 1,000 population in 1973 and has since increased to 15.4 in 1976. The 1973 rate represented the end of a period of almost unbroken declines in the birthrate, commencing in 1958, and was over 40 per cent below the record high of 26.1 for 1957. The 1976 rate was an increase over the figure of 15.1 for 1975.

From 1971 to 1975 the marriage rate per 1,000 population was unchanged at 9.3. However in 1976 there was a slight decline to 9.1. While this is still a relatively high rate compared to figures for the late 1950's and early 1960's, it is below most of the rates recorded in the 1940 decade.

The deathrate in recent years has fluctuated within very narrow limits after some fairly marked declines from the mid-sixties to 1970. It reached a record low of 7.9 per 1,000 population in 1973 and, after a rise to 8.2 in 1974 and a decline to 8.0 in 1975, there was a further decline this year to the low rate of 7.9.

The two leading causes of death both showed increases in mortality this year. For heart disease, the deathrate was 262 per 100,000 population compared to 258 in 1975. Despite the increase, the 1976 rate is still well below the rates being recorded five or more years ago. The cancer deathrate was at its highest point for some years in 1976, a rate of 160 per 100,000 population being recorded. This was above the figure of 156 for 1975 and well above most of the rates of recent years.

The gradual downward trend of the deathrate for cerebrovascular diseases continued in 1976, there being 79 deaths from this cause for each 100,000 population. This is well below the 1975 rate of 86, and also well below the rate of most recent years.

While accidental deaths continued at an excessively high level, the rate for 1976 showed an encouraging decline to 67 per 100,000 population from 78 in

1975 and 86 in.1974. Within this category, 38 per cent of the deaths resulted from motor-vehicle accidents, down from 39 per cent the previous year. The proportion due to falls was up to 19 per cent from 16 the previous year, while for drownings the proportion was down to 8 per cent from 9 in 1975. Poisonings and burns accounted for 10 per cent and 6 per cent respectively of all accidental deaths, the former figure being up from that for 1975, while the latter was unchanged.

The suicide rate was slightly lower at 16 per 100,000 population, an improvement over the higher rates of recent years.

The infant mortality rate in 1976 was down to 14.4 per 1,000 live births from the 1975 figure of 15.4. The most substantial decline was registered for infants from 1 day to 1 week old, but infants at ages from 1 week on also shared in the improved mortality rate.

COMMUNITY HEALTH PROGRAMS

Public Health Programs

Public health legislation in British Columbia dates back to 1869 when statutory authorization was given for a Provincial Board of Health. However, active administration of public health services in the Province by the Board did not get under way until the last decade of the 19th century. By 1946 the services had developed to the point where full departmental rank was warranted and in that year the Department of Health and Welfare was established.

Public Health Programs is now one of the two major administrative subdivisions of Community Health Programs (the other being Mental Health Programs) and is charged with providing a wide range of preventive, treatment, and environmental control services and with promoting positive health. These services are made available to the public through certain centralized facilities and a network of 17 local health units covering the non-metropolitan areas of the Province. Greater Vancouver and the Capital Regional District have their own health organizations, which are not under the jurisdiction of the Provincial Health Department, but which receive certain consultative and specialized services together with financial assistance from the Provincial Government. These two administrations collaborate very closely with the Provincial Health Department in disease prevention and control, and in program implementation.

Statutory support for the operation of Public Health Programs comes mainly via the *Health Act,* and pursuant regulations, and the *Public Schools Act.* These statutes confer powers on the Minister of Health, the local Medical Health Officer, and the local board of health for dealing with matters of public health. The local board of health may be either a municipal council (covering municipal areas which may also draw up additional public health by-laws), or a union of municipalities and school districts, to administer relevant sections of the *Health Act* or pursuant regulations in areas outside municipalities.

A review of the activities of Public Health Programs is presented on the following pages:

PUBLIC HEALTH PROGRAM HIGHLIGHTS

- Increased emphasis on health education and the dissemination of health information was reflected in the creation of a new Division of Health Education and Information in the Departmental support services. The new division, which incorporates the former Division of Public Health Education of the Community Health Branch, was given an immediate mandate to consolidate existing information services in the Department and to carry out a Province-wide study of health education needs.
- With the exception of an increased incidence of gonorrhœa, there were no serious outbreaks of communicable disease this year, nor were there any major outbreaks of food poisoning.
- The world-wide increase in malaria affected the Province, and some 200 cases were diagnosed. For the most part those affected were new immigrants or returning residents who had travelled to tropical countries.
- Arising out of concern over an outbreak of influenza in the United States caused by a strain of swine influenza virus similar to that which is thought to have caused the 1918/19 pandemic of influenza, a large-scale public program of immunization against influenza took place in the Province in the fall. Because of the limited supply of vaccine, it was offered only to chronically ill persons of all ages and to persons over 65.
- The routine use of smallpox vaccine has been discontinued as this disease appears to have been brought under world-wide control.
- While about 500,000 immunizations were carried out among the population during the year, some indications of a decline in immunization level point up the need for continuing promotional effort to maintain the general level of immunity to such diseases as diphtheria, tetanus, pertussis, rubella, rebeola, and poliomyelitis.
- The incidence of venereal disease continued at a high rate and it has been necessary to increase the activity related to contact tracing.
- In the field of environmental engineering, nine regions were established to replace the five regions in which service was previously based. Regional engineers were appointed in each region, thus increasing the service provided to the local health units.
- A publication, *Waterworks Systems Guidelines,* was issued during the year for the information of water system designers.
- In view of the increasing use of radiation-emitting equipment in the healing arts, the Division of Occupational Health intensified its surveillance of such equipment to ensure that radiation exposures are kept at safe levels.
- The introduction of disposable artificial kidneys makes it possible to reduce markedly the amount of time patients requiring kidney dialysis must spend on this procedure. Also, the quality of the equipment in use has been improved by the introduction of electronic components.
- About 15,000 expectant parents attended 685 series of evening or day-time classes provided by Provincial public health staff. Over 75 per cent of the classes had enrolment by both parents compared to 62 per cent in 1974.

- Integration of the services provided by the Victorian Order of Nurses in the Province with the public health nursing service was made complete during the year with the assumption of responsibility for VON nursing service in the Vancouver area by the Greater Vancouver Metropolitan Health Services.
- Home visits by public health nursing staff to persons over 65 years of age increased by 25 per cent in 1976.
- Home care programs continued to be available to over 90 per cent of the Province's population.
- Service from the expanded role of public health nurses was extended to a number of remote areas of the Province which lack full medical facilities.
- A reorganization of the former combined Fraser Valley and Skeena dental region into two separate regions resulted in better service being provided in these areas.
- In the field of nutrition information, special emphasis was placed on maternal and infant nutrition with the production of the *Infant Nutrition Guide* for professionals, a first in Canada.
- Substantial progress was made in computerization of the Division of Vital Statistics data processing operation and a terminal was installed to provide direct access to the Transport and Communications Department computer.
- Program plans for the health promotion-prevention focus of the community human resources and health centres were initiated during the year. An all-centre workshop and conference was held in the fall at Granisle for 40 board and staff representatives. An evaluation process has been implemented using a variety of approaches to monitor service.
- A vision care task force was established in the Province in September 1976 to plan for a co-ordinated vision care system for the population.
- An important addition was made during the year to the program of the Division for Aid to Handicapped. This involved the development of a work adjustment program at the Vancouver General Hospital to provide vocational assessment and work adjustment service to selected disabled out-patients at the hospital.
- Negotiations between the Department of Health and the Department of Education were concluded during the year and approval was given for co-ordination of service by speech therapists in the schools.
- An extension of the hearing conservation program to 10 more centres in the Province in 1976 brings the number of areas covered by the program to 15.
- New community health clinics were opened in Lumby, Pender Harbour, and Mayne Island in 1976.

COMMUNICABLE AND REPORTABLE DISEASE

Except for gonorrhœa, for which the reported incidence continued to increase, there were no serious outbreaks of communicable disease during the year. Only 11 cases of diphtheria were reported, compared with 51, 69, and 22 during the preceding three years. Also, no major outbreaks of food poisoning were reported during the year.

Infectious hepatitis, which is a highly cyclical disease, was at a low ebb this year, with only 745 cases reported, compared to over 1,800 cases five years ago.

Measles dropped from 1,149 cases in 1975 to 181 cases this year, and rubella from 476 reported cases in 1975 to 69 cases in 1976,

Almost 200 cases of malaria were diagnosed this year. Most of those affected were newly arrived immigrants or persons returning from visits to tropical countries. This is a reflection of the world-wide increase in malaria and serves to emphasize the fact that with increasing travel we are increasingly vulnerable to diseases that do not normally occur in this Province.

INFLUENZA IMMUNIZATION

Influenza vaccine first became generally available about 1960 and has since then been given routinely by many physicians to elderly persons and to patients with chronic illnesses.

This year, for the first time, British Columbia, in common with all the other Canadian provinces, planned for a large-scale public program of immunization against influenza because of an incident in the United States in the spring.

An extensive outbreak of influenza occurred at an army recruit camp in New Jersey. Although most of those who became ill were infected with the current A/Victoria strain of influenza virus, a small number were found to be infected with a type of influenza virus that is normally only found in swine.

Since there is good circumstantial evidence that a strain of swine influenza virus was the cause of the world-wide pandemic of influenza that took so many lives in 1918/19, the United States Government decided to offer immunization against swine influenza to everyone in the United States, at public expense.

The four American manufacturers, who normally also supply the Canadian market, were not able to manufacture enough vaccine to meet even their Government's order, which meant that no influenza vaccine was available for export to Canada this year.

The Federal Government approached other companies producing influenza vaccine in all parts of the world and were able to obtain about 13 million doses of unfinished vaccine in bulk form from Australia, Holland, France, Germany, and England. Two types of vaccine were purchased—one offering protection against the current A/Victoria strain of influenza virus, and the other against the A/New Jersey (Swine) influenza virus.

This imported vaccine was tested and made ready for use by the Connaught Laboratories in Toronto and the Armand Frappier Institute in Montreal, but because of the many technical difficulties that arose it was not ready for use at public clinics until mid-November.

Each province adopted a somewhat different approach to the use of these vaccines. British Columbia's program, which was generally the same as that in the other western provinces and Quebec, was to offer a combined or bivalent vaccine (A/Victoria and A/New Jersey (Swine)) only to chronically ill persons of all ages and to persons over the age of 65. A/New Jersey (Swine) influenza vaccine was also purchased and stored in Vancouver. The program called for this to be offered to healthy persons in the 20 to 65-year age-group if evidence developed that the A/New Jersey (Swine) type of influenza was recurring.

Both the American and Canadian manufacturers experienced a great deal of difficulty in producing a satisfactory vaccine for chronically ill children and no vaccine suitable for use in children was available in Canada during 1976.

About mid-December, American Public Health officials noticed that an unusual number of cases of Guillain-Barré syndrome seemed to be occurring in persons who had recently been vaccinated against influenza and the U.S. Public

Health Service temporarily suspended their national immunization program, while the significance of this observation was investigated and evaluated.

Although there did not appear to be a similar problem in Canada, several Canadian provinces, including British Columbia, also decided to temporarily suspend their vaccination program until more information became available from the United States.

TUBERCULOSIS CONTROL

The number of new active cases of tuberculosis again declined in 1976. Preliminary data indicate that 390 such cases were diagnosed during the year compared with 440 in 1975 and 464 in 1974. Approximately 80 per cent of these new cases were pulmonary tuberculosis, the remaining 20 per cent being divided among other systems of the body. The incidence of the disease continues to be higher in individuals born outside Canada and also in certain ethnic groups.

The number of beds available for the treatment of tuberculosis has again been reduced, reflecting the aims of the division to treat as many patients as possible at home if the situation is suitable and to discharge hospitalized patients when they cease to be infectious. These objectives have become feasible due to the availability of the new and effective anti-tuberculosis drugs.

During the year a great many of the stationary miniature X-ray machines located in health units have been taken out of operation. While these have been a convenience to the public, their productivity in discovering previously unknown cases of tuberculosis has fallen to a very low level. These machines also are quite old and, in some cases, the radiation levels have become unacceptable. Increasingly, the efforts of the division to further reduce the incidence of tuberculosis must be concentrated on ensuring good treatment of known cases and thorough investigation of contacts of these cases in order to prevent further dissemination of tuberculosis. For this, the division remains very dependent upon the local health units throughout the Province.

Some adjustments are being made in the relative responsibility of caring for Indian tuberculosis patients as between this division and the federal medical services in an effort to improve the treatment and follow-up of this group.

VENEREAL DISEASE CONTROL

Infections usually transmitted by sexual contact are called "sexually transmitted diseases" or STD. There are two different manifestations of these diseases, usually referred to as signs and symptoms. The first is a discharge, either from the male or female, the second is a skin lesion, or sore.

The discharges are by far the commonest signs and symptoms. The most prevalent infection in the male is non-gonococcal urethritis or NGU. The disease may have a long incubation period of one to four weeks, there being a serous urethral discharge. Unfortunately, the disease cannot be treated by penicillin. It is at least twice as common as gonorrhœa. Formerly, it was thought that the female was a symptomless carrier, but there is increasing concern that the infection can cause cervicitis and pelvic inflammatory disease, and may result in eye infections and bronchitis in newborn infants. As the causal organism has not been clearly established, there is no specific control program other than to offer treatment to the patient and to his sexual contacts.

Gonorrhœa, or infections of the urethra with the gonococcus organism, is the second commonest STD causing a discharge in the male. The incubation period is usually four or five days, starting with a burning pain on urination, followed a

day later with a urethral discharge. The methods of control have been to establish clinics in large centres, to require reporting of cases diagnosed by physicians and laboratories, and to offer contact tracing services. Although these were effective in the past, the current less-restrictive sexual morality prevalent in young single adults has resulted in more cases of this infection developing than can be dealt with by the available control procedures.

The more recent control concept has been to identify promiscuous females, and as the infection seldom produces symptoms in women, to examine them on a routine basis and provide treatment where indicated. Although this procedure may help to retard the spread of the infection, it too is inadequate.

Of the many control procedures that have been recommended, three deserve mention. Firstly, physicians are required to report infections they become aware of. However, as this offends the confidential doctor-patient relationship, such reporting is inadequate. The physician can avail himself of assistance in contact tracing from trained Health Department staff if he needs it. The second control method is to establish acceptable clinics for social diseases, mostly sexually transmitted diseases, and for the prevention of unwanted pregnancy, in major centres throughout the Province. This solves a problem whereby some people who find it difficult to go to their physician with a social problem will accept the anonymity of a special clinic, whether it is a V.D. clinic, a planned parenthood clinic, a street clinic, or a women's clinic. The third method is to establish diagnostic facilities readily available to every physician. Ideally this would mean doing a screening test for venereal disease on every woman having a pelvic examination, especially young single women age 15 to 30. This would result in the asymptomatic carriers being found and brought to treatment.

Other methods of control have been tried and found wanting. For example, a Zenith information telephone line for free calling in the Province has had few inquiries, and many of these are by pranksters.

Discharges in the female are also caused by yeast or monilia, a very difficult infection to treat, and also by infectious trichomonas. Both these infections may cause severe itching and they are more difficult to treat because of the current fashion of wearing tightly fitting clothes.

Syphilis is a common infection in the male homosexual group. The ease of travel between West Coast cities, and the organized methods allowing easy sexual contact, has allowed this infection to persist, whereas it has been well suppressed in the heterosexual population. The methods of control are the provision of diagnostic and treatment facilities in the larger centres, contact tracing and treatment of contacts, and the establishment of a good relationship of trust and confidentiality with both the patients and physicians who see many of these patients. There is an excellent screening program of blood tests on pregnant women, and anyone having a physical examination. Active male homosexuals are encouraged to have routine blood tests.

Many improvements have occurred in the division's operations. A third male nurse and a physician have been employed in the Vancouver clinic and a health educator has been taken on staff to assist in preparing educational materials to improve the dissemination of information about sexually transmitted diseases. The Vancouver clinic operates until 7.30 p.m., Mondays and Fridays, and is open from 10 a.m. to 1 p.m. on Saturdays. The Pine clinic and Water Street clinic are supported through the Vancouver City Health Department. Other clinics are located in New Westminster, Victoria, Kelowna, Kamloops, Prince George, Prince Rupert, Dawson Creek, and Fort St. John.

THE PUBLIC HEALTH NURSE AND DISEASE CONTROL

Both communicable and noncommunicable disease control received attention from public health nursing staff:

- Routine smallpox vaccinations were discontinued as this disease was brought under world-wide control.
- Immunization for diphtheria, tetanus, pertussis, rubella, rubeola, and poliomyelitis continued at the same level as the previous year; however, the general level of immunity in most areas decreased slightly.
- A promotional effort is required to increase immunity levels and to make people more aware of the continuing need for immunization protection.
- Approximately 500,000 immunizations and tests were given by public health nurses.
- An increasing amount of time was spent in contact tracing, and treating persons with venereal diseases.
- The amount of public health nurses' time required for tuberculosis control and for other communicable diseases decreased slightly.
- Cancer, along with diseases of the heart and circulatory systems, were the major illnesses of patients receiving nursing service on the home care program.

HEALTH AND OUR ENVIRONMENT

ENVIRONMENTAL ENGINEERING

The Division of Environmental Engineering employs 15 staff members; Director, Assistant Director, nine Regional Engineers, one technician, two full-time and one part-time stenographers. Five of the Regional Engineers are located in local health unit offices at Ladysmith, Cloverdale, Vernon, Prince George, and Cranbrook.

This specialized group of engineers is responsible for the approval of all waterworks used for domestic purposes, all swimming-pools except for backyard pools, and some small sewage-disposal systems. They provide engineering advice to the Medical Health Officers and their staff throughout the Province in connection with problems arising from water supplies, swimming-pools, sewage disposal, solid wastes, etc. They also offer their expertise to other Governmental agencies and municipalities, especially in the area of operator training and instruction.

Field Services

The team concept, whereby each field engineer related directly to an engineer at headquarters, which was started in 1974, has enabled the field engineers to become fully experienced in their duties and responsibilities. This concept was reviewed in 1976 and as a result of the study it was decided toward the end of the year to make a further administrative change and to assign every engineer in the division to a specific region of the Province. Nine regions were created from the five regions under the previous arrangement. The term "District Engineer" given to the five engineers located in the field was discarded and all nine working-level engineers were named as "Regional Engineers".

This new approach reduced the geographical area for all but two of the engineers. This meant that the health units were able to receive more time from their Regional Engineer. The Regional Engineers based in Victoria established a schedule of regular visits to their assigned health units and thus met the general needs for their field services.

Top priority was given to compilation of information concerning waterworks systems and obtaining samples of drinking-water for chemical analysis. The results of the chemical analysis were put into a data processing system for storage and retrieval. The Regional Engineers also gave a good portion of their time to visiting and assisting the operators of waterworks, sewage works, and swimming-pools; to site inspections of installations; and to consulting with municipal officials.

Description of Functions

A brief description of the basic functions of the division is as follows:

- *Waterworks*—Reviews for approval, submitted plans and specifications for domestic water systems, including private systems, utilities, improvement districts, and municipalities. Certificates of approval from the Department of Health are required before construction proceeds. This division has 859 recorded waterworks systems in the Province, up 99 from 1975. There were 710 certificates of approval issued in 1976, up 71 from 1975.
- *Sewage works*—Reviews for approval, submitted plans for public systems with flows under 5,000 gallons per day and not discharging into a watercourse. There were only two certificates issued in 1976, an indication of the relatively minor nature of this function.
- *Swimming-pools*—Reviews for approval, submitted plans, and specifications for all swimming-pools and auxiliary facilities to be built in British Columbia, except backyard pools to serve individual families. In general, compliance with the regulations ensures that physical safety and sanitation standards will be met. Once the construction of the pool has been completed, the jurisdiction for conformance with the regulations transfers to the local Medical Health Officer who is responsible for the issuance of an annual operating permit. There were 83 certificates for construction issued in 1976, a slight increase over 1975.
- *Sanitation*—Offers technical support to the Division of Public Health Inspection in the areas of septic-tank construction, tile for disposal fields, and package sewage-treatment plants.
- *Pollution control permits to discharge*—An inherent feature of the *Pollution Control Act, 1965* is the requirement that four other Government agencies review the applications for discharges prior to the issuance of a permit. The Environmental Engineering Division, on behalf of the Minister of Health, receives all applications for discharges to land and water, solicits comments from the local health authorities, and formulates a Departmental reply. Applications for permits to discharge solid wastes are also reviewed by the division.
- *Operator training (sewage-treatment facilities)*—As Co-ordinator of Operator Training for British Columbia, the Assistant Director of the division actively participates in the preparation and implementation of operator training and certification programs in British Columbia. The delivery system for operator training was available through the three following avenues:

(1) Preparatory training of eight months' duration is offered at Malaspina College in Nanaimo. A staff member of the division was a member of the College Advisory Committee.

(2) Workshops, seminars, and schools are offered through the Education Chairman of the B.C. Section, American Waterworks Association, who was also a staff member of the division. A five-day water and waste school for operators, co-ordinated by the division, was held in May 1976 and attended by 154 operators.

(3) Correspondence courses are available from other areas for wastewater personnel in British Columbia.

- *Operator certification*—Trained sewage-plant operators have been able to participate in the voluntary certification program established in 1966. This program has continued to be effectively handled through the Environmental Engineering Division.
- *Other training*—A one-day cross-connection control seminar was held in Kamloops to familiarize plumbers, water purveyors, and public health personnel with the hazards of cross-connections and the devices which are available to protect water supplies from these hazards. The usual large-scale training program for pool operators was not provided by the division this year. However, some health units offered a one-day course and used Regional Engineers to assist with lectures. Booklets on swimming-pool operation, prepared by the division, were distributed to those in attendance and are available on request.

In addition to their regular assigned duties, the staff offered assistance to a wide variety of other Government agencies and actively participated in specialized groups and committees.

Special Projects

Following a careful review of accepted waterworks standards, the division printed and distributed a publication entitled *Waterworks Systems Guidelines.* This publication is primarily useful to designers of waterworks systems who submit plans and specifications to the division for approval. Copies are available on request.

All fluoridation installations in the Province were reviewed by the division's technician or Regional Engineers. Reports have been made as a basis for future annual inspections.

Separate lists of approved prefabricated septic tanks and package sewage-treatment plants were compiled and distributed to all health units for their use as required by the Sewage Disposal Regulations.

Short Courses and Conferences

Members of the division attended a number of short courses and conferences which were helpful in their professional training and continuing education; staff members also co-operated in the provision of various short courses.

Annual Conference

The Engineering Division held its third annual three-day conference on October 6 to 8, 1976, to evaluate its program and priorities. Professional staff were given the opportunity to exchange information, discuss policy, regulations, procedures, and other matters of organization and operation.

PUBLIC HEALTH INSPECTION

The Division of Public Health Inspection plays a very active role in a wide range of activities in the field of environmental health.

Food Safety

The safety and protection of food served to the public continues to be one of the major concerns of Public Health Inspectors. The Food Premises Regulations are continuously under review for improvements; however, the major thrust has not been in the field of enforcement but rather to assist in improving the skills of food service workers through educational programs. Most of these activities have been concentrated on the Lower Mainland in co-operation with the Canadian Restaurant Association, and employees of both large and small operations have participated. The investigation of food-borne outbreaks has been updated by improved methods of reporting and through close co-operation with the Provincial Laboratory. The surveillance of microwave ovens in restaurants throughout the Province has continued with assistance from the Division of Occupational Health.

Regulations

The Mobile Home Park Regulations were rescinded by Order in Council, having served a very useful purpose prior to the formation of regional districts. The Department of Health still has authority under the Sewage Regulations and *Health Act* to control sewage and water installations.

Land Use

Involvement with the issuing of permits for private sewage-disposal systems and subdivision inspections are taking up 90 per cent of Public Health Inspector's time in several health units. In order to assist with this heavy demand for service, the Sewage Disposal Regulations were amended to permit Union Boards of Health to charge and collect fees for sewage disposal permits. The money collected will be used by the union boards to hire additional Public Health Inspectors. Four union boards, namely, South Okanagan, Central Fraser, Coast Garibaldi, and Central Vancouver Island, will participate as a pilot project.

The demand for housing is opening up many new subdivisions on Crown and privately owned land. The Public Health Inspectors' continued involvement in assessing land for both on-site sewage disposal and water supply is considered essential as a preventive health program.

Educational Activities

The Division of Public Health Inspection, in co-operation with the British Columbia Institute of Technology, completed the third and final module of a course on law for Public Health Inspectors. The course was very well received and tapes of the various lectures have been circulated to those who were unable to attend.

A four-day seminar for Public Health Inspectors was held in Prince George in February and included those from Skeena, Peace River, Northern Interior, and Cariboo Health Units. Both the Director and consultant from the division as well as a solicitor from the Attorney-General's Department and a representative from the Provincial Laboratory participated in the program.

The Department supported the National Educational Conference of the Canadian Institute of Public Health Inspectors in Vancouver by sponsoring the attendance of 16 Public Health Inspectors.

Personnel

This division has suffered an unusually high turnover of staff and it has been difficult to recruit suitable candidates for northern and Interior vacancies.

A general shortage of Public Health Inspectors appears to prevail throughout Canada. However, some improvement is anticipated inasmuch as the Public Health Inspectors' course at British Columbia Institute of Technology enrolled a first-year class of over 40 persons in 1976.

The Director of the Division of Public Health Inspection is one of the representatives for the Deputy Minister of Community Health Programs on the Advisory Committee for the Public Health Inspectors' course at the British Columbia Institute of Technology. He is also the Deputy Minister's representative on the Board of Certification of the Canadian Public Health Association and responsible for supervising the oral examination for those candidates wishing to become Public Health Inspectors.

The student training program of Public Health Inspectors has been extended from three to six months and the students are now required to submit five written reports to the Board of Certification, which accounts for 40 per cent of the students' marks.

DIVISION OF OCCUPATIONAL HEALTH

The Occupational Health Division provides a multi-disciplinary, comprehensive employee health service for public servants, acts as a consultative and advisory group to all departments of Government, performs certain services required of the employer by the Workers' Compensation Board (audiometric surveillance), monitors the use of ionizing radiation, conducts an extensive alcoholism rehabilitation program for public servants, and conducts a physical fitness program for public servants in the Victoria area. This division has five specialized areas of expertise, namely, medical, nursing, radiation surveillance, alcoholism rehabilitation, and physical fitness.

The medical team consists of four physicians, all of whom possess special training. Physicians in this division provide some direct medical care, but the major activities involve assessment of medical problems of employees with difficulty in performing their job, advising employing departments of the best rehabilitation or retraining program, and acting as liaison between attending physicians and employers. It should be emphasized that occupational physicians direct their efforts to the well-being of the individual employee and are neither labour nor management oriented.

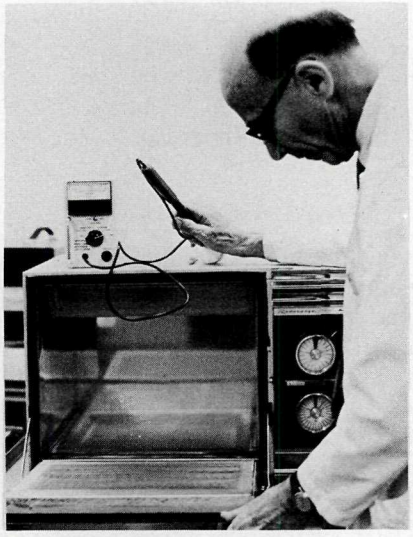
Advice on any particular health problem is made after a thorough medical examination, consultation with the employer, other medical attendants, and other involved parties such as the Workers' Compensation Board.

It is important that physicians continue to upgrade their basic knowledge and all physicians in this division have availed themselves of postgraduate training opportunities in 1975 in areas of specialty: industrial toxicology, aviation medicine, cardiac monitoring, and business administration.

Nurses in this division work closely with physicians in assessing employees with health problems. As well, they are intimately involved in the continuing follow-up of individuals referred to this division. It is a responsibility of the nursing staff to review the approximately 200 sick reports received weekly and to consult with the employer and private physicians if it appears a health problem might be job-related or job-aggravated. Also, the nurses are responsible for a good deal of the employee counselling on a wide variety of subjects, as well as conducting immunization pro-

grams, audiometric screening, pre-employment health screening, and health education. They also work closely with the alcoholism counsellors in the ongoing care of some employees with alcoholism difficulties.

The use of radiation in the healing arts continues to increase despite the paradox that the population is becoming more aware and concerned with various aspects of radiation and its potential to cause harm to man and his environment. This increase is most dramatically illustrated in the increase in dental X-ray tube heads, the number of which has doubled in the last three years. It has been noted that during the last two years there has been a marked improvement in the reduction of skin exposure to X-rays by patients during a dental examination. The primary cause is the dentist's awareness and a change in technical operating factors.



Commercial microwave ovens were checked for defects as part of the Radiation Protection Service's responsibilities.

The Radiation Protection Service carried out a survey of all photofluorographic (miniature) chest X-ray units in this Province in order to ensure that they meet present standards of operation.

The possibility of harmful effects to man exposed for extended periods of time to low-level microwave radiation is receiving increased attention. This concern does not apply to the occasional use of an in-the-home microwave oven, but rather to the commercial use of microwaves. The microwave survey program conducted by this Department covered 265 commercial units of which 10 per cent were leaking radiation well above recommended levels and 20 per cent were borderline or had other mechanical or electrical faults.

The activities of the Radiation Protection Service during 1976 are summarized as follows:

Radiation surveys (X-ray, radioisotopes, and microwave)	1,018
Consultations and visits	388
Talks and lectures	25
Radiation leak tests	511
Water samples checked for radioactivity	95
Air samples checked for radioactivity	68

The purpose of the Employee Development Services in this division is to provide a comprehensive Province-wide interdepartmental program to identify, diagnose, motivate, and refer for treatment troubled employees (problem drinkers) of the Public Service, in order to rehabilitate and return them to effective job proficiency.

This service has three closely related functions:

A. *Counselling* the troubled employee and (or) the family.

Alcohol and related problems identified—

Employees referred	109
Employees returned to satisfactory job proficiency	95

Other problems (drugs, marital, etc.)—

Employees referred	25
Employees returned to satisfactory job proficiency	25

B. *Training* for managerial, supervisory, and shop steward staff in the identification and referral of troubled employees (based on job performance). These seminars are usually a full day's program. An attempt is made to include the appropriate shop stewards.

Managerial, supervisory seminars—

Number of seminars	77
Number of attendees	1,503

Personnel Officer seminars—

Number of seminars	3
Number of attendees	90

Safety rally talks (2–3 hours)—

Number of employees attending	2,443
Number of sessions	12

General staff training—

Pearson Hospital employees	268
Number of sessions (ongoing)	21

Promotional talks (to acquaint the private sector with our Government program)—

Number of talks	6
Number of attendees	386

Consultation services in order to promote the program within the Government Service where the program is little known or to help it function more smoothly where it is already in operation. This also involves liaison with community treatment services.

Number of discussions	25
Number of attendees	60

The total number of Government employees interviewed this year was 4,690 or over one tenth of the Public Service. The estimated cost-saving through employees returned to satisfactory job performance is $237,000 (based on a minimum inefficiency rate of 25 per cent of personal earned income).

C. *Research services*—An attempt is being made to monitor the effectiveness of this program and to determine actual case penetration. It is too early in the

program to report actual data, but trends are appearing and they are highly encouraging.

The employee fitness program, now in its second year of operation, is staffed by a full-time Fitness Director, half-time nutritionist, and seven part-time exercise leaders. The program is designed to cater to the fitness and nutrition needs of Provincial Government employees in the Greater Victoria area. Educational and motivational information is provided, testing and counselling sessions are carried out, and individual and group exercise classes are available.

The physical activity centre in Victoria, opened in January 1976, and catered to 150 participants on a regular basis. Eight group exercise classes offered at other locations attracted another 150 people. Administrative assistance was provided to employee groups in the formation of inner-tube water polo, hiking, and weight-training clubs. These three clubs catered to 60 members. Fifteen to 20 people received nutrition counselling on a weekly basis, while a further 15 individuals had fitness testing and exercise counselling each month. Health and bicycle maintenance seminars are available on an ongoing basis. The bi-monthly newsletter and health fitness library are both available to Government employees throughout the Province. New services and activities in the fall of 1976 include strength fitness and aquatic fitness classes, a recreational activity group, and fitness testing. Plans for the near future include small exercise programs in three offices on an experimental basis and a dietary modification program for obesity control.

SPECIALIZED COMMUNITY HEALTH PROGRAMS

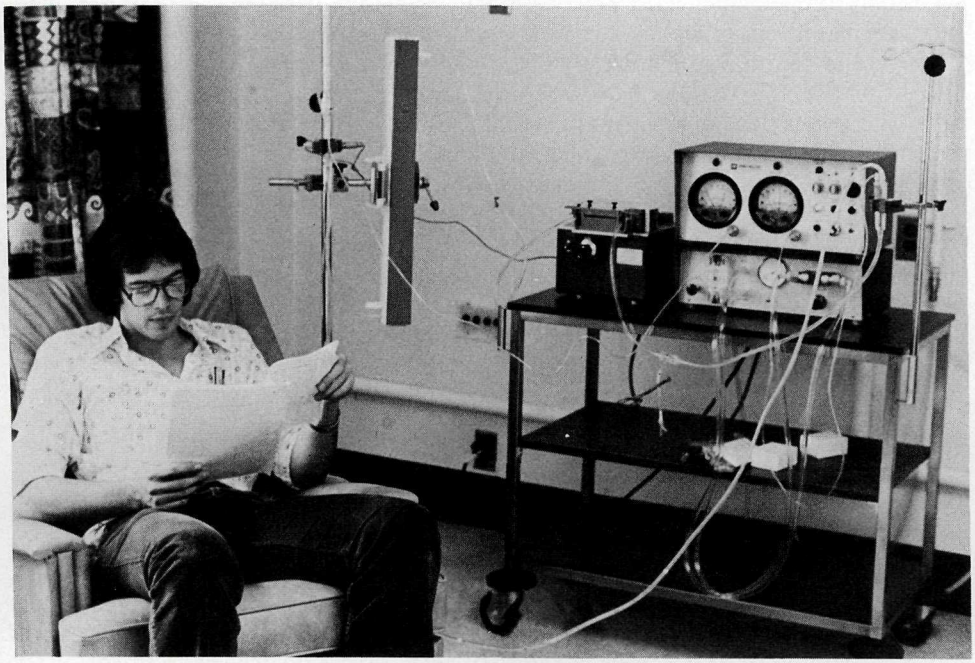
MEDICAL SUPPLY SERVICE

The Medical Supply Service operates a home care program for patients requiring special equipment. This includes patients with end-stage renal failure, hæmophilia, and Crohn's disease.

The number of patients with end-stage renal failure has stabilized at about 90 home patients. These patients are relatively well except that they require dialysis on a regular basis. This service provides the necessary equipment, supplies, and drugs to maintain the patients at home. There were 75 patients on blood dialysis at the end of 1976.

Two major improvements were made in the dialysis program during the past year. Disposable artificial kidneys which can be used an average of four times were introduced. They reduce the time on dialysis from an average of eight hours to an average of five hours, three times a week. The second change was in the quality of equipment, which was markedly improved with the introduction of electronic components. One patient has been provided with a portable machine so that he can travel as his job requires. The Kidney Foundation has purchased a motor home so that patients may take a holiday, taking their equipment with them, and the Medical Supply Service provides the supplies for patients using this home.

There were 15 patients on peritoneal dialysis at the end of the year and there have also been marked improvements in this service. Two patients were placed on automatic machines and five patients were placed on automatic cyclers. As peritoneal dialysis requires about 40 hours of dialysis a week, this automatic apparatus allows the patient to sleep during the process and therefore reduced the waking-time necessary for this treatment.



Disposable artificial kidneys are being used by increasing numbers of patients needing dialysis.

There were approximately 30 patients with Factor 8 hæmophilia on a home-treatment program in which the Red Cross supplies the cryoprecipitate while the Medical Supply Service supplies the intravenous administration materials. It has been found necessary to supply one patient with Factor 8 concentrate or "Hemophil". Although this is a very expensive procedure it is a way of controlling the disease when no other possibility exists. A program has been introduced to treat children up to their third birthday with "Hemophil" concentrate because the slow administration of plasma is very difficult for a baby.

There are approximately five patients with Factor 9 hæmophilia. This service previously supplied a concentrate for the use of these patients, but the Red Cross is now able to provide a concentrate prepared by Connaught Laboratories. As this does not come as a complete packaged unit it is still necessary for this service to supply the intravenous materials for its administration.

There are six patients with Crohn's disease who are provided with intravenous materials from this service. The treatment of this disease by intravenous feeding is a relatively new development and has not yet been adequately standardized. Some patients are fed through peripheral blood vessels and must use very dilute solutions. Other patients are fed by a centrally placed catheter into a blood vessel and can receive much more concentrated solutions. At the present time it is necessary to use sugar, protein, and fat solutions to which is added a variety of minerals and vitamins. This is a difficult procedure for a home patient as sterility must be maintained. Progress is being made toward the establishment of standardized procedures and solutions and, once this is accomplished, then most patients should be able to carry out this treatment at home.

Children on dialysis are not able to absorb sufficient food and therefore have inadequate caloric intake. A program was developed of supplying these children

with food supplements which must be low in protein, potassium, and sodium. This program has been extended during the past year to include children not yet on dialysis who also have this difficulty. It has been found that providing these food supplements before dialysis begins will likely improve their stature.

The major development that occurred in this service during the past year was the opening of a limited-care unit in the Willow Chest Centre in Vancouver. Patients who cannot dialyse at home because of lack of space or of someone to assist them can be dialysed in these limited-care facilities, provided they have the capability of assisting themselves. As the hospital renal units have continued to fill up it has been imperative to find alternative methods of getting patients out of the hospital. The number of home patients cannot be increased and these limited-care facilities have the capability of taking patients who could not otherwise go home. Once this capability is established as a method of increasing the facilities of these patients, then additional limited-care units will be opened throughout the Province.

MERCY FLIGHTS

The Department again arranged for "mercy flights" to transport seriously ill or injured persons by air to a hospital or other treatment centre. When such flights become necessary, available aircraft from a variety of sources may be called upon, including the Provincial Government, the Canadian Armed Forces, the Canadian Coast Guard, and, in special circumstances, the United States Coast Guard and British Columbia Forest Products Ltd. In each case a medical assessment of the need is made by a senior medical officer of Public Health Programs who also acts in a co-ordinating capacity between the patient's physician, the providers of the aircraft, and the receiving hospital.

In 1976, 387 mercy flights were made, an increase of 8 per cent over the 357 such flights in 1975 and an increase of 59 per cent over the 244 flights in 1974.

COMMUNITY CARE FACILITIES LICENSING BOARDS

Although the Minister of Health is ultimately responsible for the quality of care given in licensed care facilities for both children and adults, senior staff from the Departments of Health, Human Resources, and Education have for many years administered the *Community Care Facilities Licensing Act* for the Minister through the Community Care Facilities Licensing Board. This year a number of changes which have been planned for many years took place.

Two boards have been formed, a child care licensing board and an adult care licensing board, and are now meeting monthly.

The Ministers of the three departments involved have each appointed a community representative to each board.

Toward the end of the year new adult care regulations were adopted which reflect more fully the quality of care which the Government wishes the elderly people in the Province to have. New child care regulations are under preparation and will be ready next year.

The adult care board has been given the additional responsibility of developing proposals for long-term care (personal and intermediate care in the home or in a residence built for the purpose).

At the close of the year there were 514 adult care facilities and 1,249 child care facilities licensed, and applications have been received and are outstanding for 19 adult care facilities and 62 child care facilities.

The Provincial Adult Care Facilities Licensing Board has set up a pilot project to give basic St. John Ambulance Society training courses to certain operators and staff of adult care facilities.

A community care facilities nursing consultant has been added to the board's staff in Victoria.

The consultants made 17 visits to field offices in 1976 for consultation and workshops.

SPEECH THERAPY

Twenty speech pathologists are currently serving the needs of communicatively handicapped individuals in 18 local health units in British Columbia. While demands for such service exceed existing staff capabilities, emphasis has been placed on delivering quality treatment programs for speech and language handicapped clients.

Each health unit program has provided service to communicatively handicapped clients within a framework of standardized guidelines to assure effectiveness. While they are standardized, local health unit programs reflect the most pressing needs of local populations with respect to

(*a*) identification of handicapped population;
(*b*) evaluation and assessment;
(*c*) treatment;
(*d*) reporting;
(*e*) dismissal; and
(*f*) public information and education.

Extensive program data have been maintained at the Division of Speech and Hearing's central office covering referrals, assessment and treatment, case disposition, and treatment time.

An average of eight clients per month or 96 per year are referred to speech clinics in each health unit. Speech pathologists maintain an average of 32 clients on an active therapy case load providing 20 to 24 hours of treatment time per week. The number of client therapy sessions vary from one to three per week. When appropriate, other treatment procedures are used, such as home programs, parent/teacher programs, etc.

On the average there are about 42 children on the waiting-list for assessment, with seven awaiting treatment.

Speech pathologists in local health units have presented a variety of public information programs utilizing radio, television, and local interest groups. As well, they have provided in-service training with co-operating professionals.

During the year, negotiations between the Department of Health and the Department of Education were concluded and approval was given for co-ordination of service provided by speech therapists in the schools. Formerly, service was provided separately by the two departments and the new arrangement will result in more effective treatment.

HEARING CONSERVATION PROGRAM

During the past year the division's system of service delivery has been closely evaluated. The system demonstrated a high degree of success.

The audiology centres not only fit hearing-aids but deliver comprehensive hearing conservation services which range from the identification and rehabilitation of newborns with hearing impairment to the rehabilitation of senior and other

persons in need of hearing-aids. Persons who have been in need of services for years are now being identified and are receiving assistance. The results of a patient survey indicate a high degree of satisfaction with the service.

Contributing factors to this success are

(1) a high level of community and medical input through local advisory committees;

(2) co-ordination of services with public health personnel, schools, hospitals, and community organizations;

(3) low Governmental expenditure due to

(*a*) strict quality control of equipment and hearing instruments,

(*b*) standardization of critical systems procedures and reliance on scientific principles,

(*c*) ability to identify problems, and

(*d*) effective problem remediation.

Approval has been obtained for expansion of the program from the five centres presently in operation to 15. This will make possible considerable wider coverage of the Province when staffing is completed.

The audiology centres provide a comprehensive program aimed at preventing or overcoming hearing disabilities utilizing a team of health professionals. As a result, the public in five Provincial areas where the services are offered have become aware of the fact that hearing disability can be remediated. An important feature of the program is strict adherence to an accountable systems approach for

Province-wide calibration of audiometers was one of the numerous responsibilities of the Division of Speech and Hearing services.

each of the procedures from identification through remediation and prevention. While the establishment of such an approach is initially difficult, it provides the information needed to make adjustments which may be required in the program.

Reliance on established methods, principles, and recognized international standards are fundamental to the program and experience has shown that the systems and methods employed are successful and inexpensive in effectively servicing the hearing impaired.

VISION SERVICES

The purpose of the vision screening program is to enable children to have optimal visual function and maintain the ability to use their eyes together, comfortably and efficiently.

The pre-school years are critical ones in the development of a child's eyes. Visual defects such as strabismus and amblyopia (occurring in 4.5 per cent of children) can lead to permanent loss of vision in the affected eye if not corrected and treated at an early age, preferably before age 6 or 7. The importance of early detection and treatment of vision defects in this young age-group cannot be overemphasized.

Routinely, tests for visual acuity and stereopsis are being administered to all pupils enrolled in kindergarten or Grade I. As many pre-schoolers as possible are also being tested for visual acuity and stereopsis. This screening is carried out in day-care centres, nursery and playschools, and at health unit offices. Visual acuity testing is also carried out on pupils in special classes and those in Grades III, V, VII, and X as time permits.

The responsibility for ensuring an acceptable standard of care in the vision screening, referral, and follow-up of these children rests with the local public health nurses because of their specialized knowledge.

Consultative services are provided by a Provincial orthoptist to assist health unit staff in evaluating the vision program. This past year visits were made by the orthoptist to 10 health units and 11 branch offices involving nearly 200 public health nurses, health unit aides, and others assisting in the testing.

Each health unit has been sent a "learning module" for vision screening. The purpose of this module is to provide public health nurses with information required to carry out parts of the vision screening program relevant to their case loads.

In September 1976 a significant event in the field of vision care for the people of the Province was the establishment of a vision care task force. The task force, made up of ophthalmologists, optometrists, physicians, and educators will attempt to prepare plans for a co-ordinated vision care system for the people of British Columbia. This task force will examine the functions of various vision care personnel and vision care requirements on a regional basis. The co-ordination of vision services has the potential to improve quality, comprehensiveness, accessibility, efficiency, and economy of the entire system.

COMMUNITY HEALTH CLINICS

Community health clinics are designed to house a number of Government agencies such as health unit services, Human Resources facilities, and probation services in one building to assist the public in obtaining easier access to social services. This innovative approach is now being considered in any new building projects undertaken in local communities by the Department of Health.

During 1976, new community health clinics were opened in Lumby, Pender Harbour, and Mayne Island. Construction of such facilities at Terrace, Prince George, Valemount, Vernon, and North Kamloops is planned to be commenced in 1977.

COMMUNITY PUBLIC HEALTH NURSING SERVICES

Many disciplines make up the public health team which provides services to people in their homes, their places of work, their schools, and their communities. However, the one discipline usually most visible and the one which works most directly with the majority of the residents is the community health nurse—the public health nurse and the home care nurse. She is a primary health care worker concerned with people of all ages, in all social and economic levels, with all types of health needs in every community of the Province. She is concerned with individuals and communities in health and in illness.

Through her, many of the consultant services of other public health specialists such as the health educator, the nutritionist, and the audiologist are delivered and interpreted directly to people in their own homes. Emphasis is on health promotion, early identification of potential health hazards or problems, referral for treatment, and then follow up, rehabilitation, and promotion of individual or family responsibility for care. Services are family centred with each individual being considered in the context of his family and community life and relationships. Participation in voluntary health and other agency activities, in total health planning for the community, in promotion of projects related to changing life-styles and improved health and social services are all a part of the community nurse's normal activities.

The year 1976 has been a difficult one for public health nurses, who faced increasing demands from the public for more of the public health services which have been helpful to them. There has been a complete re-examination of programs in all areas, a review of priorities and modifications in the methods of delivery in order to maintain high-quality care while still providing services to meet major public health needs. Statistics reflect these changes and although certain programs show a reduced service, most areas of the Province have maintained and even extended services to high-risk, high-priority groups in perinatal, infant, pre-school, and geriatric programs.

In line with a redefinition of health needs in rural areas, some nurses are now working an expanded role in certain areas of the Province which have limited medical facilities.

Integration of the service formerly provided in the Province by the Victorian Order of Nurses was made complete in 1976 with assumption of responsibility for VON nursing service in the Vancouver area by the Greater Vancouver Metropolitan Health Services.

MATERNAL AND CHILD HEALTH

Perinatal

A high level of interest in perinatal education has been built up over a number of years through the persistent efforts of public health staff working in conjunction with physicians and other concerned groups and individuals.

- Expectant-parent education is reaching more people every year.
- Approximately 15,000 expectant parents attended 685 series of five or six evening or day-time classes provided by Provincial public health staff, and requests for further classes could not be met.

- Classes consisting of discussion and exercises were attended by expectant mothers and fathers, single parents and adopting parents, each concerned regarding his and her future family.
- Over 75 per cent of the series had both parents enrolled as compared to 62 per cent last year.
- Over 41 per cent of all expectant mothers attended classes and a large per cent of the remaining group had attended classes during previous pregnancies.
- Public health nurses presented prenatal education on television programs and on home visits in an attempt to reach more expectant parents.
- Many volunteers, both professional and nonprofessional, were used to assist the nurses with large classes.
- Enthusiastic new parents in many areas returned following the births of their babies for further group sessions in postnatal care and infant growth and development.

Infant and Pre-school

Emphasis was continued on programs related to infants and pre-school children. Home and clinic visits, health appraisals, screening procedures, and health protection measures were used to identify potential or early health problems, to promote physical and emotional health and good nutrition patterns, and to facilitate treatment where required.

- Approximately 99 per cent of all newborn babies were seen at least once in their own homes for general health assessment and parent counselling.
- Over 82 per cent of all new infants attended child health conferences.
- Home visits and special services, e.g., screening tests, physical appraisals, etc., for pre-school children increased slightly from the previous year.
- Many pre-schoolers were seen in nursery schools and day-care centres where public health nurses gave health supervision to children and consultation to operators.

School

Identification of health hazards and individual problems and a strong program of health promotion continued in schools.

- The public health nurses worked closely with teachers and special school personnel to identify at-risk children and provide assistance to children with special needs.
- A high concentration of time was spent with kindergarten pupils in order to prevent later health problems from developing.
- Hearing, vision, and developmental screening programs were carried out at appropriate grade levels and on all children referred or those with special needs.
- Individual student counselling assumes a more important and time-consuming role each year, especially in secondary schools.
- Group discussions on a variety of topics provided contact with students of all ages and opportunities for productive health promotion.
- The public health nurses continued to provide liaison between the homes and the schools and worked with families and teachers where continuing care and assistance was required.

FAMILY, ADULT, AND GERIATRIC SERVICES

Public health nurses continued to provide a wide range of family health services, including health supervision, general counselling, care for those with special illnesses or problems, health promotion, and programs to meet the special needs of the elderly.

- Adults with special conditions, e.g., diabetes, cardiac or kidney ailments, arthritis, received special attention from both home care and public health nurses.
- Geriatric clinics for the elderly provided assessment and supervision opportunities as well as a social outlet.
- Home supervision of many elderly was provided and arrangements for additional care were made when required.
- Group discussions involved many adults in health education activities related to obesity, fitness and exercise, nutrition, smoking, accident prevention, and other health subjects.
- Home visits to persons over 65 years of age increased by 25 per cent to 152,227, excluding home care visits.
- Special adult clinics were held routinely in all areas to provide injections and immunizations for those requiring them.
- Personal care and boarding-homes were visited regularly providing consultative help to operators and supervision for residents.
- Mental health was emphasized and promoted in all contacts with individuals and families and as part of every program being offered.
- Follow up of attempted suicides, group work with "Parents in Crisis," work with individuals under emotional or mental stresses, etc., was carried out by public health nurses.
- Over 12,000 visits involved mental illness and 1,545 visits were made to retarded children or adults.

HOME CARE PROGRAMS

The home care program provides treatment and care in the homes to persons who would otherwise be in acute hospitals, other institutions, or would be inadequately cared for at home. The needs of the patient are assessed by the Home Care Co-ordinator with the patient's physician and the services required are supplied by public health nurses, home care nurses, and physiotherapists, or purchased or obtained from other community agencies by the public health unit. These latter services include homemaker, dietitians, social workers, medication, equipment, and transportation.

- Patients are admitted to a home care program on referral from their physicians.
- Services, in some areas more comprehensive than others, are available to over 90 per cent of the Province's population.
- Full "hospital replacement services" in home care are available in 22 areas (serving approximately 80 per cent of the population) and provide at no

cost to the patient all the services required by him during the period he would otherwise have been in hospital.

- These costs as well as all nursing and some physiotherapy services to all home care patients are paid by the public health programs of the Department of Health.
- All home care program costs in the Greater Vancouver Metropolitan area are paid completely by public health programs.
- The home care services of the Victorian Order of Nurses in the Greater Vancouver metropolitan areas were taken over by the official health departments in those areas on October 1, 1976. For the most part the former VON staff transferred to these agencies.
  - Approximately 35,000 patients were admitted to the home care programs in the Province in 1975.[1] This was an increase of 43 per cent over the number for 1974 and there was an increase of 45 per cent in the number of nursing visits.
  - In addition to homemaker, physiotherapy, nutrition, meals-on-wheels, social work, medication, and other services, these patients received almost 500,000 professional nursing visits.
  - The average cost per patient-day for patients receiving home care in lieu of hospitalization in 1975 was $16.42. On the average, patients were included in the program for 9.7 days for a total average cost of about $160.

COMMUNITY PHYSIOTHERAPY SERVICES

Physiotherapy service was available during 1976 in 10 Provincial health units. This service was provided by the equivalent of 11 full-time physiotherapists and included both preventive and treatment services.

The community physiotherapy services are being developed in the health units to provide a full range of physiotherapy and associated services relative to the needs of the area. The program has four major features:

(1) *Treatment service*—Provided under the home care program to patients in their home setting.

(2) *Consultative/advisory service*—For patients, families, physicians, community health nurses, and the community at large. Under this aspect of the program, service is offered in the form of general assistance and referral in such matters as diagnosis and treatment, provision of equipment, and establishment of community health programs.

(3) *Preventive services*—Wherein the physiotherapist participates in community programs such as scoliosis screening, homemaker training programs, and physical fitness in schools.

(4) *Maintenance and follow-up*—Provides an ongoing audit of the patient's level of independence and function within the community.

During 1976, about 10,500 direct physiotherapy treatment services were given under the home care program. Some 2,000 of these treatments were rendered under the comprehensive hospital replacement day home care program, which covers a full range of support and professional services to the patient.

[1] Home care program statistics for 1976 are not yet available.

DENTAL HEALTH SERVICES

By year-end the staffing of this division had greatly improved and comprised eight dental officers, 14 dental hygienists, and 25 dental assistants. Also during the the year it was possible to reorganize the heavily populated former combined Fraser Valley and Skeena dental region into two separate regions called Fraser Valley and Boundary and Skeena regions, each now having populations rather similar to the other four dental regions of this Province. However, it must be recorded that the present staff of dental auxiliaries is only approximately half that required to provide effective dental health programs in all school districts served by the Provincial health units. Therefore, it is the current policy to carry out effective programs in selected school districts or parts of them, rather than to have ineffective programs with a larger geographical coverage. To recruit and train competent staff to provide total coverage is expected to take several more years.

The effectiveness of these programs has been well documented by results in the Okanagan region, where such programs were first initiated. For example, in this region during the period 1967/74 the dental decay rate of permanent teeth was lowered by approximately 20 per cent and the average number of permanent teeth prematurely extracted for the 15-year-olds had been cut by approximately one third.

To upgrade the competence of all staff engaged in these programs the second Dental Health Institute, a one-week in-service training program, was held during the past year. Topics presented and freely discussed included program planning, personnel management stressing job descriptions and appraisals, classroom instruction, and standardization of dental inspections. A new feature this year was a presentation by each regional team of an effective innovation to the dental health programs developed by themselves.

The three-year-old birthday card dental programs continued to operate in 46 of the 66 school districts served by the Provincial health units. By this program some 9,000 young children received from their family dentist an examination and counselling at no direct cost to the parents. These children represented 56 per cent of all those to whom cards were mailed by the local health unit. Acceptance was highest in the Okanagan region at 84 per cent, where there is a good ratio of dentists to population and experienced staff to carry out telephone follow-up for non-responders. The lowest in acceptance rate was in the Kootenays at 45 per cent, where neither of these conditions pertained.

In the school dental health programs carried out by the dental hygienists and dental assistants, close to 90,000 children received dental hygiene instruction in the classroom and, of these, some 50,000 took part in one or two lessons on tooth-brushing, using a specially prescribed fluoride paste. Each received as a present a new toothbrush used during their participation.

Dental health programs in schools and health units of Greater Vancouver and of the Capital Regional District continue to operate effective dental health programs, assisted by grants-in-aid from this Department. In addition these past three years, the Department has funded a summer dental clinic at the Dental School of the University of British Columbia. Patients are pupils of Greater Vancouver and the Lower Mainland requiring much needed and extensive dental care. Treatment and counselling is provided by senior dental students and dental hygiene students under the supervision of members of the Faculty of Dentistry. This summer, 1,275 children benefited from this clinic. The value of the services provided is conservatively estimated as more than twice that of the grant provided.

During the year the fleet of mobile dental clinics was again increased by two, to a total of six. The dentists staffing these units visited 33 communities without a

resident dentist and completed treatment for over 4,000 patients on a fee-for-service basis. The Prince Rupert dental facility was leased to a new dentist, approximately 1,800 patients having been treated in this facility during the past year. In addition, the College of Dental Surgeons of British Columbia has provided and equipped a dental clinic at Kaslo, and engaged a dentist for this grossly under-serviced area; this is in addition to the facilities they continue to operate at Masset, Queen Charlotte City, and Mackenzie, the latter now having the services of two dentists. It is a pleasure also to be able to report a considerable increase this past year in the total number of dentists located in the Kootenay region, which now has a ratio of one dentist to every 2,543 persons there resident.

However, there are wide disparities in the dentist-to-population ratio in the Province, with the ratio being as low as one dentist to every 1,280 people in the Greater Vancouver area, although it is likely that many other residents of the Lower Mainland also utilize the services of these dentists. For the total population of British Columbia the ratio is one dentist to every 1,620 residents, an annual improvement having been evident the past eight years. However, in recent years there has been a very marked increase in the number of persons in this Province covered by group dental insurance plans. It is currently estimated that approximately 35 per cent of British Columbians now so benefit and in addition there are certain categories of welfare recipients along with armed services personnel and native Indians for whom dental services are provided. In some communities this situation has resulted in a severe strain on the available dental services.

The oral cytology program has operated since 1969 with the co-operation of the British Columbia Cancer Institute and the College of Dental Surgeons of British Columbia, who issue cancer diagnostic kits to each dentist newly registering in this Province. In the period 1969–75, a total of 1,896 smears was submitted to the institute for diagnosis. No less than 34 cases, a ratio of 1:56, were confirmed as having been derived from early cancerous lesions.

To evaluate the dental health status of the children of British Columbia, Province-wide dental surveys have been conducted in the years 1958–74 and have demonstrated a steady improvement in the dental health of those children. This past year a new, more sophisticated and computerized methodology has been developed in co-operation with the Research Section of the Division of Vital Statistics. It is planned that in 1977 this methodology will be carried out Province-wide on a random sample of all children of specific age-groups and in sufficient number to provide statistically significant results.

HEALTH EDUCATION AND INFORMATION

Prior to the development of this new division in the summer of 1976, health education had been the responsibility of Public Health Programs, and information service functions had been performed by various individuals throughout the Department. In the interest of efficiency and expanded operation, the decision was made to combine both functions into a Departmental service, and the Division of Health Education and Information was formed in August with the appointment of Maurice Chazottes as Director. Administrative reorganization of staffing and equipment to meet the division's new responsibilities was well under way at the close of the calendar year. In the summer, considerable progress was made in the reorganization by the division of the Department's various library facilities for books, periodicals, and films. The division planned to work in close collaboration with the Legislative Library and the Library Development Commission to establish a compre-

hensive central library for the Department as a whole, providing one of the major sources of reference in public health specifically, and health care in general. The central library will be located in the new health services building in Victoria.

Division staff continued to provide a basic audiovisual service, with slide-tape packages, videotape dubbing, and literature and colour photography being produced throughout the period of transition. The third series of 13 "Senior Chef" programs for television was completed by the end of the year, employing an improved format of linked 15-minute segments instead of half-hour shows. This major project was undertaken in conjunction with the staff of the Nutrition Division.

Audiovisual workshops were conducted by division staff in various health units, and at BCIT for second-year students in the Environmental Health class.

In public relations, the division was actively associated with several projects. Among the most significant were the influenza immunization campaign and publicity relative to the expanded program for medical students. The division has acted in a consultative role in the preparation of several manuals and handbooks for various sections of the Department of Health and associated commissions.

NUTRITION SERVICES

The science of nutrition is an evolving one, so priorities in nutrition must constantly be evaluated.

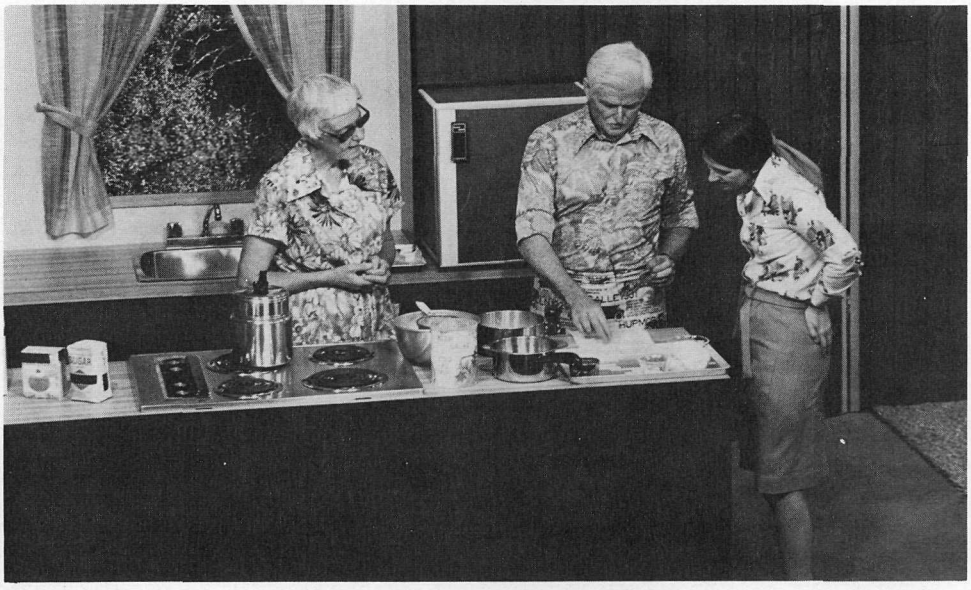
Throughout the past year the nutrition consultants endeavoured to provide public health nurses, teachers, and other professionals involved in nutrition education with up-to-date, pertinent nutrition information and teaching materials.

In the field of maternal nutrition, a slide-tape series containing two slide tapes suitable for prenatal classes and a third for updating professional knowledge was introduced through nutrition workshops. A major accomplishment was the completion of the *Infant Nutrition Guide* for health professionals and an adaptation of this guide for parents. A 16-mm film, "Why Nutrition," was produced to stimulate pre-school teachers to include nutrition education activities in their programs. Class plans entitled "Having a Happy Heart" and stressing the role of nutrition in the prevention of obesity and cardiovascular disease were developed for teachers of all grades. The much demanded pamphlet *How to be a Good Loser* has been revised to become *The Fat Fighters Handbook* and now emphasizes increased physical activity, change in life-style, as well as calorie restriction in weight reduction.

Sound nutrition information has been made available to the general public through such methods as the Nutrition Buyline column, now carried by 50 newspapers throughout the Province. Television will be used again to reach senior citizens with the filming of a new 13-program series of the "Senior Chef." A new cookbook will also accompany the series.

In-service nutrition education programs for public health nurses were presented at the local level. The consultant staff presented 11 individualized workshops, primarily in health units where nutritionists are not located. Often these health unit visits included meetings and workshops with such groups as physicians, home economics teachers, pre-school teachers, and dieticians.

In the six health units with nutritionists on staff, public health nurses received nutrition education on a regular basis. Even though in some instances the community nutritionist's position has been in existence for less than two years, her role as an educator is well established. Medical associations, community colleges, adult education groups, schools, recreation centres, weight-reduction groups, for example, rely on her assistance. The community has also quickly learned that she is a source



Production and Nutrition Division staff discuss culinary details for opening sequence of new series of "Senior Chef" TV shows.

of reliable nutrition information. She often appears on local radio and television programs and is asked to submit newspaper articles. Libraries and bookstores seek her advice before purchasing nutrition publications.

A major portion of the nutritionist's duties involves participation in ongoing health unit programs. These include assisting nurses in prenatal and infant nutrition classes, counselling at-risk pregnant women, helping patients to follow their therapeutic diets at home, and assisting community care facility operators with their food service.

Highlights of specific programs in the six health units with nutritionists are listed below. These demonstrate the nutritionist's role in providing nutrition information and education, and her participation as a member of the preventive health team.

Boundary Health Unit

There was establishment of a good liaison between the health unit and local physicians and hospital dieticians. Increased referrals of at-risk pregnant women were noted so that nutrition counselling was given to an average of 25 women per month.

Central Fraser Valley Health Unit

A nutrition education program was developed for use in pre-school and day care centres. As a member of the local pre-school nutrition committee, the nutritionist had direct contact with parents and teachers who influence children's food habits at this early age.

Simon Fraser Health Unit

A nutrition component was provided at clinics for 3-year-old children. The objectives of the nutrition component are to assess the child's weight for height, evaluate the child's food intake, and to provide supportive information to the parents so that the child can develop positive food habits.

South Okanagan Health Unit

The unit was involved in school feeding programs. Non-nutritious foods have been replaced with nutritious foods in vending-machines and school canteens in the Kelowna area. A nutrition education program for students and meetings with teachers, principals, school board officials, and vending-machine suppliers were required to bring about this change.

South Central Health Unit

This unit organized and implemented adult nutrition education programs. This includes a seven-lecture series on nutrition and physical fitness to be offered to the general public by the local community college. Other sessions designed for specific groups, such as occupational health nurses, job trainees, hospital staff, and employees of local industries have been offered.

Cariboo Health Unit

Participation in health programs was offered to native Indians, which includes classes in prenatal and infant nutrition and assistance in planning meals, snacks, and nutrition activities for the day care centre. Resource material was also supplied to the medical service nurse.

VITAL STATISTICS

The Division of Vital Statistics continued to administer the *Vital Statistics Act,* the *Marriage Act,* the *Change of Name Act,* and the *Wills Act* (Part II), as well as to provide a centralized statistical service to community health programs and certain voluntary health agencies.

REGISTRATION SERVICES

There was a further substantial increase during 1976 in the volume of all types of certificates issued by the division.

The total number of registrations also increased substantially. While registrations of births and deaths showed an increase, marriages declined slightly.

There was a substantial increase in the number of divorce orders registered.

The sharp increase in numbers of adoption orders registered was due in part to late registration of orders made in the previous year.

Registrations of wills notices maintained their long-continued upward trend, reflecting the increasing use of the facilitative provisions of Part II of the *Wills Act.*

Table 7 shows the numbers of main types of events registered and documents issued under the specified Acts in 1975 and 1976.

BIOSTATISTICAL SERVICES

Substantial further progress was made in the major task of computerizing the division's entire data processing operation, which was commenced in 1974 by the Computing and Consulting Services Branch, Department of Transport and Communications. A terminal linked with the central installation was installed in this division in the fall. The operation of the terminal will replace the use of the division's obsolescent IBM unit record equipment as rapidly as the necessary computer systems can be designed and programmed.

The Health Surveillance Registry (previously the Registry for Handicapped Children and Adults) received 11,816 reports of disabilities, congenital anomalies, and genetic disorders during 1976 from numerous sources of ascertainment. From these, 8,786 new cases were recorded, and 3,030 reports provided additional information concerning cases previously on file. This was a substantial increase in ascertainment over previous years and was due in most part to the co-operation of the Department of Human Resources in providing for the registration of handicapped adults through its Health Care Division.

Computer systems and programming of registry records, with the exception of the Cancer Register, were completed in 1976, an analysis of the case load to year-end 1974 was developed and reported from statistics and data supplied through use of computer facilities.

For several years, follow-up information on the condition, activity, and special needs of register cases has been obtained by means of annual surveys of registered children aged 7 and 14 years. The results of these surveys provide a basis for estimating the Province's rehabilitation needs.

Several research papers based on registry data were accepted for publication. Research staff provided the statistical services to registry consultants and also to nondepartmental researchers and agencies in connection with health related studies.

During the year the registry's medical and genetic consultants were active in international committees and symposia on subjects related to the work of the registry. These included conferences on such topics as the epidemiology and etiology of birth defects, psychological and social implications of developmental disabilities, comparison of teratogenesis, mutagenesis, and carcinogenesis; the classification and taxonomy of syndromes, monitoring systems, and the use of registers in morbidity studies.

The Cancer Register is a specialized unit within the framework of the Health Surveillance Registry. The register receives notifications of live cases of malignant neoplasms from hospital pathology laboratories, private physicians and the Cancer Control Agency, while information on cases of cancer ascertained at death is derived mainly from the Division of Vital Statistics registration system.

The Cancer Register provides a definitive source of annual Province-wide statistical data on the incidence of malignant neoplasms.

The registry's cancer consultant rendered invaluable assistance in interpreting pathology reports and determining their diagnostic classifications as well as in maintaining contact with hospital pathology departments.

Close collaboration was maintained with the Cancer Control Agency of British Columbia, and also with the British Columbia Cancer Society and The University of British Columbia's Department of Health Care and Epidemiology.

A statistical report on cancer incidence, prevalence, and mortality in British Columbia, 1969 to 1973, was completed with the help of a grant from the Cancer Control Agency.

Statistics of the 1974 case load of women screened under the cytology screening program of the Cancer Control Agency of British Columbia were analysed.

The division continued to be actively involved in the work of the perinatal program of British Columbia. Two research officers of the division, one as a member of the Program Executive Committee and one as the consultant, contributed special reports and statistical advice to the medical members of the committee.

Statistical advice and data processing services were provided to the Division of Dental Health Services. Dental surveys were undertaken in two Greater Victoria

public schools to assess the reliability and validity of the newly revised criteria and examination techniques for recording dental health.

The division continued to share in the responsibility for processing mental health statistics. Pending completion of the new information system which is in process of development, patient records are being processed through the use of SPSS (Statistical Package for Social Sciences).

One of the division's research officers continued to represent community health programs on the Provincial Metric Conversion Co-ordinating Committee. A metric conversion committee for community health programs was formed during the year for the purpose of overseeing and co-ordinating the implementation of metric conversion as it affects various divisions of the Public Health and Mental Health Branches.

Development work continued on the computerized record linkage program which was recently initiated by the division. The project involves the linkage of British Columbia vital and health records into individual and family histories, to provide data for health research.

The division's research section became increasingly involved in health program evaluation. The evaluation of the parent study group behavioural program in the Courtenay area, initiated in 1975, was completed in the fall of this year, and the results presented in one of the division's special report series.

Evaluation of a smoking education program for Grade VI and VII students undertaken by the South Okanagan Health Unit was initiated, and data collection was completed before the end of the year. Data collection for the evaluation of the family asthma program in Kelowna was also initiated in the spring and will be completed in 1977. This program is sponsored jointly by the Health Department, the B.C. Tuberculosis Christmas Seal Society, and the Kelowna General Hospital.

The division continued to co-operate with the Department of National Health and Welfare in the maintenance of a National Surveillance System of Congenital Anomalies. Lists of congenital anomalies ascertained from physician's notice of births and from death and stillbirth registrations were submitted to Ottawa throughout the year, and assistance was given in the critical examination of the resulting data.

The division maintains a register of all known cases of tuberculosis and selected nontuberculosis chest diseases, as well as files of new active TB cases and contacts to these cases. The computerization of these files was completed, and the tables required for the annual report on tuberculosis were generated by computer, using the Statistical Package for Social Sciences.

Assistance was given to the Division of Speech and Hearing in designing and undertaking a pilot project for the collection and processing of speech and hearing data.

Services were provided to the Divisions of Epidemiology, Venereal Disease Control, Environmental Engineering, Public Health Nursing, Public Health Inspection, and to the G. F. Strong Rehabilitation Centre, in the mechanical processing of records and statistical consultation.

AID TO HANDICAPPED

The Division for Aid to Handicapped conducts a service which includes a wide variety of rehabilitation measures mainly designed to assist the handicapped to become competitively employable. These services are provided under the terms of the *Vocational Rehabilitation of Disabled Persons Act* (Canada) and Agreement, through which the Federal Government reimburses the Province for 50 per cent of the costs incurred. The major types of service are medical and vocational assess-

ment and, subsequently, the provision of such items as prostheses and wheel-chairs, and of academic and vocational training programs designed to help prepare the handicapped person for gainful employment.

During 1976 an important addition was made to the program of the division. The development of a work adjustment program was initiated at the Vancouver General Hospital through which vocational assessment and work adjustment services are provided to selected disabled out-patients of the hospital. The program is under the direction of a Program Co-ordinator and counsellor who, with the co-operation of the hospital management, the union concerned, and the staff of the hospital, have made it possible for accepted patients to engage in actual, useful work in the hospital, under direction. The division not only participated in the planning and development of the program but also made available a substantial part of the salaries of the two professional staff members.

It is gratifying to report that the vocational orientation for the deaf program, which was put into motion three years ago with the assistance and co-operation of the personnel of Vancouver Community College, Manpower, and the Department of Education, continues to be highly successful in preparing and training the deaf and hard of hearing for gainful employment. This program continues to be the only one of its kind in Canada. The possibility of developing a somewhat similar program for the blind, who have some special and unique needs that have never adequately been met in Canada, is being explored.

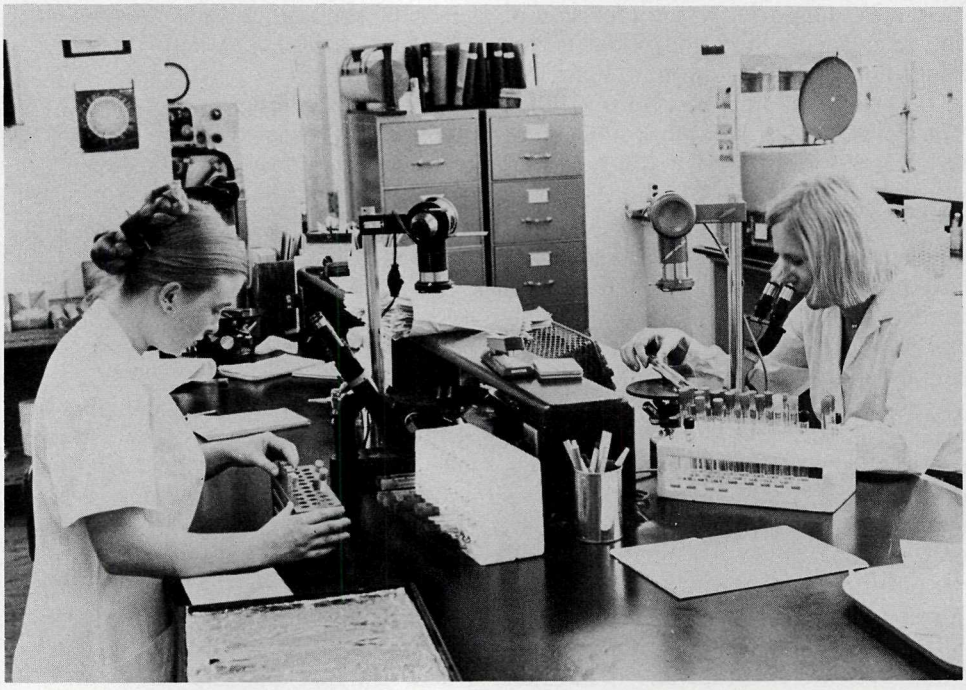
Plans for maintaining active liaison with the resource boards and areas of Vancouver are in an advanced stage and it is anticipated that this will result in a substantial improvement in services to the handicapped in the Vancouver Metropolitan region.

There were some problems during the year associated with recruiting adequately trained staff for vacancies created by retirements and resignations. This is a reflection of the fact that, to date in Canada, there are no full-time courses at the university level to train vocational rehabilitation personnel. Over the past several years the division has recruited staff from applicants with relevant, associated training and experience and has then given them intensive in-service training under senior supervision in the Vancouver office of the division. All newly recruited professional personnel are required to complete a minimum six-month in-service training program before being permitted to undertake responsibility of an area or region in the field. This necessity to provide in-service training initially causes delays in filling field vacancies.

The division wishes to acknowledge the valued co-operation of other Provincial Government departments such as the Department of Education and the Department of Human Resources, the Federal Department of Manpower and Immigration, and the many voluntary agencies in the Province.

LABORATORY SERVICES

The role of the Division of Laboratories is to provide public health laboratory services for the diagnosis, investigation, and control of community diseases and for amelioration of the environment. These services to physicians, hospitals, and other branches of Government include bacteriology, environmental microbiology mycology, parasitology (and tropical medicine), virology, and related immunology and serology with quality control. To maintain the necessary skills in these fields, the Provincial Laboratories are constantly involved in clinical, research, and teaching commitments.



Volume of tests performed by the Provincial Laboratories totalled 638,800 in 1976, compared with 637,300 the previous year.

In addition to performing routine laboratory procedures, the Provincial Laboratories act as the medical microbiology reference and referral centre for British Columbia, provide consultative services for physicians and agencies, and collate and report laboratory information on the epidemiology of incidents of community disease.

The work load of the Division of Laboratories increased less than 1 per cent between 1975 and 1976. In Table 9, the numbers of tests performed in 1976 at the main laboratories and the branch laboratories in Nelson and in Victoria are compared with the corresponding numbers for 1975. Increases in work performed occurred in examinations for intestinal parasites (21 per cent) and virological investigations (3 per cent). A decrease occurred in enteric bacteriology (9 per cent).

BACTERIOLOGY SERVICE

Diphtheria

Between 1956 and 1967, only 15 cases of diphtheria were identified in laboratories in British Columbia. From 1968, diphtheria became resurgent, reaching a peak in 1974 with 355 laboratory-diagnosed cases. The number of cases declined to 83 in 1976.

Enteric Diseases

The number of specimens submitted for culture for *Salmonella, Shigella,* and enteropathogenic *Escherichia coli* (ECC) decreased by 9 per cent. First isolates from 807 persons included *Salmonella,* 388; *Shigella,* 168; EEC, 301. The 338 strains of *Salmonella* belonged to 43 types. The most common isolated from human sources were *S. typhimurium* and *S. typhimurium* var. Copenhagen (85),

S. san diego (53), *S. heidelberg* (38), *S. saint paul* (30), *S. infantis* (20), and *S. thompson* (18). *S. mbandaka, S. stanleyville,* and *S. indiana* were isolated for the first time in British Columbia. Six cases of typhoid fever were confirmed bacteriologically. During 1976, *Salmonella* was isolated or confirmed from 100 nonhuman sources, including chickens, turkeys, cattle, horses, dogs, pigs, lobster, duck, iguana, horned toad, fish, fish meal, environmental swabs, and cooked ham and turkey. Of the 21 types identified, the most common were *S. typhimurium* and *S. typhimurium* var. Copenhagen (23), *S. infantis* (16), *S. saint paul* (16), *S. san diego* (7), *S. thompson* (6), and *S. agona* (6).

The 168 strains of *Shigella* included *Sh. sonnei* (85), *Sh. flexneri* (73), *Sh. boydii* (5), and *Sh. dysenteriæ* (5). The most common enteropathogenic E. coli (EEC) were 026:K60 (B6), 56; 0128:K67 (B12), 41; 018:K77 (B21), 39; 0126:K71 (B16), 33; 0111:K58 (B4), 31; 0125:K70 (B15), 25; and 055:K59 (B5), 22.

Food Poisoning

During the investigation of 167 incidents of suspected food poisoning, 242 specimens were cultured. Food poisoning organisms were isolated in 18 incidents: *Staphylococcus aureus,* 11; *Salmonella,* 4; (*S. san diego* (2), *S. saint paul,* and *S. typhimurium*); *Clostridum perfringens; Bacillus cereus;* and *Bacillus subtilis.*

One incident of clinically diagnosed paralytic shellfish poisoning occurred in Kitimat when four persons fell ill with nausea, vomiting, cramps, and muscle weakness after eating fresh cockles. In two incidents, strychnine was demonstrated by the Vancouver City Analyst in a bottle of rye whiskey and heavy metal was detected by the Federal Food Laboratory in canned orange and grapefruit juice.

Immunofluorescence

In 1976 the direct immunofluorescence test was introduced for confirming the identification of cultures of *Neisseria gonorrhœæ.* Immunofluorescence tests were also used for confirming the diagnosis of syphilis, toxoplasmosis, and streptococcal infections.

Mycology

Dermatophytes were isolated from 460 specimens of skin: *Microsporum,* 79; *Trichophyton,* 336; *Epidermophyton,* 45. The three most common dermatophytes were *T. rubrum,* 232; *T. mentagraphytes,* 87; and *M. canis,* 77.

Tuberculosis

In 1976 the number of tests relating to the diagnosis and control of tuberculosis remained much the same as in 1975. At the request of the Division of Tuberculosis Control, strains of *Mycobacterium tuberculosis* were tested for their susceptibility to rifampin as well as to streptomycin, isoniazid, and ethambutol.

WATER MICROBIOLOGY

In the spring the Department of Environment and the Department of Health introduced a new service for the chemical and bacteriological analyses of private water supplies to determine their suitability for domestic use. In five months, coliform tests were carried out on 211 water samples. In consultation with the Computing and Consulting Services Branch and the Environmental Laboratory, Water Resources Branch, a new computerized laboratory requisition and report form was developed for use in recording, storing, and retrieving the results of tests on public water supplies.

TROPICAL AND PARASITIC DISEASES SERVICE

The Tropical and Parasitic Diseases Service provided advice on the diagnosis and treatment of tropical and parasitic diseases acquired by travellers and immigrants returning to or entering Canada.

INTESTINAL PARASITES

The number of fæcal specimens examined for parasites increased by 20 per cent from 18,318 in 1975 to 22,001 in 1976. The numbers of helminthic and protozoan parasites identified showed a dramatic increase from 1,300 in the five-year period 1956–60 to 20,400 in the five-year period 1971–75. This increase reflected the exposure of Canadian travellers to parasites and to increased immigration from tropical countries.

Malaria

The number of blood films examined microscopically for malaria parasites increased from 194 in 1975 to 440 in 1976. Of the 177 patients with malaria parasites in peripheral blood films, 165 (94 per cent) were identified as *Plasmodium vivax,* five as *P. malariæ,* and five as *P. falciparum*

Serology

Specimens from 862 patients were sent to reference laboratories for serological diagnosis of a variety of communicable diseases. In 20 per cent of the tests, positive results were obtained, including visceral larva migrans (18), amœbiasis (13), filariasis (12), echinococcosis (8), schistosomiasis (7), trichinosis (3), malaria (3), and trypanosomiasis.

Exotic drugs, not available commercially in Canada, were supplied for treating 53 patients with trichuriasis, filariasis, malaria, schistosomiasis, amœbiasis, and trypanosomiasis.

VIROLOGY SERVICE

The 368 viruses isolated or identified serologically were influenza, parainfluenza, and respiratory syncytial viruses, 93; adenoviruses, 8; mumps and measles viruses, 11; rubella virus, 18; enteroviruses, 20; herpesvirus, 212; mycoplasma, 5; not yet identified, 1.

Herpes Simplex

Herpes virus was isolated from many patients with genital lesions. With current sexual freedom, an increasing number of these infections were seen in VD clinics and by family physicians. Although usually self-limiting, herpes virus may cause congenital anomalies or fœtal death in pregnancy.

Influenza

Epidemic influenza appeared in January 1976. Most cases were caused by influenza virus type A/Victoria; a number of localized outbreaks were, however, caused by influenza virus type B.

RETIREMENT

Miss M. C. Reid retired after a lengthy and satisfying career. She was supervisor in bacteriology sections from 1948 to 1976.

BRANCH LABORATORIES

Following the death of Miss Marjorie D. Petavel, Technician-in-Charge, Nelson Branch Laboratory, the laboratory was closed pending the appointment of a suitable replacement. Miss Petavel worked for 31 years in the Division of Laboratories and from 1955 to 1976 in Nelson, where she became known for her outstanding service to the community and to public health workers in the Kootenays.

The Victoria Branch Laboratory at Royal Jubilee Hospital continued to provide good service on contract to the Capital Regional District.

DELIVERY SERVICE

With the introduction of a delivery service in January 1976, first to five health units, then to 14 and, finally, to all units outside the Lower Mainland, the transportation of specimens to the main laboratory and the return of reports was speeded up, leaving few areas in the Province without overnight public health laboratory service.

COMMUNITY HUMAN RESOURCES AND HEALTH CENTRES

The community human resources and health centres project is jointly supported and financed by the Department of Human Resources and the Department of Health. The development group, responsible to the Minister of Health and the Minister of Human Resources, provides a link between the two departments and the four community human resources and health centres. The six group members, functioning as an interdisciplinary team, are responsible for providing consultation and information to the two Ministers and their departments, regarding policy and its implementation, and management and monitoring services to the centres to assist them in meeting their objectives.

The over-all objectives of the project are to provide community involvement, integration of services, and a health promotion and prevention focus.

1. Community Involvement

The four centres (James Bay (Victoria), Houston, Granisle, and Queen Charlotte Islands) each have an elected board of 10 to 15 members. The boards have statutory responsibility for providing social services, public health nursing services, and mental health services in their respective communities. Each board has hired a co-ordinator to administer the centre and together the board and co-ordinator have been successful in providing facilities and staff to meet their responsibility.

The total operating budget for the centres' 1976/77 fiscal year was $1,179,474, and the Department of Health portion was $926,693. Each board and co-ordinator negotiate with the development group their budget based on their core services and the centre's priorities.

2. Integration of Services

The community's public health nursing and human resources staff, employed by their respective departments, have been seconded to the centre. The exceptions are James Bay and Granisle, where the public health nursing staff are "attached."

Of the total staff, approximately one third have been seconded and the rest board-hired. Integration in each centre provides a common administration for all staff, responsibility to one board, and common objectives for multidisciplinary team functioning.

The basic services integrated in each centre include social and public health nursing services and primary medical care. Each centre has also included services to meet their community's particular needs and interests, e.g., in

Houston—Psychological services, manpower, and volunteer services have been integrated.

Granisle—Continued attempts to obtain dental services.

James Bay—Community school, volunteer services, Manpower outreach, probation, and homemaker services are included.

Queen Charlotte Islands—Four separate service locations, dental services, physiotherapy, senior citizen visiting, and meals-on-wheels are provided.

3. Health Promotion and Prevention Focus

Each centre has been busy initiating program plans with this focus. An all-centre workshop-conference, with 40 board and staff representatives, was held in Houston/Granisle in the fall of 1976. Participation in sessions focused on "health promotion," "volunteerism," "team functioning," and "management."

Granisle is involved with environmental concerns in Topley Landing; Houston initiated a health fair; James Bay works with day care, family life programs, a drug program, and experience in human life-styling; and the Queen Charlotte Islands are working on youth preventive programs and alcoholism.

Evaluation

An evaluation process with a four-pronged approach has been implemented:

(1) Audit Committee of six representatives from the British Columbia Association of Social Workers, British Columbia Medical Association, Department of Human Resources, Department of Health, Registered Nurses Association of British Columbia, and University of British Columbia, School of Business Administration:

(2) Data from the project's information system and other agencies and institutions:

(3) Consumer and community survey:

(4) Service monitoring by the Department of Health, Department of Human Resources, and development group.

ACTION B.C.

During 1976, Action B.C. again took major strides toward its goal of promoting awareness of good health through activity and sound nutrition.

At the Pacific National Exhibition over 9,000 men, women, and children participated at the Department of Health display. To supplement the Canadian Home Fitness Test and the children's obstacle course at this display, a new and important component was introduced, namely, the computerized nutritional analysis. Based on a 24-hour recall of food intake, in less than five minutes an individual received a print-out telling him the adequacies or inadequacies of his daily diet.

Nutritionists were on hand to counsel and recommend on the results. This pilot project, both popular and worth while, has led Action B.C. to do the necessary work to extend the program to large numbers of people and cover a time period up to one week for an in-depth study of the public's diet habits.

The daily physical education program which was started in two schools in Prince George was increased to 17 schools in that district and Action B.C. has initiated or has given support to similar projects in Revelstoke, Nanaimo, Dawson Creek, and Abbotsford. Other school districts are becoming actively interested and are making plans to use Action B.C.'s experience in developing their own programs. The testing program for the Lower Mainland schools, started last year, continued under the guidance of Action B.C.

Acting as a catalyst and motivator on the industrial scene is a main concern. Advanced activity leadership training with a select volunteer group of Cominco employees will ensure the longevity of that project. Many hospitals throughout the Province have sought assistance in initiating fitness and recreational activities for their staff. Another step toward personal well-being for health professionals has been the Royal Columbian School of Nursing activity program run by Action B.C. as a regular and mandatory part of the students' curriculum.

Health units and their staff continue to be a very important link between Action B.C. and the public they serve throughout the Province. It is hoped that the in-service training and testing with presentations of activity and meal planning will expand to include all units in the forthcoming year.

In addition to the specific programs outlined above, Action B.C. has participated in a great many community events and conferences which have provided a forum to bring a message of position life-style change to thousands of people, both public and professional.

COUNCIL OF PRACTICAL NURSES

The British Columbia Council of Practical Nurses, under the authority of the *Practical Nurses Act,* has completed 12 years of its mandate under this Act. The 10 members of the Council are appointed by Order of the Lieutenant-Governor in Council on the basis of nominations by the

- Minister of Health (two members);
- College of Physicians and Surgeons of B.C. (one member);
- Registered Nurses' Association of B.C. (two members);
- Minister of Education (one member);
- British Columbia Health Association (one member);
- Licensed Practical Nurses' Association of B.C. (three members).

Since its inception, 85 general meetings of the council were held, as well as a great many standing and special committee meetings. During council meetings over the years, 13,465 applications for licensure were received; the disposition of these is given in Table 10. Consideration was given to graduates of college and hospital programs in the Province and to a large number of applicants from outside British Columbia and Canada. Of these, licences were issued to 381 British Columbia graduates and to 256 applicants trained outside the Province.

While the responsibility for the preparation, administration, and marking of Provincial practical nurse examinations was transferred to the council in 1975, a further step was taken in 1976 with completion of a contractual agreement with the

Canadian Nurses' Association testing service for the use in British Columbia of their national examinations. This will make it possible to use regularly updated examinations and increase the "portability" for licences to other provinces in Canada.

This year council accepted the first year of the nursing program at Douglas College as being equivalent training to that given in other colleges for practical nurses. This now makes it possible for students in their program to take advantage of a progressive or "ladder" approach to nursing training.

VOLUNTARY HEALTH AGENCIES

The Ministry of Health continued to give financial support to a wide range of voluntary health agencies. In general, these agencies cater to persons suffering from chronic debilitating conditions who have special needs beyond the scope of health services routinely available, and to certain disadvantaged socioeconomic groups in the population. Over $2.5 million in grants was awarded to these agencies for the 1976/77 fiscal year.

Table 1—Reported Communicable Diseases, British Columbia, 1972–76

(Rate per 100,000 population)

	1972		1973		1974		1975		1976	
	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate	Number of Cases	Rate
Amœbiasis	1	0.1	.....	.....	2	0.1	1	0.1	1	0.1
Brucellosis	.....	.....	.....	.....	.....	.....	1	0.1	.....	.....
Diarrhœa of the newborn (*E. coli*)	60	2.7	29	1.3	52	2.2	49	2.0	52	2.1
Diphtheria	11	0.5	51	2.2	69	2.9	22	0.9	11	0.5
Dysentery, type unspecified	72	3.2	34	1.5	91	3.8	97	3.9	93	3.8
Food infection—										
Salmonellosis	415	18.5	320	13.9	302	12.6	456	18.6	321	13.2
Unspecified	73	3.2	36	1.6	7	0.3	33	1.3	3	0.1
Food intoxication—										
Staphylococcal	16	0.7	25	1.1	.....	.....	.....	.....	.....	.....
Botulism	5	0.2	.....	.....	2	0.1	.....	.....	.....	.....
Hepatitis—										
Infectious	1,894	84.3	1,755	75.8	1,381	57.7	962	39.2	745	30.7
Serum	26	1.2	25	1.1	11	0.5	10	0.4	12	0.5
Leprosy	.....	.....	1	0.1	.....	.....	1	0.1	.....	.....
Meningitis—										
Bacterial	34	1.5	47	2.0	43	1.8	33	1.3	47	1.9
Viral	22	1.0	20	0.9	12	0.5	16	0.7	11	0.5
Pertussis	102	4.5	102	4.4	66	2.8	49	2.0	77	3.2
Poliomyelitis	.....	.....	1	0.1	.....	.....	.....	.....	.....	.....
Q. fever	1	0.1	.....	.....	.....	.....	.....	.....	.....	.....
Rubella	84	3.7	77	3.3	342	14.3	476	19.4	69	2.8
Rubeola	97	4.3	158	6.8	573	23.9	1,149	46.8	181	7.4
Shigellosis	202	9.0	212	9.2	203	8.5	184	7.5	120	4.9
Streptococcal throat infection and scarlet fever	454	20.2	836	36.1	789	32.9	739	30.1	698	28.7
Tetanus	.....	.....	.....	.....	.....	.....	.....	.....	2	0.1
Trichinosis	.....	.....	1	0.1	.....	.....	.....	.....	.....	.....
Tularæmia	.....	.....	1	0.1	.....	.....	.....	.....	.....	.....
Typhoid and paratyphoid fever	13	0.6	3	0.1	6	0.3	8	0.3	7	0.3
Western equine encephalitis	7	0.3	.....	.....	.....	.....	.....	.....	.....	.....
Totals	3,587	159.7	3,734	161.3	3,951	165.0	4,286	174.4	2,450	100.8

Table 2—Reported Infectious Syphilis and Gonorrhœa, British Columbia, 1946, 1951, 1956, 1961, and 1966–76

Year	Infectious Syphilis		Gonorrhœa	
	Number	Rate[1]	Number	Rate[1]
1946	834	83.0	4,618	460.4
1951	36	3.1	3,336	286.4
1956	11	0.8	3,425	244.9
1961	64	3.9	3,670	225.3
1966	71	3.8	5,415	290.8
1967	72	3.7	4,706	242.0
1968	68	3.4	4,179	208.6
1969	45	2.2	4,780	232.0
1970	76	3.6	6,070	285.2
1971	73	3.4	7,116	325.7
1972	98	4.4	7,921	352.5
1973	101	4.4	8,955	386.6
1974	146	6.1	9,284	387.6
1975	174	7.1	9,793	398.6
1976[2]	121	4.8	9,870	396.2

[1] Rate per 100,000 population. [2] Preliminary.

Table 3—Selected Activities of Public Health Nurses, September 1975 to August 1976[1]

Maternal and child care—	
Expectant parent series enrolment:	
Mothers	9,161
Fathers	5,707
Total class attendance (685 series)	51,285
Prenatals—number of home visits	6,460
Postnatals and new infants—number of home visits	21,285
Infants—	
Number of visits to Child Health Conference	58,134
Number of home visits	40,155
Pre-school—	
Number of visits to Child Health Conference	69,810
Number of home visits	27,902
Special assessments—infant and pre-school	17,638
School—	
Screening tests (assistance by auxiliaries)	292,855
Follow up	26,010
Conferences with students	25,955
Conferences with staff	80,736
Home visits	33,194
Family, adult, and geriatric (excluding home care program)—	
Adult (ages 19–64 years)—number of visits	128,066
Adult (ages 65 and over)—number of visits	152,227
Geriatric clinic attendance	482
Family planning clinic	732
Community care facilities—number of visits	5,795
Mental retardation—number of home visits	1,545
Mental health (preventive counselling)—number of home visits	5,576
Mental illness—number of home visits	5,593
Family problems—number of home visits	8,242
Disease control—	
Immunizations—number given	405,781
Tests (tuberculosis, diphtheria, and other)	32,518
Venereal disease—number of visits	7,386
Tuberculosis—number of visits	7,475
Infectious hepatitis—number of visits	1,702
Chronic disease—number of visits	12,923
Total home visits	274,972
Total professional services by telephone	257,982

[1] Statistics provided are for activities of Provincial public health nurses only and do not include public health nurses employed by Greater Vancouver, New Westminster City, or the Capital Regional District.

Table 4—Patients Admitted to Home Care Programs and Nursing Visits Carried Out, 1975

Area or Program	Number of Patients	Number of Nursing Visits
Provincial health units	8,341	149,047
Capital Regional District	3,070	55,500
New Westminster	3,018	39,739
Metropolitan Vancouver	7,731	133,618
Hospital replacement program	12,461	118,294
Totals	34,621	496,198

Table 5—Patients Discharged From Home Care Programs, by Age-group and Classification,[1] 1975

Age-group	Hospital Replacement		Non-hospital Replacement	
	Number	Per Cent	Number	Per Cent
0–19	1,541	12.4	394	4.7
20–44	4,111	33.0	2,481	29.8
45–64	3,108	24.9		
65–74	1,866	15.0	5,466	65.5
75 and over	1,835	14.7		
Totals	12,461	100	8,341	100

[1] The hospital replacement program provides all services required except medical at no cost to the patient, e.g., nursing, physiotherapy, homemaker, social work, medication, laboratory, nutrition, supplies, etc., whereas other patients on the home care program (nonhospital replacement) receive nursing and some physiotherapy at no cost but are required to pay for other services required.

Table 6—Selected Activities of Provincial Public Health Inspection, 1972–76

Type of Inspection or Activity	1972	1973	1974	1975	1976 (Estimate)
Inspection—					
Food premises—					
Eating and drinking places	5,022	9,668	10,051	11,107	12,817
Food stores	1,622	1,962	2,553	2,392	3,177
Other	775	1,064	1,512	2,045	1,925
Factories	337	437	561	343	185
Industrial camps	260	280	305	317	377
Community care[1]	1,703	2,442	3,139	3,013	2,224
Schools	498	546	1,013	544	613
Summer camps	212	274	300	266	400
Housing	1,741	1,603	1,672	1,653	1,641
Mobile home park	1,566	1,946	2,199	2,015	1,301
Camp-sites	1,718	1,567	1,344	1,249	1,315
Other housing	454	418	600	666	541
Hairdressing places	384	365	370	396	564
Farms	345	387	400	367	336
Parks and beaches	366	318	352	388	468
Water and waste investigation—					
Swimming-pools—					
Inspection	1,298	1,801	2,094	2,613	2,737
Samples (pools and beaches)	1,343	1,516	1,153	1,791	2,266
Surveys (sanitary and other)	449	518	430	445	460
Waste disposal	797	917	890	720	689
Public water supplies—					
Inspection	1,305	1,516	1,496	1,915	2,145
Samples	4,975	5,716	5,370	6,663	9,308
Private water supplies—					
Inspection	2,042	2,431	2,665	2,953	3,159
Samples	2,551	2,692	3,717	3,179	3,993
Pollution and survey samples	1,003	1,543	563	722	600
Private sewage disposal	17,554	22,585	26,251	24,367	27,744
Municipal outfalls and plants	438	528	430	384	380
Plumbing	399	772	686	1,518	2,140
Land use investigation—					
Subdivisions	6,307	5,395	6,140	5,259	6,185
Site inspections	10,685	11,719	14,786	14,208	12,820
Nuisance investigation—					
Sewage	3,376	3,440	3,361	3,350	3,521
Garbage and refuse	1,963	1,370	2,107	1,769	1,845
Other (pest, etc.)	2,524	2,740	2,776	2,763	2,808
Disease investigation	338	314	541	813	680
Educational activities	1,234	1,535	1,479	1,284	1,287
Meetings	3,109	3,225	3,330	3,226	3,127

[1] Includes boarding homes, youth hostels, day care centres, hospitals, and other institutions.

Table 7—Registrations, Certificates, and Other Documents Processed by Division of Vital Statistics, 1975 and 1976

	1975	1976
Registrations accepted under *Vital Statistics Act*—		
Birth registrations	35,573	37,810[1]
Death registrations	18,862	19,410[1]
Marriage registrations	21,572	20,620[1]
Stillbirth registrations	414	340[1]
Adoption orders	1,637	2,260[1]
Divorce orders	7,250	9,350[1]
Delayed registrations of birth	375	289
Registrations of wills notices accepted under *Wills Act*	37,295	40,877
Total registrations accepted	122,978	130,956
Legitimations of birth effected under *Vital Statistics Act*	175	298
Alterations of given name effected under *Vital Statistics Act*	247	275
Changes of name under *Change of Name Act*	2,280	2,052
Materials issued by the Central Office—		
Birth certificates	79,340	89,120
Death certificates	8,969	9,527
Marriage certificates	8,601	10,141
Baptismal certificates	17	7
Change of name certificates	1,995	2,095
Divorce certificates	225	319
Photographic copies	10,806	12,007
Wills notice certification	12,531	12,663
Total items issued	122,484	135,879
Nonrevenue searches for Government departments by the Central Office	11,203	15,531
Total revenue	$534,895	$515,510[1]

[1] Preliminary.

Table 8—Case Load of Division for Aid to Handicapped, 1976

Cases under assessment or receiving services, January 1, 1976		1,305
New cases—		
Referred to Aid to Handicapped Committees in Vancouver Metropolitan Region and North Fraser Region (12 committees)	563	
Referred to Aid to Handicapped Committee outside Vancouver Metropolitan Region (37 committees)	798	
Referred from other sources	2	
Total new cases		1,363
Cases reopened (all regions)		257
Total cases provided with service in 1976		2,925

Cases Closed During 1976

Rehabilitated—		
Employment placement made by—		
Canada Manpower	58	
Aid to Handicapped	18	
Self	237	
Other	110	
Total placed in employment		423
Job placements not feasible, restorative services completed		414
Not rehabilitated—		
Severity of disability	232	
Unable to locate clients	121	
Other	461	
Total not rehabilitated		814
Other reason—		
No disability	5	
No vocational handicap	16	
Deceased	10	
Total other reasons		31
Total cases closed in 1976		1,682
Cases remaining in assessment or receiving services, December 31, 1976		1,243

Table 9—Tests Performed by Division of Laboratories, 1975 and 1976

Item	1975			1976		
	Main	Nelson	Victoria	Main	Nelson[1]	Victoria[2]
Bacteriology Service						
Enteric Section—						
Cultures—						
Salmonella/Shigella	14,391	261	4,653	13,022	167	4,785
Enteropathogenic *E. coli*	3,500	.....	1,365	3,236	.....	1,333
Food poisoning	246	.....	31	242	.....	34
Miscellaneous Section—						
Cultures—						
C. diphtheriæ	4,047	25	3,295	2,938	15	3,025
Hæmolytic Staph./Strep.	4,393	184	1	4,018	87	129
Miscellaneous	25,636	273	13	20,158	53	12
Fungus	3,528	.....	.....	3,661	.....	.....
N. gonorrhœæ	16,988	128	8,865	28,201	157	8,320
Smears—*N. gonorrhœæ*	101,798	2,692	1,713	96,893	2,174	1,782
Immunofluorescence—*N. gonorrhœæ*	.....	.....	.....	4,526	.....	.....
Animal virulence	308	.....	20	178	.....	.....
Tuberculosis Section—						
Cultures—*M. tuberculosis*	31,807	.....	2,154	35,058	.....	1,894
Smears—*M. tuberculosis*	24,588	4	1,768	25,373	.....	1,575
Sensitivity tests	1,050	.....	.....	1,010	.....	.....
Atypical mycobacteria	313	.....	.....	326	.....	.....
Animal inoculation	604	.....	3	618	.....	.....
Parasites—						
Fæces	18,318	.....	3,004	22,001	.....	2,907
Pinworm swabs	1,156	61	.....	1,138	29	.....
Malaria blood film	.....	.....	.....	440	.....	.....
Water Microbiology Section—						
Presumptive/Confirmed coliform test	32,113	3,361	3,695	32,178	2,212	4,170
Completed coliform test	2,214	490	602	2,963	304	891
Fæcal coliform test	7,959	.....	379	6,809	.....	414
Fæcal streptococcal test	113	.....	.....	8	.....	.....
Standard plate count	2,931	.....	.....	3,113	.....	.....
Other tests (algæ, shellfish)	2	.....	.....	4	.....	.....
Serology Section—						
Syphilis—						
Screening	182,225	.....	18,096	186,246	.....	4,349[2]
Confirmatory	12,739	.....	.....	13,890	.....	.....
ASTO	8,196	.....	968	7,284	.....	893
Widal, brucella, heterophile-antibody	4,971	.....	864	4,398	.....	951
Immunofluorescence	3,784	.....	.....	2,266	.....	.....
Toxoplasmosis	306	.....	.....	467	.....	.....
Virology Service						
Virus isolation—						
Tissue culture	4,418	.....	.....	3,531	.....	.....
Rubella	660	.....	.....	243	.....	.....
Embryonated egg	619	.....	.....	1,271	.....	.....
Mouse	6	.....	.....	325	.....	.....
Serological identification—						
Hæmagglutination inhibition—						
Rubella	51,783	.....	.....	51,707	.....	.....
Other viruses	2,804	.....	.....	4,553	.....	.....
Complement fixation	7,198	.....	.....	7,866	.....	.....
Neutralization	521	.....	.....	3,796	.....	.....
Electron microscopy	104	.....	.....	184	.....	.....
Totals	578,337	7,479	51,489	596,139	5,198[1]	37,464
Combined totals		637,305			638,801	

[1] Nelson Branch Laboratory was closed for two months.
[2] Victoria Branch Laboratory transferred syphilis serology to main laboratory.

Table 10—Licensing of Practical Nurses

(Disposition of applications received since inception of program in 1965 to October 31, 1976)

Received			13,465
Approved—			
On the basis of formal training	8,093		
On the basis of experience only—			
Full licence	396		
Partial licence	876		
	1,272		
		9,365	
Rejected		1,871	
Deferred pending further training, etc.		1,739	
Deferred pending receipt of further information from applicants		397	
Awaiting assessment at October 31, 1976		93	
			13,465
Number of licences issued to October 31, 1976			8,650
Number of practical nurses holding currently valid licences at October 31, 1976			6,420

Table 11—Number of Cases Referred for Hearing Assessment, by Source, Division of Speech and Hearing, 1976

	Referral Source			Total
	Physician	Public Health Nurse	Other[1]	
Number of referrals	3,055	504	142	3,701

[1] High-risk hearing register, public health clinics, etc.

Table 12—Number of Cases Referred for Hearing Assessment, by Type of Evaluation, Division of Speech and Hearing, 1976

	Type of Evaluation			Total
	Initial Assessment	Reassessment	Hearing-aid Evaluation and Rehabilitative Audiology	
Number of cases	2,034	575	1,092	3,701

Table 13—Hearing-impaired Cases, by Degree and Type of Impairment, Division of Speech and Hearing, 1976

Type of Impairment	Degree of Impairment				Total of Each Type
	Mild	Moderate	Severe	Profound	
Conductive	492	144	13	.....	649
Sensorineural	622	707	458	228	2,015
Mixed	45	120	92	30	287
Totals of each degree	1,159	971	563	258	2,951

Mental Health Programs

On October 12, 1872, just 14 months after British Columbia's entry into Confederation, Mental Health Programs had its beginnings when the Royal Hospital in Victoria was designated as the Provincial Asylum. The management of the institution was placed under the jurisdiction of Mental Health Services in the Provincial Secretary's Department, where it remained until 1959, at which time it was transferred to the Department of Health and Welfare and became known as the Mental Health Branch.

With the change in name to Mental Health Programs in 1975, as part of the reorganization of the Department of Health, the branch transferred the operation of the various mental health institutions to the Division of Government Health Institutions, and became solely responsible for the development of mental health services at the community level.

A review of the year's operations of the various community services throughout the Province appears on the following pages:

MENTAL HEALTH PROGRAM HIGHLIGHTS

- There were 9,000 new admissions to service in the Province's 30 mental health centres and, additionally, 4,000 persons were carried for treatment from the previous year's case load. In addition to direct treatment the professional staff in mental health centres also provided consultative services to a variety of community agencies.
- The patient load of the Greater Vancouver Mental Health Service for October 1976 was 2,716, a substantial increase over the previous year's case load of 2,116. The October case load for 1974 was 949.
- During the year the administration of the boarding home program was decentralized to the community mental health centres. This move permitted the central staff to expand their consultative role to the centres in the development of new resources, the licensing of boarding homes, and in terms of management problems.
- Rapidly increasing case loads in the north and south community teams of the Burnaby Mental Health Services necessitated recruitment of additional nursing personnel for those teams. The north team moved to new offices in May, vastly improving working conditions for a busy staff and providing much more satisfactory facilities for patient care, teaching, and community preventive activities. Out-patient and day program personnel worked closely with Canadian Mental Health Association to develop a badly needed sheltered workshop program in Burnaby. Continued rapid growth and development in the Lougheed Mall area suggested the need for an additional out-patient team to provide service there.

COMMUNITY MENTAL HEALTH CENTRES

Mental health centres have been established in 30 British Columbia communities. The function of each centre is to develop, in co-operation with existing resources within the community, a variety of services designed to meet the specific mental health requirements of the area served.

Mental health centres are located in the following communities: Abbotsford, Burnaby, Chilliwack, Courtenay, Cranbrook, Duncan, Fort St. John, Kamloops, Kelowna, Langley, Maple Ridge, Nanaimo, Nelson, New Westminster, Penticton, Port Alberni, Port Coquitlam, Powell River, Prince George, Prince Rupert, Saanich, Sechelt, Squamish, Surrey, Terrace, Trail, Vernon, Victoria, Whalley, and Williams Lake.

A centre is staffed by a team of experts in mental health and may include a psychiatrist, a psychologist, psychiatric social workers, mental health nurses, and other professional personnel.

The majority of the centres provide the following services in varying proportions:

- Direct treatment services for adults and children.
- Consultative services to physicians, health, welfare, educational, and correctional agencies.
- Educational programs, both professional and nonprofessional.
- Special programs such as the supervision of the long-term patient, preventive programs, boarding home care, special group homes, etc.

Members of a mental health centre may make periodic visits to outlying districts of the area served by the centre, primarily to provide diagnostic assessment, consultation, and referral services. This travelling clinic usually utilizes facilities provided by the local health units, and on an appointment basis sees patients who have been referred by the family doctor or the district public health or welfare services. When necessary, after seeing the patient, the clinic may refer the patient back to the family doctor, in some cases to school authorities, or on occasion may recommend admission to a residential treatment facility. Treatment by the clinic team is usually given in close co-operation with the family doctor, the health unit, or other agency.

During 1976, emphasis was placed on making Community Mental Health Programs as efficient as possible, both through internal streamlining and externally through better co-ordination with various community agencies. Staff worked very hard to attempt to meet community demand for services.

Regional reports of the community mental health centres follow:

VANCOUVER ISLAND REGION

Community Mental Health Programs teams in Victoria, Saanich, Duncan, Nanaimo, Port Alberni, Courtenay, and Powell River constitute the Vancouver Island Region. Over 2,500 patients were treated in 1976 by these teams. Such direct services to patients accounted for two thirds of staff time. Another major service was consultation to various community agencies dealing with emotionally disturbed clients. During the year the Victoria integrated services project for children and families was added to Mental Health Programs administrative responsibility (*see* page 77). The functions of Integrated Services and the two mental health centres in the Capital Region area were closely co-ordinated with other agencies such as the Capital Regional District Health Services and the Department of Human Resources.

A sampling of some of the special projects of note from mental health teams in the region follows:

In *Courtenay,* the centre conducted training programs for a wide variety of community agencies in group techniques, behaviour management, and counselling. A pilot project in which migraine headaches were treated by biofeedback techniques showed very promising results. Volunteers learned to raise their body temperature in their extremities, usually their hands, and in so doing were able to reduce or eliminate the pain associated with migraine headaches.

The *Duncan* Mental Health Centre was involved in periodic meetings with Human Resources, public health, probation, Indian services, and school district staff to co-ordinate their services to children. These conferences prevented duplication of services and effected a more creative system of providing services to children.

In *Nanaimo,* the centre was instrumental in developing a multi-purpose residential and day program centre for a wide spectrum of mental health clients.

The *Powell River* centre materially assisted in bringing together, for planning and consultation, most of the voluntary and Government agencies in their area, and the occupational health section of the local mill.

In the *Greater Victoria* area, the Victoria and Saanich centres joined forces to make the community nurse follow-up program more effective with the Eric Martin Institute and private practitioners of medicine who admit patients to that facility. Regular consultation meetings were held with a number of these physicians.

Supervised by a qualified art therapist, emotionally disturbed patients are encouraged to paint and draw as part of diagnosis and treatment at Victoria Mental Health Centre.

LOWER MAINLAND REGION

Mental health centres located at Sechelt, Squamish, New Westminster, Whalley, Surrey, Langley, Port Coquitlam, Maple Ridge, Abbotsford, and Chilliwack make up the Lower Mainland Region. Approximately 3,000 patients were treated during the year. Direct services to patients took more than two thirds of the time of the mental health teams. In addition to those services, the centres provided consultation to various community agencies serving emotionally disturbed clients. In the provision of services of all types, staff worked closely with local physicians; personnel from Public Health Programs, the Department of Human Resources, schools, the local hospital, probation and the courts; and various other local professional and lay groups. Examples of special activities for these centres include the following:

In *Abbotsford* the adult development program, jointly sponsored with Fraser Valley College, which offers a variety of short workshops, seminars, and group-learning experiences, added several new workshops and recruited a number of additional community people as group leaders.

The *Chilliwack* centre, marking the completion of a decade of service, was occupied with a full program of direct services to clients.

In *Langley,* two adolescent group sessions, one made up of Grade IX and X boys and the other a mixture of Grade VIII boys and girls, were held during regular school hours. The students were taken by bus to the centre by a special services person employed by the Department of Human Resources and seconded to the school's Special Services Division.

In *Maple Ridge* the centre was consulting during the year on the planning of the psychiatric unit of the Maple Ridge Hospital, currently in the architectural planning stage.

In *Sechelt* the centre assisted with the establishment of a group home for emotionally disturbed adolescents, and continued to provide them with consulting services.

The *Surrey* centre developed a joint program with the public health unit for patients requiring injectable psychotropic medication. A special workshop on psychotropic drugs was held in conjunction with this clinic.

OKANAGAN-THOMPSON REGION

Regular visits to the Kamloops, Vernon, Kelowna, and Penticton Mental Health Centres was undertaken by the acting Regional Program Director during the year. This new function enabled headquarters personnel to develop better channels of communication with field personnel regarding policy matters, program development, and other activities which pertain to mental health centre operations within the Okanagan-Thompson Region.

A total of 2,016 persons was referred for direct services through mental health centres within the region in 1976, representing an increase of 24 per cent over the previous year's figure of 1,531. The Kamloops centre showed the largest single increase with 38 per cent; Kelowna, 36 per cent; Penticton, 20 per cent; and Vernon, 9 per cent. Direct patient services, i.e., treatment of individuals, families, and groups, accounted for approximately 60 per cent of the professional time of personnel throughout the region. The balance was devoted to agency consultation, the school system, hospitals, and a variety of educational activities directed toward specialized groups or the community at large.

The surrounding communities of Merritt, Ashcroft, Revelstoke, Keremeos, Salmon Arm, Cawston, Osoyoos, and Hedley continued to be served by way of travelling clinics from each of the centres. The particular mental health requirements of Salmon Arm were under study at year-end by a joint working group representing Hospital Programs and Mental Health Programs. The objective was to provide a less costly but perhaps more appropriate and effective alternative to the erection of a 10-bed psychiatric unit within the Shuswap Lake General Hospital complex.

Kamloop's drop-in centre program for long-range psychiatric patients was expanded this year from one to two afternoons per week. In addition, an intensive staff development program was inaugurated for in-service personnel at the mental health centre together with a 30-week course in abnormal psychology for some 50 registrants from the professional community at large, comprising teachers, medical and nursing staff, Department of Human Resources personnel, etc. In conjunction with the YM-YWCA, the Kamloops Mental Health Centre also sponsored a short-term course for 25 parents seeking help with interpersonal communication and child-raising problems.

The *Vernon* centre continued to support the largest single complement of chronic patients (300) through the boarding home program. With a view toward fostering more independent life-style opportunities for this large chronic-patient group, the boarding home staff were successful in establishing a new independent living home for selected persons from this group. Staff also contributed toward the development of a crisis line for Vernon and district.

A part-time pharmacist was added to the *Kelowna* centre staff during the year, eliminating a hospital-based dispensing program which had proven costly and ad-

ministratively awkward. Through CMHA sponsorship of an LIP grant, the Kelowna centre staff was instrumental in the development of a winter-activity program for young chronic boarding home patients. In terms of other new activities, the Kelowna centre embarked upon an intensive group and conjoint marital therapy program in order to cope with the large increase in referrals (36 per cent) over last year and to reduce the time span between initial referral and therapeutic contact.

In 1976 the *Penticton* centre was instrumental in the development of a unique drop-in program for chronic emotionally ill young adults. This program was geared largely to help those residents of boarding and group homes who were not functioning as independently as their assessed potential would suggest. This drop-in program, largely assisted by community volunteers, combined both recreational and work activities with the result that a number were fully employed in regular work situations at year-end.

With funding support from New Horizons, centre staff also contributed toward the design and implementation of three workshops to train volunteers who work with senior citizens. Approximately 50 persons attended each of these workshops.

KOOTENAY REGION

The Kootenay Region is served by mental health centres located in Cranbrook, Trail, and Nelson. Services to the surrounding communities of Golden, Fernie, Sparwood, Kimberley, Creston, Castlegar, Salmo, Nakusp, New Denver, Riondel, Grand Forks, and Rossland are provided through travelling clinics and frequent consultation to local professionals. The total population of this area, based on Hospital Programs estimates, was over 127,000 in 1976.

During the year the centre had a total of 10 full-time and five sessional professional staff, and four support staff. They provided direct therapeutic services to over 2,200 clients. The month-end case load for the centres averaged over 1,000 cases. While direct therapy with adults, children, and families occupied the bulk of staff time, consultation and support services continued to be offered to community agencies, including Human Resources, public health, and school services.

Staff from the three centres were active in community education. Child-rearing workshops and volunteer training were continued by the *Cranbrook* staff. Staff from the *Nelson* centre were involved in many in-service education programs for community groups, including a three-day children's resource workshop, child-care courses, and nurse-training programs. As well as community education activities, staff from *Trail* conducted an extensive community awareness and mental health attitude study. The results from that study confirmed the high visibility and acceptance of the Trail centre in the community.

The boarding home program continued to grow in the region, and it was hoped that the decentralization of the program would allow better co-ordination between the centres and the boarding homes.

Community development work was also undertaken in the Kootenay Region during the year. Staff participated on interagency co-ordinating committees, and in the development of proposals for needed community resources. For example, in Nelson, efforts to establish an alcoholism treatment centre looked promising at year-end, primarily due to the Chemical Dependency Committee, which had mental health centre representation.

Data on the types of problems and required services in the communities served by the centre were collected and related to population subgroups. These data, along with similar data from other regions, would form the basis for program development.

The major problem facing mental health services in the Kootenay Region was the increasing demand for direct therapy services. Last year the region, as a part of the Okanagan-Thompson-Kootenay Region, reported 2,576 cases seen in direct service. This year the Kootenay Region alone had over 2,200 cases. This increase in service demand was reflected across the whole of Mental Health Programs, as evidenced by the 27-per-cent increase in case load over the past three years.

NORTHERN BRITISH COLUMBIA REGION

The Northern British Columbia Region comprises the area north of Kamloops and includes the catchment areas of community mental health centres in Williams Lake, Terrace, Prince Rupert, Prince George, and Fort St. John. For the first time since the centres were opened in the region it was possible during the year to fill all vacant positions. However, many of the areas that did not yet have an established mental health centre received only limited mental health services from travelling clinics.

In addition to staffing problems, the services provided by these clinics were also affected by the long distances and the frequent inclement weather conditions. Communities which travelling clinics visit on a more regular basis included Masset, Bella Coola, 100 Mile House, Quesnel, Hazelton, Dawson Creek, and Fort Nelson. A full-time mental health worker was providing services in Kitimat.

Local mental health services in the Northern Region were augmented by visits of personnel from mental health centres in the Lower Mainland, Riverview Hospital, and the UBC Health Sciences hospital. Professionals from these facilities provided a variety of consultation services. In addition, both the Riverview Hospital and the Health Sciences hospital continued to accept referrals from the north.

The awareness of the residents that mental health affects all aspects of their lives greatly increased during the year, and, consequently, more demands for specific services related to mental health were being made. In general, services were aimed at four groups of people—young children, adolescents, adults, and special groups or groups with special needs.

General services provided by mental health centres were designed to deal with the total range of problems related to mental health. Assessment and diagnostic services included those for the assessment of specific types of mental health problems. Client consultation services were provided for other professionals who desired general or specific case consultation. A somewhat related program included community and agency support services, in which workshops and other training and information services were provided, upon request, for other agencies and for the community at large.

Counselling services were aimed at clients who require specific information or general counselling. Rehabilitation services assisted people with their reintegration into a normal life situation. Research and evaluation services included surveys of community needs, the analysis of services which are needed to deal with these needs, and the documentation of existing services. Also included were the evaluation of program effectiveness, and the definition of service options and their objectives. The volunteer and self-help groups programs provided support for citizens who wanted to participate in mental health activities, and for self-help groups who focused on specific group needs.

GREATER VANCOUVER MENTAL HEALTH SERVICES

The Greater Vancouver Mental Health Service (GVMHS) completed its fourth year of operation in the summer of 1976, and has become an integral part of the mental health delivery system for the area. The service is responsible for the operation of seven community care teams and the Broadway Clinic, providing direct patient care to approximately 2,800 patients. Additionally, the service operates the short-stay residence, Vista, a halfway house for men and women, and Blenheim House, which is a treatment facility for pre-school children and their families.

The primary mandate of the GVMHS is to treat the moderate to seriously ill patient in the community, and to provide limited service to families and children within available resources. The effectiveness of the service has been confirmed by a series of evaluative studies conducted by the Evaluation and Research Planning Department. The implementation of a management information system, which was in the initial phase of development by year-end, will provide additional evaluative and planning data. The development of performance standards for each team and facility will be possible when the management information system has been fully activated.

Each community care team was working to capacity with 250–350 patients on its case load. The community care teams have been very successful in establishing good relations with other agencies working in their community, especially public health, Human Resources, local hospitals, and police. Increasingly, the teams are utilizing community resources and programs which are available in many areas of the city. During the year the GVMHS enjoyed excellent relations and support from Mental Health Programs and the city and municipal health departments. While there are some components of the mental health delivery system still to be developed, there is a much higher quality of patient services available to Greater Vancouver than in the past. When the necessary support services are provided, Vancouver will have a system of mental health delivery unequalled in Canada.

BURNABY MENTAL HEALTH SERVICES

Burnaby Mental Health Services during 1976 continued to offer the Province's only regionalized, decentralized, integrated, and comprehensive program of psychiatric resources for adults, families, and children resident in this community.

In-patient unit—The 25-bed acute psychiatric in-patient unit maintained high occupancy and activity, treating large numbers of seriously disturbed patients efficiently and effectively in their own community. Only occasionally was it necessary to call upon the resources of the Riverview Intensive Care Unit for back-up with grossly assaultive or dangerous patients.

A detailed study by the nursing staff of the ward environment and staff behaviour toward patients, aimed at minimizing patient dependency and regression, has been carried out, and an ongoing ward environment committee established to monitor and regulate these conditions.

Adult day programs—Two separate adult day programs are offered by Burnaby Mental Health Services—one is an intensive five-day-per-week milieu program designed to produce major behavioural changes, the other a part-time more gradual re-educative and socially rehabilitative program. Close co-operation with the out-patient teams resulted in establishing a number of new activity groups of different types during the year.

The day hospital programs sponsored a one-day workshop on psychiatric day programs, attended by representatives from all such programs in the Province. Response to this innovation was so enthusiastic it is expected to become an annual Provincial event with rotating sponsorship.

Adult out-patient services—Rapidly increasing case loads in the north and south community teams necessitated recruitment of additional nursing personnel for those teams. The north team moved to new offices in May, vastly improving working conditions for a busy staff and providing much more satisfactory facilities for patient care, teaching, and community preventive activities. Out-patient and day program personnel worked closely with the Canadian Mental Health Association to develop a badly needed sheltered workshop program in Burnaby. Continued rapid growth and development in the Lougheed Mall area suggested the need for an additional out-patient team to provide service there.

Children's out-patient services—The Children's Out-patient Department continued to provide consultation services to Burnaby schools and out-patient assessment and treatment services to children and families from Burnaby. Addition of a part-time speech therapist improved these services. The pre-school and out-patient staff combined to offer a one-day workshop for children's day care workers in Burnaby, covering topics from normal growth and development to working with families.

Consultation and education services—Increasingly, Burnaby staff have been asked to consult in a variety of forms to community groups and organizations such as the Canadian Mental Health Association, the Burnaby Health Department, Burnaby pre-schools, Burnaby General Hospital, Dogwood Lodge, and L'Arch Vanier Home. Staff continued to provide educational placements for students in nursing, psychology, social work, and occupational therapy, as well as to physicians serving a rotating internship. An active in-service education program was augmented with two major workshops—one workshop on family therapy was held in the spring, and in the fall a workshop on goal attainment scaling was offered. Members of the staff also attended various professional meetings, workshops, courses, and seminars to develop and improve their knowledge and skills.

VICTORIA'S INTEGRATED SERVICES FOR CHILD AND FAMILY DEVELOPMENT

As of August 1, 1976, the administration of Victoria's Integrated Services became the responsibility of the Department of Health, through Community Mental Health Programs. It had previously reported directly to the Ministers of Health, Education, and Human Resources. Staff provided to the project by the Department of Human Resources were seconded for the remainder of the fiscal year and then would become Department of Health staff. Mental retardation services, formerly the responsibility of Integrated Services, were transferred to the Department of Human Resources.

Integrated Services provides clinical services to families whose children have difficulties in the following areas:

- Learning disability.
- Brain injury.
- Developmental delay (0–5 years).
- Social-behavioural disorders.
- Severe emotional disturbance.

The early childhood team provides assessment services to children and their families, with treatment services available primarily to those children with socio-behavioural difficulties. A number of education programs for parents of infants and pre-schoolers have also been developed.

The school-age team provides assessment services to children and their families, with treatment services available to selected children in all problem areas who are between 6–11 years of age.

During the summer of 1975, Integrated Services entered into a one-year contractual relationship with School District 61, involving the clinical development of a special two-classroom facility located at George Jay Elementary School. Staff from School District 61, Human Resources, and Integrated Services developed a short-term therapeutic classroom experience for behaviourally disturbed children. The program included follow-up services to the children, as they returned to their regular classrooms and family involvement, as required. The contractual relationship with School District 61 proved to be successful and could be considered a demonstration of the viability of co-operative ventures between mental health and educational resources.

Members of the school-age team were also involved in providing direct and consultative services to the Learning Assistance Centre in School District 61, which was an attempt to integrate special educational services available to children in School Districts 61, 62, and 63.

BRITISH COLUMBIA YOUTH DEVELOPMENT CENTRE

The British Columbia Youth Development Centre, referred to as "The Maples," is located in Burnaby, and provides a variety of services, all of which are part of the comprehensive consultation and treatment program dealing with psychological, social, and learning problems in children and adolescents under the age of 17 years.

After an initial screening, each child is interviewed and assessed at the centre. It is here that the treatment program for each individual is developed. In most cases the family of the disturbed child will participate in the assessment, treatment, and educational process. The program that is offered may include out-patient attendance, a day program, or living-in accommodation.

These services are provided by two units, each with its own professional staff and Director—the psychological education clinic, providing special services for children with learning problems, and the residential unit, which provides living-in accommodation for 45 boys and girls in separate residences.

The staff of The Maples is comprised of professional workers, including psychiatrists, psychologists, child care counsellors, teachers, nurses, and others who are trained in the mental health field.

A report of the two units follows:

RESIDENTIAL AND DAY CENTRE TREATMENT UNIT

The residential and day centre programs provide a variety of services, which include comprehensive consultation, assessment and treatment of psychological, social, and learning problems in adolescents, from the ages of 12 up to 17. There are three self-contained residential cottages which provide living accommodations, in separate wings, for boys and girls who require intensive treatment on a round-the-clock basis. Treatment in the cottage is carried out in a warm, homelike

atmosphere by a team of child care counsellors, supported by a psychiatrist and social worker.

The day centre program provides treatment for boys and girls from 14 to 17 years of age who require support and counselling, yet are able to live either at home or in other suitable community facilities. They attend the centre on a daily basis. In addition, the centre serves as a transitional stage of treatment for some adolescents in the move from cottage to community. It also provides an extended, intensive assessment for some adolescents prior to admission to the cottages. The day centre treats those adolescents who require less structure in their daily life and can assume more responsibility than those in the residence.

All adolescents in the residential cottages and day centre attend the special school, where the educational staff work closely with cottage and day centre staff to ensure that therapeutic and educational goals are co-ordinated and complement one another. When indicated, some adolescents attend classes in nearby community schools. A major goal is to equip all adolescents with the skills necessary to re-enter the regular school system, vocational training courses, or to achieve job placement.

A gymnasium, swimming-pool, and arts and crafts centre are located on grounds. Special individualized programs such as art and dance therapy, drama, gymnastics, and swimming are designed to improve motor and expressive skills. Socialization is an important goal in the activity's program. Camping, ski-ing, movies, social events, and regular outings promote and develop social skills by bringing the adolescents into contact with the community.

Residential and day centre programs insure high standards of clinical practice by providing an ongoing, in-service training program leading to a diploma in child care. The planning and implementation of this program is under the direction of a training co-ordinator who works with the unit psychiatrists, social workers, psychologists, and child care counsellors in developing a curriculum which stresses an integrated approach to the treatment of adolescents.

The in-service training program aims at skill development in child care and includes the following: Milieu, family, individual, and group therapy; interpersonal and group dynamics; assessment, supervision, cottage management, and administration; and personality growth and development. The unit is also affiliated with The University of British Columbia and provides field training to students from the University of Victoria and Douglas College. Field placement training is provided to psychiatric residents and students in social work, child care counselling, nursing, psychology, education, and recreational therapy.

To meet the increasing need and demand for personnel to work more effectively with adolescents, the residential unit sponsored a three-day workshop in June 1976 for workers in the field throughout the Province. The response to this seminar was excellent. Some 200 applications for the course were received, but, because of space limitation, only 75 participants could be included in the seminar. Topics such as family therapy, individual therapy, depression and aggression in the adolescent, psychological testing, and interactional techniques were discussed. The need for repeated seminars of this nature was expressed and a future conference is planned for 1977.

Private physicians, psychiatrists, school counsellors, probation officers, and those working in mental health centres refer their clients to the residential and day centre programs. Referral is usually made through local Department of Human Resources offices. The referrals are assigned to an interdisciplinary team for assessment and diagnostic recommendation. Staff continued to concentrate on treating

the more seriously disturbed adolescent and his or her family. During 1976, 150 adolescents were referred for residential treatment. This was a 15-per-cent increase over the previous year's referral rate.

PSYCHOLOGICAL EDUCATION CLINIC

The Psychological Education Clinic continues to operate a program for children and their families in the hope that most of the problems can be resolved, permitting the child to remain in the regular school system. Staff provide a consultation service to supplement the special services that the schools normally provide. The clinic can also provide special assessment services such as neuropsychological evaluations.

During the year a clinical service continued to be offered to the northwestern communities of British Columbia where psychological services are nonexistent. A staff psychologist visited Prince Rupert, Ocean Falls, the Queen Charlotte Islands, Lower Post, and Cassiar. These trips were generally initiated by a request from the local schools for assistance with problem children, although the lack of any mental health personnel in some of the remote communities frequently results in a wide range of community and (or) family problems being investigated. Workshops for parents and teachers, as well as some direct clinical intervention, comprise the bulk of the travelling clinic work.

During the year some graduate students were hired on a research grant from the Non-Medical Use of Drugs Directorate in Ottawa, to do a study of the incidence of drug-related problems in three remote company towns (Tasu, Ocean Falls, and Cassiar). Feedback from the communities indicated that the travelling services being offered were badly needed and very much appreciated.

When a child has deteriorated to the point that prevention is no longer possible and the only viable alternative is removal from the school system, the clinic has a well-equipped school in Burnaby that accommodates 50 children. To complement the staff of eight teachers, there is a support staff of five psychologists and a part-time speech therapist. The teachers provide a highly technical learning assistance program designed to embrace both academic learning and successful therapy.

Within this program the child is assigned academic tasks adjusted to his level of cognitive and emotional functioning. It is a success-oriented program which minimizes and counteracts failure of the past by emphasizing success in the present. The teachers are also aware that much learning is provided outside of the classroom, and provide field trips and several camping experiences to complement the educational program.

Another service that is provided is to assist the Department of Education in its in-service training of teachers who are already in the field in classroom management. Four teachers spend one month at the clinic, during which time they receive a didactic and practical experience. Most of the teachers have been teaching for several years, and are from communities located in fairly remote areas around the Province. In addition, the clinic provides a training of one-year duration for three teachers from the Burnaby area.

BOARDING HOME PROGRAM

During 1976, there was approximately 585 placements (or replacements) made to 306 boarding homes in the Province. The over-all case load of the program at December 31, 1976, was 1,992, compared to a figure of 1,886 at December 31, 1975. This small increase in over-all case load reflected the gradual change in

the type of person receiving the service. About two thirds of referrals received for placement were persons resident in the community, rather than persons who had been hospitalized for many years in centralized mental health institutions. Generally they were younger, more acutely disturbed, and more active, but following treatment required shorter boarding home stay. Further, a greater number of persons who had many years in boarding home care were being helped to move to more independent forms of living. The total number of persons rehabilitated in this way during the year was approximately 244. During the year, approximately 133 persons were readmitted either to the psychiatric ward of a general hospital or to a mental health institution for varying periods of time during the year.

A major decentralization of the program became effective June 1 when administrative responsibility was transferred to local community mental health centres. This move was part of a long-range plan which enabled the Boarding Home Co-ordinator to expand her consultation role to the mental health centres, while continuing to provide co-ordination at headquarters levels with other departments of Government.

There continued to be a need for the development of resources able to provide a more specialized type of program or service for specific groups of mental health clients. Such resources are generally described as providing an intermediate type of care, and are most frequently developed and sponsored by nonprofit societies. The types of client requiring specialized program or service are the young, psychiatrically disabled person; the young behaviourly disturbed retarded person; and persons of all ages who are physically disabled as well as mentally disordered.

A good activities program for boarding home residents, provided by occupational therapists and activity workers, continued throughout the year. The major goal of this program is, through the development of self-direction and self-confidence in the residents, to involve them eventually in normal recreational, educational, vocational, and employment resources in the community. To this end, activity personnel were involved in the development of sheltered workshops, activities centres, and adult education courses, as steps in the process of rehabilitation. They assisted in the development of co-operative group-living homes (unsupervised) which is a new, most promising arrangement for housing the mentally disabled person in the community.

Additionally, the activity personnel initiated many imaginative and innovative programs for both individuals and groups designed to improve awareness of self and others. For example, eight district baseball teams were formed which compete with each other for a championship trophy. Gym, tennis, hikes, ski-ing, and bowling were promoted as participatory sports. Cultural and educational activities included attendance at adult education courses, restaurant dining, trips to Gastown, Chinatown, the Kelowna Regatta, and the Calgary Stampede.

Several workshops were arranged by local program staff for boarding home operators. These workshops covered a variety of topics and were designed to enhance the operators' skills in the management of their resident groups, and to increase their understanding of the residents' behaviour and problems. Additionally, the staff enrolled in workshops and continuing education opportunities provided by Mental Health Programs and other sources, in order to enhance their own skills and knowledge.

Several licensed boarding homes closed down during the year. These closures took place for a variety of reasons which did not indicate any particular trend and the program was able to absorb the loss of beds. However, the closure of a specialized resource on Vancouver Island for 18 young male psychiatrically handicapped

persons was of significant concern because of the difficulty of replacing the valuable service offered in this facility.

The approximate distribution of placements made and case load of the boarding home program in 1976 were as follows:

	Placements Made 1976	Case Load December 31, 1976
Region 1 (Kootenays)	23	113
Region 2 (Okanagan-Thompson)	186	671
Region 3 (Fraser Valley)	176	825
Region 4 (Skeena)	31	21
Region 5 (Greater Vancouver)[1]	25	91
Region 6 (Cariboo-Peace River)	3	14
Region 7 (Georgia Strait)	102	164
Region 8 (South Vancouver Island)	39	93
Totals	578	1,992

[1] Burnaby and North Vancouver were the only municipalities of the Greater Vancouver area where placements were made through the mental health boarding home program.

CONSULTANTS

The senior administrative offices of Mental Health Programs are located in Victoria, and the staff consists primarily of consultants in the various mental health disciplines. Their varied responsibilities include the provision of consulting services to the field staffs; conducting studies regarding the Province's need in terms of facilities, programs, and treatment services; maintaining liaison with other Governmental, community, and nonprofit agencies; co-ordinating the recruitment of professional personnel; the provision of continuing educational seminars and workshops; and involvement in research projects.

A brief report of the work undertaken by each of the disciplines during the year follows:

NURSING CONSULTATION SERVICES

The year under review was characterized by a considerable widening of the scope of the Nursing Consultants' responsibilities. This was formally identified as the provision of consultative services to community mental health programs, Government hospitals, psychiatric nursing education programs, general hospital psychiatric services, and other Government departments.

In this regard, reports were developed on the role of nurses in community settings and the status of psychiatric nursing education in the Province. Among the former were critiques of classification systems proposals for broad-banding various categories of community nurses and, also, several categories of ancillary hospital workers.

The designing of local community systems to ensure continuity of psychiatric nursing care to patients and clients was a promising development, and favourable results were evident in the Victoria, Duncan, and Surrey communities. A different aspect of the same focus on continuity materialized in a one-year trial project for collaboration between community mental health nursing and community college nursing education, with anticipated gains for both programs in Surrey Municipality.

The nursing component of Mental Health Programs was provided by community mental health and psychiatric nurses. It was necessary to apportion con-

siderable time to nursing education and psychiatric nursing education matters, through work on five advisory committees to various levels of nursing and psychiatric nursing education programs, and two task committees on continuing education. As well, all of these commitments enabled the Consultant to keep abreast of the Provincial scene regarding the academic preparation of nurses for psychiatric mental health nursing practice. Similarly, the chairmanship of the Mental Health Nursing Liaison Committee, which provided an opportunity for senior nurses in a variety of health care agencies to meet, provided an overview of current activities in the Province.

In this regard, the first half of the year saw the completion of input into the B.C. Medical Centre Nursing Manpower Committee, and the chairmanship of the Post Basic Clinical Education Committee. Three reports emanated from the latter and should prove useful in the development of plans for staffing nursing services for nurses equipped with specialized skills.

Consultative work concerning hospitals included the provision of information on staffing patterns to out-of-Province hospitals; participation in considerations of the role of Riverview Hospital; liaison with Directors of Nursing; a visit to the federal psychiatric centre at Matsqui, and review of an intermediate care facility's nursing services.

During the year the Consultant collaborated with the Registered Psychiatric Nurses' Association on a number of projects, as follows:

(*a*) development of data and recommendations to the Provincial Manpower Commitee on nurses qualified for psychiatric nursing practice;

(*b*) development of standards for practice for psychiatric nurses; and

(*c*) development of a format and mechanism for approving psychiatric nursing education programs.

Riverview Hospital makes extensive use of video tape recording equipment to train psychiatric aides and nursing staff.

A specific added dimension to the Nursing Consultant's responsibilities, at the request of the Registered Nurses' Association, was twofold in nature. First, a study of the need for consultative services by psychiatric units of general hospitals, was under way at year-end. The second, to provide nursing consultation to general hospitals on request, resulted in consultation visits to three hospitals. Professional responsibilities were also carried out through participation in the work of the Registered Nurses' Association Nursing Practice Committee.

A difficult and time-consuming responsibility during the year was the transferring of the Education Centre, Essondale, from the Department of Health to the Department of Education, and its residences to Riverview Hospital. It marked the end of 17 years of administrative responsibility for this facility.

SOCIAL WORK CONSULTATION SERVICES

New responsibilities during the year for the Consultant in Social Work included serving as Co-ordinator for Continuing Education for Mental Health Programs and acting as Regional Program Director for the Okanagan centres.

The work of the Series Review Study Committee, begun in the previous year, was completed in May 1976. The committee's findings encompassed the entire classification series for psychiatric social workers, and made major recommendations designed to bring about more professional accountability, more career potential at the service delivery level, more recognition for individual professional achievement, and the introduction to an appropriate licensing mechanism for clerical practitioners. At year-end the committee was waiting upon the Public Service Commission for endorsement of these recommendations.

With the objective of providing more flexibility in the hiring of clinical social workers, especially in rural areas where shortages of professional personnel are felt most keenly, a special committee was formed during the year to study the benefits of extending the "sessional appointment" mechanism for psychiatric social workers. It was expected that the report would be completed by year-end.

The inappropriateness of the curriculum and practicum models of the two University Schools of Social Work, in terms of community mental health priorities, continued to be of concern to the administration, as well as to psychiatric social workers throughout the Province.

This growing discrepancy between the requirements of the field versus the product of the schools prompted the establishment of a Committee on Social Work Education to engage in an ongoing constructive dialogue with the training institutions in Vancouver and Victoria, with more collaborative approaches to curriculum planning and field work practice.

As a member of the Child Care Facilities Licensing Board, the Consultant in Social Work was active in a number of special studies dealing with the appropriate utilization of facilities in Victora and the Lower Mainland. At year-end the Child Care Board was involved in the formulation of regulations for child care facilities.

The Consultant was active on a number of committees throughout the year, including the Program Advisory Committee; the Planning Committee for Mental Health Programs; the Advisory Committee to the School of Social Work, University of Victoria; the B.C. Conference on the Family; and the Committee on Special Needs for Special Children.

As chairman of the newly formed Continuing Education Committee, the Consultant worked with field and headquarters personnel in an effort to develop a comprehensive continuing education program for mental health personnel throughout the Province. The committee was successful in assisting most of the mental

health centres to commence local programs of in-service education and staff development, shared by other agency personnel within their respective communities.

The second annual Western Inter-provincial Conference on Rural Mental Health convened at Naramata under the chairmanship of the Consultant. Approximately 160 lay and professional delegates from the four western provinces attended the three-day conference. The format for this conference emphasized the need for a better understanding of how a variety of rural communities can come to grips with the development of mental health services. Using community simulation techniques, participants had occasion to experience real community issues in process, to react to pressure groups, and to come to know at first hand the special problems and resources unique to "have" versus "have not" communities, in terms of their availability of human services.

PSYCHOLOGY CONSULTATION SERVICES

Areas of special emphasis during the year included providing consultation on mental health policy, planning, implementation, administration, research, and evaluation. The over-all determination of policy and planning was done in conjunction with a Program Advisory Committee, composed of program personnel, representatives from different mental health regions in the Province, and people representing the various mental health disciplines.

Research and evaluation are important aspects of the administration of Mental Health Programs, especially the documentation of related needs to mental health of British Columbia communities and the necessary services required to deal with these needs.

Generally, there are four groups for whom specific mental health services are provided. These include young children, adolescents, adults, and special groups or groups of people with special needs. The total range of mental health services includes an assessment and diagnostic program, a client consultation program, a group-therapy program, a one-to-one therapy program, a rehabilitation program, a research and evaluation program, a community and agency support program, a counselling program, and a volunteer and self-help program.

During the year an area of concern was the maintenance of standards of providing psychological services. This concern was shared by the British Columbia Psychological Association.

In 1976 the Consultant in Psychology continued his responsibilities of acting Regional Director for northern British Columbia.

The result of increasing public awareness in mental health was reflected in the concern of many communities about mental health problems, and the focusing of what can be done by both the communities themselves and the Government to alleviate these problems. A number of requests to meet with various community groups to discuss these concerns were received by the Consultant in Psychology. Several communities themselves initiated the documentation of local needs, and such information was of great assistance in determining not only the types of services most needed but also in being able to utilize available resources most effectively.

Special responsibilities of the Consultant included services to various crisis intervention centres in the Greater Vancouver region, assistance to a number of centres in documenting community mental health profiles, and to the Integrated Services for Family and Children Centre in Victoria.

Through the support of the Community Care Services Society, it was possible to finish a health study of British Columbia communities with 50 or more residents.

In the first part of the study a survey was made of people working in the four main industries in British Columbia. In addition, residents of various communities and personnel from Government agencies were surveyed in an attempt to determine the type of general physical and mental health problems which existed in the various areas. This resulted in nine general categories which either directly or indirectly were thought to affect physical and mental health. The categories were composed of demographic, health, education, housing, employment, economic activity, basic services, environmental, and recreational variables.

The second part of the study consisted of collecting as much objective information as could be obtained pertaining to these variables, and this was used to provide profiles for the various communities in British Columbia. The study was initiated by the Government to assist in the planning of needed services.

MANAGEMENT ANALYST CONSULTATION SERVICES

Management analyst consultation services continued to be available to both Mental Health Programs and the Government health institutions, with the emphasis in 1976 on services to the mental health centres.

The response of mental health centre personnel to the proposed information system was enthusiastic and a project team, composed of both field and head office representatives, was formed. The team completed its work in May and presented its recommendations to the Program Advisory Committee in July. By the end of the year the procedures and programs required to collect and process data on mental health centre clients was completed and preparations were made to begin implementation in the centres.

With the assistance of the Medical Records Consultant, and the co-operation of the Division of Vital Statistics, modifications were made to data collection and processing.

During the year the Management Analyst assumed responsibility for the design of new forms and procedures for several areas requesting this service. Assistance was provided, for example, in the development of a system to evaluate two sheltered housing projects in Vancouver, and advice was frequently given on the design of the records system for the Forensic Psychiatric Institute.

The Management Analyst served on the Planning Committee, the Program Advisory Committee, and the Department of Health Metric Conversion Committee, and continued to represent Mental Health Programs in dealings with the Division of Vital Statistics, Computer and Consulting Services, and the Queen's Printer.

RESEARCH AND PLANNING SERVICES

The Research and Planning Section is a newly developed component of Mental Health Programs. At the beginning of the year the vacated position of Consultant in Sociology was converted to that of Research and Planning Officer and Dr. D. Fernandez was appointed to the position on January 15.

Initial efforts in this area were concentrated on program development. An "after-the-fact" planning model was developed, in close consultation with field staff, in order to organize the array of current services provided from mental health centres into a program format. Work in this endeavour proceeded well and was expected to be complete toward the end of the year.

Other activities involved exploring avenues of research grant funding, since no budget currently exists for research purposes. Contact was established with National Health and Welfare, and the Medical Research Council, regarding types of research funded.

There was direct consultation with field staff involved in research projects, and recent publications of research in the field of mental health were regularly summarized and distributed to field staff through mental health centre administrators.

Projects under way at year-end included the development of a treatment goal attainment scaling component of the new client information system, evaluation of a pilot program involving a community mental health nurse in a general hospital, comparison of mental health worker/population ratios of British Columbia and the other provinces, participation in the evaluation of medical care for boarding home residents, and studies regarding community awareness of mental health services.

It was hoped that activities in research could be increased through the acquisition of a federally funded national health scientist attached to Mental Health Programs.

STATISTICS AND MEDICAL RECORDS

After the major efforts of the past few years to computerize patient data, it was necessary during 1976 to carry out extensive editing of both patient records and computer programs in order that the data system could achieve greater accuracy and efficiency. The task of processing all computer programs was assumed by the statisticians, thus relieving the pressure on the Division of Vital Statistics and providing a faster, more direct service for both routine and special requests.

Statistical Forms and Routine Reports

The volume of statistical forms verified by this section again increased. As of March 1, 1976, the centres assumed the responsibility for coding all items on the statistical forms. In August the administration of Victoria Integrated Services for Child and Family Development was returned to Mental Health Programs, and their case load was added to the statistical system. In October the case load of the mental health workers who were formerly part of the Boundary Community Human Resources and Health Centre at Grand Forks was added to the statistical system as a new unit, administered by Trail Mental Health Centre.

A number of routine statistical reports were generated during the year, including the Monthly Statistical Bulletin, the Statistical Canada Outpatient Monthly Report, the Annual Statistics Canada Preliminary Report from Institutions, and the Annual Statistical Report for 1975. Two routine reports were discontinued, the Preliminary Patient Movement Report and the Annual Statistics Canada Return from Outpatient Programs.

A variety of research projects was undertaken during the year, such as a survey of clients admitted to mental health facilities with alcohol or drug addiction problems, the preparation of summary information packages on all Provincial in-patient and out-patient mental health facilities, and a survey of pharmacy services.

Close liaison with the Division of Vital Statistics and Statistics Canada was maintained throughout the year.

Medical Records

The transfer of the Medical Records Consultant position to Victoria greatly facilitated intra-departmental communications. As a result of the Consultant's visit to 28 mental health centres, a report on the record keeping system was prepared. One recommendation from this report, the formation of a Clinical Records Committee to encompass Mental Health Programs and Greater Vancouver Mental Health Services, had been implemented by year-end. This committee will be respon-

sible for policies and procedures of the client file system. Time was spent in orientating a number of new clerical staff in the centres, and a program of in-service education was set up specifically for the clerical staff.

Table 14—Patient Movement Trends, Mental Health Facilities, 1973–76

Mental Health Facilities	Yearly Sum of Entries[1] From—			Resident or Case Load		
	Oct. 1973 to Sept. 1974	Oct. 1974 to Sept. 1975	Oct. 1975 to Sept. 1976	End of Sept. 1974	End of Sept. 1975	End of Sept. 1976
All mental health facilities	13,901	15,691	16,056	15,234	17,347	17,622
Hospital programs	2,024	1,950	1,690	1,643	1,381	1,244
Riverview	2,024	1,950	1,690	1,643	1,381	1,244
Geriatric facilities	505	438	427	987	980	930
Valleyview	413	332	302	645	645	609
Dellview	72	88	97	174	178	177
Skeenaview	20	18	28	168	157	144
Mental health programs	11,372	13,303	13,939	12,604	14,986	15,448
Total in-patients	153	352	676	27	46	61
Burnaby	110	301	319	10	18	17
BCYDC	43	51	45	17	28	30
Venture (August 1975)[2]	.....	45	269	.....	8	8
Vista (August 1975)[2]	.....	16	43	.....	7	6
Total out-patients	11,219	12,890	13,263	12,577	14,925	15,387
All mental health centres	9,295	9,904	10,151	10,821	12,267	12,480
Abbotsford	253	226	241	231	305	350
Burnaby	807	1,015	975	776	1,002	1,253
Chilliwack	412	344	258	333	334	469
Courtenay	243	246	298	281	338	344
Cranbrook	117	297	254	63	224	237
Duncan	291	349	330	523	486	401
Fort St. John	107	314	178	199	492	762
Kamloops	350	253	380	392	352	496
Kelowna	464	377	426	634	787	696
Langley	235	226	326	210	348	277
Maple Ridge	398	415	394	768	737	783
Nanaimo	327	356	319	447	411	372
Nelson	419	358	457	672	1,013	266
New Westminster	222	200	228	258	231	273
Penticton	261	294	381	260	379	508
Port Alberni	482	417	403	286	298	214
Port Coquitlam	319	377	388	230	265	306
Powell River	259	222	205	366	302	256
Prince George	188	159	267	257	286	396
Prince Rupert	234	293	178	149	134	96
Saanich	242	287	396	512	555	548
Sechelt	128	147	133	74	109	100
Squamish	69	87	55	58	104	59
Surrey	278	360	345	535	614	727
Terrace	401	308	333	202	146	279
Trail	194	218	246	225	304	372
Vernon	759	779	784	1,097	760	701
Victoria	535	442	435	374	447	452
VISC (August 1976)[2]	.....	.....	30	.....	.....	181
Whalley	285	467	463	398	430	387
Williams Lake	16	71	75	11	74	100
All community care teams	1,772	2,834	3,112	1,652	2,537	2,907
Blenheim House (July 1974)[2]	.....	95	63	.....	76	80
Broadway Clinic	492	420	388	709	659	692
Kitsilano	215	349	260	156	293	286
Mount Pleasant	279	340	280	150	185	214
Richmond	185	187	202	145	214	248
Secure (April 1975)[2]	.....	53	156	.....	48	83
South Vancouver (July 1974)[2]	.....	26	252	.....	210	203
Strathcona	178	542	453	142	325	365
West End	274	198	397	247	248	281
West Side	149	424	426	103	279	354
BCYDC (out-patients)	152	152	185	104	121	101

[1] For the residential facilities this includes permanent transfers, admissions from community, and returns from leave and escapes.

[2] Month centre/team commenced reporting.

Table 15—Patient Movement Data,[1] Mental Health Facilities, 1976

Mental Health Facilities	Entries				Exits				
	Total	Direct Admissions	Returns From Leave	Permanent Transfers	Total	Discharges	Leaves	Permanent Transfers	Deaths
All mental health facilities	15,155	15,831	293	31	15,559	14,311	878	34	336
Hospital programs	558	1,287	271	....	1,606	779	749	3	75
Riverview	558	1,287	271	....	1,606	779	749	3	75
Geriatric facilities	418	396	21	1	457	80	115	1	261
Valleyview	286	265	21	....	307	56	112	....	139
Dellview	104	104	.....	....	108	8	3	1	96
Skeenaview	28	27	.....	1	42	16	.....	....	26
Mental health programs	14,179	14,148	1	30	13,486	13,452	14	30	.....
Total in-patients	670	639	1	30	640	596	14	30	.....
Burnaby	308	304	1	3	271	259	11	1	.....
BCYDC	44	44	.....	....	46	43	3	....	.....
Venture (August 1975)[2]	276	268	.....	8	279	263	.....	16	.....
Vista (August 1975)[2]	42	23	.....	19	44	31	.....	13	.....
Total out-patients		13,509				12,856			
All mental health centres		10,424				10,027			
Abbotsford		348				356			
Burnaby		975				816			
Chilliwack		282				121			
Courtenay		354				360			
Cranbrook		279				305			
Duncan		327				478			
Fort St. John		175				91			
Kamloops		384				199			
Kelowna		502				320			
Langley		219				293			
Maple Ridge		389				365			
Nanaimo		325				301			
Nelson		504				1,361			
New Westminster		229				159			
Penticton		404				226			
Port Alberni		378				476			
Port Coquitlam		408				204			
Powell River		228				265			
Prince George		166				68			
Prince Rupert		198				210			
Saanich		440				495			
Sechelt		150				171			
Squamish		37				69			
Surrey		363				166			
Terrace		370				214			
Trail		233				132			
Vernon		725				807			
Victoria		435				423			
VISC (August 1976)[2]		60				102			
Whalley		452				438			
Williams Lake		85				36			
All community care teams		2,852				2,596			
Blenheim House (July 1974)[2]		46				32			
Broadway Clinic		402				414			
Kitsilano		272				298			
Mount Pleasant		281				228			
Richmond		193				171			
Secure (April 1975)[2]		147				108			
South Vancouver (July 1974)[2]		274				252			
Strathcona		625				600			
West End		258				200			
West Side		354				293			
BCYDC (out-patient)		233				233			

[1] Table compiled from actual data through September 1976, and projected for the remainder of the year. (NOTE—In case of centres/teams opened in 1976, table compiled on basis of available data for 1976.)

[2] Month centre/team commenced reporting.

MEDICAL AND HOSPITAL PROGRAMS

Hospital Programs

Prior to the introduction of the British Columbia Hospital Insurance Service on January 1, 1949, the Province had been interested in developing a comprehensive program for many years. In 1932 the findings of a Royal Commission had recommended that a compulsory health insurance maternity plan be considered, and in 1936 a Health Insurance Act had been placed on the statutes but never proclaimed. In 1937, British Columbians voted in favour of health insurance in a referendum held in conjunction with a Provincial general election. Finally, in 1948, the *Hospital Insurance Act* was passed, establishing a Hospital Insurance Service which when implemented on January 1, 1949, provided coverage for acute care in approved general hospitals.

The funding of the operating costs of the service (Hospital Programs) was a 100-per-cent responsibility of the Province until 1958 when the Federal Government agreed to share on a Canada-wide basis approximately 50 per cent of the approved cost of certain hospital services.

In March 1975 the name of the service was changed to Hospital Programs as part of a reorganization of the Department of Health.

The following pages contain individual reports of the divisions which comprise the administrative structure of Hospital Programs, and brief reviews of pertinent legislation and statistical data.

HOSPITAL PROGRAM HIGHLIGHTS

- Gross operating expenditure for public general, rehabilitation, and extended-care hospitals for the calendar year 1976 amounted to $520 million.
- A total of 395,706 adult and child B.C. Hospital Program patients was discharged in 1976, a decrease of 2,573 or 0.65 per cent less than in 1975; 95.7 per cent of all patients discharged were covered by Hospital Programs.
- Hospital Programs was responsible for 3,371,036 days of care for adults and children in public hospitals, a decrease of 42,594 days or 1.25 per cent less than 1975. The average length of stay was 8.52 days.
- In 1976, 18 major hospital projects were completed, involving an estimated $33.5 million. Two special unit projects were the Acupuncture Clinic and the installation of the brain scanner, both at the Vancouver General Hospital.
- At year-end there were 4,320 extended-care beds in the Province and there were approximately 1,670 additional extended-care beds under construction or in planning stages; of these about 500 additional beds were expected to come into operation early in 1977.
- During 1976 the regional hospital districts debenture sales to the B.C. Regional Hospital Districts Financing Authority amounted to $67 million.
- Grants totalling $7.5 million were approved toward purchases of movable and fixed technical equipment amounting to approximately $12.5 million. Over 7,200 applications for such grants were received from hospitals.
- Over 2,000 patient accounts and 2,600 emergency-service and minor-surgery accounts were processed daily by Hospital Programs.
- Over 750 out-of-Province hospital accounts were processed each month, resulting in an estimated total expenditure of over $8 million.

BRITISH COLUMBIA REGIONAL HOSPITAL DISTRICTS ACT

This Act, which is primarily related to the capital cost of hospital buildings and equipment, provides for the division of the Province into large districts to enable regional planning, development, and financing of hospital projects to be carried out under a formula which provides substantial financial assistance from the Provincial Government.

Each regional hospital district, subject to the requirements of the Act, is able to pass capital expense proposal by-laws authorizing debentures to be issued covering the total cost of one or more hospital projects. When approval has been obtained from the Minister of Health, the district is able to raise any funds immediately required by temporary bank borrowing on a uniform basis. Periodically the Regional Hospital Districts Financing Authority (*see* below) provides long-term financing by purchasing debentures issued by districts, thus enabling regional hospital districts to repay their temporary bank borrowings.

Each year the Provincial Government pays through Hospital Programs from the Hospital Insurance Fund a portion of the principal and interest payments required on the debentures in accordance with section 22 of the Act. Each district raises, by taxation, the remainder of the annual principal and interest payments required to retire the debentures which are held by the B.C. Regional Hospital Districts Financing Authority.

Under the sharing arrangements, the Province pays annually to, or on behalf of, each district 60 per cent of the approved net cost of amortizing the district's borrowings for hospital construction projects, after deduction of any items which are the district's responsibility, such as provision of working capital funds for hospital operation, etc. If a 4-mill tax levy by the district is inadequate to discharge its responsibility in regard to annual charges on old debt for hospital projects, as well as the remaining 40 per cent of the charges on the new debt resulting from hospital projects, the Province will provide 80 per cent of the funds required in excess of the 4-mill levy.

The affairs of each regional hospital district are managed by a board comprised of the same representatives of the municipalities and unorganized areas who comprise the board of the regional district (incorporated under the *Municipal Act*), which has the same boundaries as the regional hospital district. The board of each regional hospital district is responsible for co-ordinating and evaluating the requests for funds from hospitals within the district, and for adopting borrowing by-laws, subject to approvals and conditions required under the Act, in respect to either single projects of an over-all program of hospital projects for the district.

In 1975 the British Columbia *Regional Hospital Districts Act* was amended to increase the discretionary amount which a regional hospital district can raise annually for unforeseen capital expenditures, if specified by the Minister, to $200,000, or the product of one quarter of a mill, whichever is the greater.

BRITISH COLUMBIA REGIONAL HOSPITAL DISTRICTS FINANCING AUTHORITY ACT

This Act established a Provincial Government authority similar to the one set up to assist school districts in financing their projects. The functions of the authority are referred to briefly above.

In 1975 the purposes of the authority were expanded to permit assistance to medical and health facilities and community, human resources, and health centres and any other community, regional, or Provincial facilities for the social improvement and welfare of the community or the general public good. Also, the authority was permitted to purchase debentures from incorporated bodies other than regional hospital districts, provided they are authorized under any Act or their charter or their memorandum of association to issue debentures for the financing of projects permitted under the Act.

HOSPITAL INSURANCE ACT

The Hospital Programs branch of the Department of Health operates under the authority of the provisions of this statute which also authorizes the establishment of the Hospital Insurance Fund, from which grants are made to hospitals toward operating expenses and capital costs. Grants are also made to regional hospital districts toward capital expenditures made to hospitals.

- Generally speaking, every permanent resident who has made his home in British Columbia during the statutory waiting-period is entitled to benefits under the Act.
- Reimbursement to public general hospitals is based on an approved annual budget; for accounting purposes *per diem* rates are used for medically necessary in-patient care rendered to qualified British Columbia residents

who are suffering from an acute illness or injury, and those who require active convalescent, rehabilitative, and extended hospital care. The payment made to a hospital by Hospital Programs from the Hospital Insurance Fund amounts to $4 less than the *per diem* rate, and in the case of extended-care patients under 19 years of age, $1 less than the *per diem* rate, approved for that particular hospital. The patient is responsible for paying the remainder. The Provincial Government pays the above-noted daily $4 or $1, as applicable, on behalf of Provincial social welfare recipients.

- The wide range of in-patient and out-patient benefits provided under the Act is described below.
- Qualified persons who are temporarily absent from British Columbia are entitled to certain benefits for a period of 12 months following their departure from the Province.
- In addition to the payment toward operating costs, paid to hospitals as described above, hospitals and regional hospital districts receive grants of up to 60 per cent of approved costs of construction or acquisition of hospital facilities, one third of the cost of minor movable equipment, 75 per cent of the cost of major diagnostic equipment, and 100 per cent of the cost of equipment which results in proven savings in operating costs.

HOSPITAL ACT

One of the important functions of Hospital Programs is the administration of the *Hospital Act*. The Deputy Minister of Medical and Hospital Programs is also the Chief Inspector of Hospitals for British Columbia under the Act.

The *Hospital Act* controls the organization and operation of hospitals, which are classified as follows:

- Public hospitals: Nonprofit hospitals caring primarily for acutely ill persons.
- Private hospitals: This category includes small hospitals, most of which are operated in remote areas by industrial concerns primarily for their employees, and licensed nursing-homes which are not under hospital insurance coverage.
- Rehabilitation and extended-care hospitals: These nonprofit hospitals are primarily for the treatment of persons who require long-term rehabilitative and extended hospital care.

HOSPITAL RATE BOARD AND METHODS OF PAYMENT TO HOSPITALS

The Hospital Rate Board, appointed by Order in Council, is responsible for advising the Deputy Minister in regard to hospitals' operating budgets and rates of payments to hospitals for both in-patient and out-patient benefits.

A system of firm budgets for hospitals, which, with modifications, has been in use since January 1, 1951, provides for a review of hospitals' estimates by the Rate Board. Under the firm-budget procedure, hospitals are required to operate within the total of their approved budgets, with the exception of fluctuation in days' treatment and other similar items. They are further advised that deficits incurred through expenditures in excess of the approved budget will not be met by the

Provincial Government. However, hospitals retain surplus funds earned as a result of keeping expenditures within the total amount approved.

The value of variable supplies used in patient-care has been established. It is generally recognized that the addition of a few more patient-days does not add proportionately to costs because certain overhead expenses (such as heating, etc.) are not affected. However, some additional supplies will be consumed, and it is the cost of these variable supplies which has been determined.

When the number of days' treatment provided by the hospital differs from the estimated occupancy, the budgets are increased or decreased by the number of days' difference multiplied by the patient-day value of the variable supplies. Individual studies and additional budget adjustments are made in those instances where large fluctuations in occupancy involve additions or reductions in stand-by costs.

Policies to be used in the allocation of the total funds provided are approved by the Government. The Hospital Rate Board reviews the detailed revenue and expenditure estimates forwarded by each hospital and applies the policies in establishing approved budgets.

Approximately 96 per cent of all in-patient hospital accounts incurred in British Columbia are the responsibility of Hospital Programs. Cash advances to hospitals are made on a semimonthly basis, so that hospitals are not required to wait for payment until patients' accounts are submitted and processed by Hospital Programs. Qualified patients are charged $4 per day, and in the case of extended-care patients under 19 years of age, $1 per day, effective June 1, 1976, which is deductible when calculating payments to hospitals from the division.

Nonqualifying residents are charged the hospitals' established *per diem* rate, which is all-inclusive, that is, the daily rate covers the cost of all the regular hospital services, such as X-ray, laboratory, operating-room, etc., provided to patients, in addition to bed, board, and nursing care.

"The Wheeling Eights" perform a square dance—part of the patient rehabilitation program at Shaughnessy Hospital's spinal cord injury unit.

HOSPITAL CONSULTATION AND INSPECTION DIVISION

This division provides consulting services to public and private hospitals, and to other divisions of Hospital Programs and the Department of Health, in all aspects of hospital organization, operation, and management. It is also responsible for an inspectional program to ensure that minimum standards of care, safety, and licensure are met.

The services of the division are provided by teams consisting of consultants in hospital administration, biomedical engineering, dietetics, laboratory, social services, management engineering, nursing, and X-ray.

Consultation and Inspection

The ongoing work of consultation and inspection, which was carried out during the year using a "team approach," involved 57 visits to private hospitals, 141 visits to general hospitals, and participation in many other activities such as federal-provincial meetings and task forces, and educational seminars. Other activities during the year include visits to 33 hospitals regarding cost-containment studies which were related to the level of over-expenditure, and further special assistance was given to hospitals in certain problem areas. In addition, work was also done on a laboratory work unit study, a review of hospital social service statistical requirements, and eight special hospital management engineering studies. Staff members prepared a training guide for dietetic departments, and were involved in the identification and correction of patient care equipment hazards and in "quality assurance" committee activities.

Private Hospital Visiting

The year 1976 saw a continuation of the consultation and inspection service to private hospitals. In addition to team visits, most private hospitals in the Province received special visits from consultants in nursing, administration, and dietetics. It is intended that this approach to the inspection of private hospitals will be continued in 1977.

Participation in Educational Program

Three members of the division are participants in "GAMAT," which is a program developed by the British Columbia Health Association to provide education for hospital society trustees and emphasizes their role and responsibilities. The GAMAT team has 12 members representing the Government, administration, medicine, the association, and trustees.

RESEARCH DIVISION

The division performs a statistical resource function for Hospital Programs and serves as a focal point for data collection and analysis. Primarily responsible for examining the need for new hospital beds and services, the division is also involved in a wide range of activities.

The preparation of recommendations for additional hospital capacity, in the face of an ever-increasing range of benefits and services covered by Hospital Programs, necessitates close liaison at the hospital, regional, and Provincial level. In spite of a greater emphasis being given to alternatives to acute in-patient beds

in recent years, the population growth of the Province necessitates a continuing review of general hospital bed requirements. Reports and proposals for additional hospital capacity are placed before the planning group of Hospital Programs for review, and if approved are submitted to the Minister for approval. During the course of the year, 36 studies of hospital requirements for both acute and extended-care beds were completed.

The division also compiles statistical data relating to all hospitalization in the Province. The admission/separation records submitted by the hospitals for each patient form the basis of this information. All diagnosis and operations are coded according to the Eighth Revision of the International Classification of Diseases Adapted (ICDA). Through this classification system, the incidence of disease is analysed by age, sex, geographical location, as well as other variables.

In connection with morbidity analysis, the division publishes a number of annual reports. The *Statistics of Hospital Cases Discharged* includes the standard morbidity tables consistent with other provinces, and which affords an opportunity to make interprovincial comparisons of hospital data. The *Statistics of Hospitalized Accident Cases,* which is also prepared annually, provides a broad analytical coverage of hospitalized accident cases by circumstance, type of accident, and nature of injury. A report of the *Day Care Surgery in British Columbia Hospitals* is also prepared by the division for purposes of showing the potential and development of this type of service. In addition to these reports, the division supplies data to many agencies, both inside and outside of the Government. The demand for hospital morbidity data continues to grow and has become particularly useful in the planning of specialized hospital services.

The division also maintains a reporting system for therapeutic abortions performed in hospitals in the Province.

HOSPITAL FINANCE DIVISION

The Hospital Finance Division is responsible for the assembling of relevant information and the preparation of data for the use of the Hospital Rate Board in its review of the annual and preconstruction operating estimates of hospitals. During this process, estimated revenues and expenditures are examined in detail, and adjustments to estimated amounts are recommended. The gross expenditure approved by the Hospital Rate Board for public general, rehabilitation, and extended-care hospitals for 1976 amounted to approximately $520 million.

The division also reviews the annual budgets prepared by regional hospital districts, and works closely with the British Columbia Hospital Financing Authority and the regional hospital districts in the financing of hospital capital projects and repayment of debentures. Total regional hospital district debenture sales to the British Columbia Regional Hospital Districts Financing Authority amount to $254 million, of which $67 million was added during the current year.

Another function of the Finance Division is the processing of admission-separation records (accounts), which hospitals submit for each patient, and approving for payment all acceptable claims and the coding for residential data, etc. Also included are out-patient, day care, and out-of-Province accounts.

The division is also responsible for the approval of grants to assist hospitals in the purchase of equipment. The equipment grant structure is such that Hospital Programs pays 100 per cent on approved equipment where the equipment purchase will result in a reduction in approved operating costs and the recovery of the capital cost in a reasonable time. Grants of 75 per cent are paid on major diagnostic

equipment used in pathology, radiology, nuclear medicine, and ultra-sound, and 33⅓ per cent grant on all other movable depreciable equipment. In 1975, after review of approximately 7,200 applications received from hospitals, grants totalling $7.5 million were approved on purchases of movable and fixed technical equipment amounting to approximately $12.5 million.

The division assists in administering the Federal/Provincial Agreement under the *Hospital Insurance and Diagnostic Services Act*. This involves the preparation of annual claims and the disbursement of Hospital Programs funds in a manner that will maximize the Province's reimbursement under the agreement.

In order to ensure that plans for new hospitals or hospital additions are prepared with economical and efficient operation in mind, preconstruction operating estimates are completed by hospitals at the final sketch plan stage. It is essential that the estimated operating costs of the new hospital, or new addition, compare favourably with other hospitals actually in operation. Where the hospital's preconstruction operating estimates do not indicate a reasonable operating cost, it may be necessary for the hospital board to revise its construction plans to ensure efficient and economical operation. Once a satisfactory preconstruction operating budget has been agreed upon by the hospital officials and Hospital Programs, the hospital board is required to provide written guarantees relative to the projected operating cost. It is considered that this method of approaching the operating picture for proposed hospital facilities ensures more satisfactory planning, efficient use of hospital personnel, and an economical operation.

As a means of assisting hospital staff to maintain and develop health care skills, Hospital Programs provided over $390,000 in hospital operating budgets during the year to enable hospital employees to attend or participate in short-term educational training courses.

The following is a summary of comparative expenditures of Hospital Programs (including capital) for the fiscal years ending March 31, 1972–76, inclusive:

	1972	1973	1974	1975	1976
	$	$	$	$	$
Administration	1,400,095	1,538,905	1,800,229	2,438,265	3,556,066
Payments to hospitals	206,667,254	235,594,194	275,801,859	370,927,805	483,107,890
Totals	208,067,349	237,133,099	277,602,088	373,366,070	486,663,956

Finance Claims Section

Patient accounts processed during the year were in excess of 2,000 per working-day, plus over 2,600 emergency-service and minor-surgery accounts.

The staff of Admission Control reviews each application for benefits under the *Hospital Insurance Act*. Details of residence are checked with the verifying documents, and as a result over 5,300 claims had to be returned to the hospitals during the year because they were incomplete or unacceptable, and over 1,600 letters were written on eligibility, verification, and related matters.

The In-patient Claims Section pre-audits the charges made to Hospital Programs, and ensures that all information shown on each claim is completed so that it can be coded for statistical purposes, and that it is charged to the correct agency, such as Hospital Programs, Workers' Compensation Board, the Department of Veterans Affairs, or other provinces and territories. Preliminary figures for 1976 show that more than 449,000 accounts (excluding out-of-Province) were processed.

The day-care surgical services, day-care/night-care psychiatric services, out-patient psychiatric services, day-care diabetic services, and dietetic counselling accounts increased in volume to over 11,000 per month in 1976. During the year the service continued to provide a quarterly statistical run of day-care surgical services for the hospitals of the Province. Payment for out-patient physiotherapy patients was provided and preliminary figures indicate that accounts for over 373,000 treatments were processed.

The Out-of-Province Section processes all claims for hospital accounts incurred by British Columbia residents in hospitals outside the Province. This requires establishing eligibility and the payment of claims. During 1976 over 750 accounts were processed each month, resulting in an estimated total annual expenditure of over $8 million.

The claims distribution centre receives, sorts, and distributes all the forms and correspondence received in the Hospital Claims Section; approximately 12,000 claims, documents, and letters are handled daily.

HOSPITAL CONSTRUCTION AND PLANNING DIVISION

During 1976 this division has continued to provide a consultative service to hospital boards planning new acute or extended-care hospital facilities, diagnostic and treatment centres, and additions or alterations to these buildings. With inflation, continued emphasis was placed on using public funds to the best advantage and deleting any work not considered strictly necessary. All construction programs and applications for grants toward minor building improvements submitted to the branch were reviewed with this in mind.

During the year 18 major projects were completed or substantially completed in the Province, costing over $33 million; 254 new extended-care beds have been provided. Nearing completion were 300 new extended-care beds on the campus of The University of British Columbia, and construction of 100 beds was completed at year-end in North Kamloops.

Both these facilities were expected to admit their first patients early in 1977. The remaining 154 extended-care beds have been provided at the expanded Holy Family Hospital in Vancouver, which also provided 24 additional activation/rehabilitation beds. The completion of the fourth floor of the G. F. Strong Rehabilitation Centre has added 50 beds to that facility. Details of the balance of the projects are included in this report.

The latest national building codes require fire-resistant construction, fire separation around patient rooms, door closers, etc., at tremendous capital cost. For example, recent code requirements call for a type of patient-room door costing $1,000 installed. However, this and other requirements tend to hamper the functional needs of a health care facility, therefore we have undertaken a study in conjunction with National Research Council on hospital fires. This preliminary study confirmed that major disasters from hospital fires have been avoided in this Province due largely to quick and effective action by hospital staff. Unfortunately there is insufficient evidence at the present time to demonstrate to the writers of the code that the hospital staff is the first line of fire control. When the case is sufficiently substantiated, a presentation will be made to the National Standing Committee on Fire Safety in Buildings by the Director of the division, who was recently appointed to that committee.

The division records its sincere appreciation to the office of the Provincial Fire Marshal for all the assistance they have given during the year in arriving at a better

mutual understanding of fire and National Building Code requirements as they relate to hospital construction, particularly projects involving renovations and upgrading.

To speed up planning for new acute and extended facilities, the division has been working on additional comprehensive guidelines. Suggestions and criticisms from existing extended-care units in the Province have been solicited and are currently being evaluated for inclusion in a revised extended-care program and design guide which will be completed next year. With regard to acute facilities, staff from the division are refining guidelines for hospital departments which will be considered in the development of planning criteria on a national basis. The Director of the division, G. F. Fisher, is a member of the federal subcommittee on Health Planning and Construction.

The effect of metric conversion on the construction industry in January 1978 is being investigated by the division.

Since E. B. Foxon, Chartered Quantity Surveyor, joined the division, greater attention is being paid to the correct wording of contract documents and to ensuring that adequate insurance coverage is provided on construction projects. Mr. Foxon is a member of the Joint Technical Planning Committee, on which representatives from Government and industry try to resolve mutual problems in connection with insurance, bonding, contract arrangements, mediation, and the preparation of standard documents for use by Government and industry. Besides being a member of the Insurance Subcommittee, which is trying to achieve uniform insurance for all Government departments, Mr. Foxon is chairman of the Mediation Council for the settlement of disputes between owners and contractors.

The engineering section has been involved in the Canadian Standards Association Subcommittee on Essential Electrical Systems in Hospitals and new CSA standards for medical gas systems. Liaison has been maintained with consultants engaged in hospital design, particularly regarding methods of energy management.

PROJECTS COMPLETED DURING 1976

Dawson Creek & District Hospital—Stage I of a renovation program which entailed the relocation of a 24-bed nursing unit, was completed in June 1976.

Fort Nelson General Hospital—Stage I of an expansion and renovation program, the excavation and foundation work, etc., was completed in June 1976.

Fort St. John General Hospital—The completed expansion program was officially opened by the Honourable R. H. McClelland, Minister of Health, on September 11, 1976. The program included ambulatory care, radiology, nuclear medicine, and central sterilizing facilities.

Overlander Extended Care Hospital, Kamloops—The new 100-bed extended-care facility was opened on December 11, 1976.

Keremeos Diagnostic & Treatment Centre—The new diagnostic and treatment centre (no holding beds) and ambulance garage were opened in May 1976.

Powell River General Hospital—The completed renovation program was officially opened on March 12, 1976. The project included the provision of a four-bed intensive care unit, a hydrotherapy pool, and a ventilation system.

Prince George Regional Hospital—The clinical facilities for the diploma nursing program were completed in September 1976.

Queen Charlotte Islands General Hospital—A program of upgrading the mechanical, electrical, and plumbing systems was completed in October 1976.

Trail Regional Hospital—Stage I of an upgrading project, which involved the dietary department, was completed in June 1976. The project also included the air-cooling of the existing hospital and the provision of a new nurses' station on the second floor.

VANCOUVER

Cancer Control Agency of B.C.—Temporary structures for oncology residents and cytology records computerization were completed in June 1976.

Children's Hospital—The new ambulatory care facilities were completed in June 1976.

G. F. Strong Rehabilitation Centre—In October 1976 the fourth floor for 50 rehabilitation beds and a second hydrotherapy pool were completed.

Holy Family Hospital—An addition and renovation program, which provides 80 activation/rehabilitation and 154 extended-care beds, was officially opened on June 20, 1976, by the Honourable Grace McCarthy, Provincial Secretary.

St. Paul's Hospital—A program of alterations and improvements to the diagnostic and treatment and service areas was completed in December 1976.

Vancouver General Hospital—The first patients were admitted to the new acupuncture clinic on January 5, 1976.

The E.M.I. brain scanner, Stage I of the neurosciences project, was officially opened by the Honourable R. H. McClelland on October 1, 1976.

The renovations to the Willow Pavilion, which provided a new intensive care nursery, were substantially completed early in July 1976.

Mount Saint Mary Hospital, Victoria—A kitchen addition and a renovations program were completed in December 1976.

PROJECTS UNDER CONSTRUCTION AT YEAR-END

Burnaby General Hospital—A major expansion program is being carried out under project management, including the provision of 260 additional acute beds. A second block will house expanded diagnostic, treatment, and service facilities.

Cumberland General Hospital—Construction of an intermediate care unit of 50 beds and a diagnostic and treatment centre with six holding beds.

Dawson Creek & District Hospital—Stage II will include the expansion of the administration area, day care surgery, emergency, and radiology departments.

Delta Centennial Hospital Society—A new 100-bed extended-care hospital based on the same design as Overlander, Kamloops.

Elkford Diagnostic & Treatment Centre Society—Construction of a diagnostic and treatment centre with three holding beds.

Fort Nelson General Hospital—Stage II, including expansion of ambulatory care and diagnostic facilities. Also the provision of seven acute beds in "shell."

Wrinch Memorial Hospital, Hazelton—A new hospital providing 27 acute beds, plus eight in "shell" and four extended-care beds, is being built under construction management to replace the existing 50-bed hospital.

Royal Inland Hospital, Kamloops—The second phase of the first stage of an expansion program including the enlargement of diagnostic service, X-ray, emergency, laboratory, and dietary departments and provision of 14 acute beds in "shell," is now under way. Also, safety measures as required by the Fire Marshal.

Kelowna General Hospital—A new extended-care hospital on a new site providing 100 beds plus 50 in "shell." The plans for the Overlander extended-care hospital in North Kamloops are also being used for this project.

Queen's Park Hospital Society, New Westminster—A new hospital facility providing 300 extended-care beds, 100 of which are to be teaching beds, is being built under construction management adjacent to Woodlands School.

Royal Columbian Hospital, New Westminster—A major expansion consisting of an addition of 100 acute beds plus a further 45 beds for special services (intensive care, activation, renal dialysis, and metabolic investigation), is being carried out under project management.

Pemberton & District Hospital Society—A new diagnostic and treatment centre with three holding beds.

Mills Memorial Hospital, Terrace—An expansion program consisting of an addition of 25 acute beds in "shell," 16 psychiatric beds, six day care psychiatric spaces, and renovations to the service area, is under way under construction management.

Vancouver

Children's Hospital—Projects to expand the surgical suite and provide a cleft palate unit are at present under way.

Mount Saint Joseph Hospital—Construction of an addition and conversion of existing extended-care beds to increase the hospital's capacity to 161 acute beds, including 20 psychiatric beds and day care psychiatric facilities. Also a new 150-bed extended-care unit and upgrading and expansion of services. This project is under construction management.

St. Vincent's Hospital—Phase II of the hospital's expansion program involves alterations and renovations to the 1939 East Wing, including the alteration of the old dietary department for ambulatory services, renovation of the radiology and physiotherapy departments, and upgrading the electrical and elevator services.

UBC Health Sciences Centre—The new 300-bed extended-care unit was completed in October 1976.

Vancouver General Hospital—The provision of a surgical day care unit.

Royal Jubilee Hospital, Victoria—An interim program to upgrade the emergency department is being carried out by hospital staff.

TENDERING STAGE AT YEAR-END

Saanich Peninsula Hospital—Construction of a new 75-bed acute facility.

Tofino General Hospital—Expansion of services.

PROJECTS IN ADVANCED STAGES OF PLANNING

Matsqui-Sumas-Abbotsford General Hospital—Expansion of the emergency department and psychiatric unit.

Langley Memorial Hospital—Construction of a 75-bed extended-care unit adjacent to the existing hospital.

Nanaimo Regional General Hospital—Completion of a 12-bed intensive-care unit presently in "shell" form. Nine beds only are to be placed in service initially.

Young visitors to Victoria General Hospital receive colouring books from Nurse Sherry Fossum, Associate Director of Patient Care, as part of hospital's familiarization program. *Photo courtesy of The Victorian.*

Coronary intensive care unit with full patient monitoring opened at Victoria's Royal Jubilee Hospital during 1976.

Lions Gate Hospital, North Vancouver—Northern (Services) expansion project.

South Okanagan General Hospital, Oliver—Development of plans for a 75-bed extended-care unit.

Prince George Regional Hospital—Planning for a 75-bed extended-care unit.

Trail Regional Hospital—Development of Stage II of a master plan including central sterilizing area, emergency, surgical facilities, etc.

Victoria General Hospital—Radiology renovations and expansion of electrodiagnostic services.

ADDITIONAL PROJECTS APPROVED AND IN VARIOUS STAGES OF PLANNING

New facilities—

Acute hospitals—Coquitlam (150); Port McNeill (10); also replacement of a portion of Victoria General Hospital (250) on a new site.

Diagnostic and treatment centres—Delta.

Additional and (or) replacement acute beds—Abbotsford (129, including 20 psychiatric and 15 activation/rehabilitation), Cranbrook (42), Duncan (12 psychiatric), Kamloops (Royal Inland, 47), Mackenzie (seven plus five in "shell"), Maple Ridge (97, including some psychiatric), Masset (4), Mission (47), Richmond (150), Salmon Arm (12), Vancouver (Cancer Control Agency of B.C., 28; New Children's, 200).

New extended-care facilities—Coquitlam (75), Creston (35), Merritt (10), Mission (50), Princeton (10), Rossland (12).

Additional extended-care beds—Castlegar (15); Comox (15); Salmon Arm (15); Surrey (78); Vancouver (Metropolitan Council, 80 plus 80 intermediate care; Sunny Hill, 22), Victoria (Glengarry, 150).

Expansion and (or) updating of services—Chilliwack, Clearwater, Comox, Cranbrook, Creston, Fort St. John, Ganges, Kamloops (Royal Inland), Maple Ridge, Masset, Penticton, Prince George, Richmond, Sechelt, Tahsis, Trail, Vancouver (St. Paul's, Shaughnessy, Sunny Hill, Vancouver General), Victoria (Royal Jubilee, Victoria General).

MEDICAL CONSULTATION DIVISION

The function of this division is to provide medical consultation within Hospital Programs, with Community Health Programs, with other departments of the Government, with hospitals at all levels of care and with regional hospital districts. For example, within Hospital Programs, in addition to general medical consultation, the division assists in planning and implementation of new services by having representatives on the planning group, Equipment Committee, and the Functional Program Review Committee of Hospital Programs.

The division has maintained liaison with other health agencies, such as the College of Physicians and Surgeons of British Columbia, the B.C. Medical Association, B.C. Hospitals' Association, and the Faculty of Medicine at UBC. Understandably, in a province with more than 100 hospitals, problems relating to medical staff activities occur; these organizations have provided valued assistance in resolution of these difficulties. Participation on the Medical Advisory Committee of the

B.C. Medical Association with Advisory Subcommittees to the Government on many subjects continues to be a useful function. In 1976, perinatal programs was established as a new continuing subcommittee and the Fifth Open Heart Review was received from the Task Committee which began its work in 1975.

Medical Consultation Division has the responsibility for a general auditing of the quality of medical care for hospitals. This function is performed by a central review of discharge diagnoses and related information, patterns of care, hospital role, and by on-site visits. Regular visits by the Medical Record Librarian Consultant assist hospitals in maintaining a high standard of medical documentation. The audit process also involves assessment of eligibility for acute care or other types of care or insured benefit. Registered nurses within the division audited and did the medical coding of approximately 450,000 admission/separation records and 65,000 day care surgical services records. The information coded by these individuals is utilized by the Research Division to produce the regional and hospital profiles necessary for planning and audit functions.

The Medical Consultation Division has the responsibility for both the program and eligibility status of extended-care patients. The Central Registry for long-term care applications is continuing to develop and now is capable of managing all hospital waiting lists. An initial on-site assessment of applicants for long-term care is being started in co-operation with Community Health Programs and local units. These assessors will mobilize community resources on behalf of patients waiting for long-term care and ensure that their names are on the correct list.

During 1976 a new extended-care unit of 154 beds was established at Holy Family Hospital, Vancouver, together with 100 beds built at the Overlander Hospital in Kamloops, and 300 beds for the UBC Extended Care Unit. This latter unit will be ready for occupancy in January 1977. In addition, 75 beds in the Arbutus Private Hospital came under coverage and beds were designated for extended care in Prince George Regional Hospital (22 beds), Kimberley & District Hospital (18 beds), Trail Regional Hospital (12 beds), together with a number of small extended-care "holding units" within community hospitals throughout the Province. There are now 4,320 extended-care beds with very close to a 100-per-cent occupancy, a further 950 extended-care beds will be available for patients in 1977 and 15 more units are involved in various stages of approved planning.

These institutions receive a regular quarterly review by a special multidisciplinary team. This latter function emphasizes a consultative review of the hospitals to assist in establishing optimal patient programs. The review also permits an individual audit to establish the need and eligibility for continuing care. The shortage of beds in intermediate care tends to hamper the placement of patients upgraded to this type of care in the extended-care system. The policy of short-term admission of extended-care patients continues to be useful, supporting and encouraging relatives who wish to take care of extended-care patients in their own homes, but who require occasional holiday or other relief.

During 1976 the Medical Consultation Division continued to have responsibility for determining eligibility for the applicants for admission to the five designated intermediate-care homes in the Province, totalling 663 beds. These homes are visited quarterly to contribute to the development of an intermediate-care program in the unit and, secondly, to assess the continued eligibility of the residents.

Good co-operation was provided by the operators of these units in a joint endeavour for providing care based on a home rather than a hospital model. However, those residents who are incompatible with the usual units because of mental and emotional handicaps present a challenge to all concerned. It is hoped that this

type of care, particularly in larger communities, can be suitably provided within special extended-care programs or other facilities, rather than in standard intermediate-care units.

ADMINISTRATIVE SERVICES DIVISION

The division provides a variety of administrative services to the other divisions of Hospital Programs and to outside agencies. These services include the following:

Administration

The personnel function, including payroll, recruitment, promotion, and labour relations matters.

The review of requisitions and vouchers for all divisions, including travel expenses and requisitions for supplies and equipment.

The receipt and deposit of all incoming cheques.

The handling and distribution of all hospital forms and the sorting and distribution of mail.

The co-ordination of the preparation of the annual estimates for Hospital Programs.

The preparation and publication of the Hospital Programs Bulletin.

The preparation and distribution of information pamphlets for Hospital Programs.

Legislation

The drafting of legislation, regulations, and Orders in Council related to the various statutes administered by Hospital Programs. In the performance of these duties the division works closely with the Attorney-General's Department. Statutes which relate to the division's activities include

- *Hospital Insurance Act;*
- *Hospital Act;*
- *Regional Hospital Districts Act;*
- *British Columbia Regional Hospital Districts Financing Authority Act;*
- *Medical Centre of British Columbia Act.*

Hospital Societies

The provision of assistance to hospital societies in connection with the drafting of hospital constitutions and by-laws and their interpretation and application.

The review of hospital by-laws or amendments to hospital by-laws prior to their submission for Government approval as required under the *Hospital Act.*

The processing, in collaboration with the Hospital Consultation and Inspection Division, of transfers of private hospital property and transfers of shares in the capital stock of private hospital corporations.

The co-ordinating of the acquisition and disposal of hospital sites and private hospitals.

In conjunction with the Land Registry Office, control over the property of hospitals and private hospitals to ensure that the property records are suitably endorsed so that land transfers may not be made until they are approved under the *Hospital Act.*

Federal-Provincial Hospital Arrangements

The drafting and processing of the necessary amendments to the Federal-Provincial Agreement and associated matters.

Regional Hospital Districts

In conjunction with officials of other divisions, other Government departments, and the various regional hospital districts, the division assists in processing capital expense proposals and in arranging for the necessary by-laws and Orders in Council for temporary borrowings and related matters.

Eligibility

The review of applications for benefits made by or on behalf of persons admitted to hospitals.

The maintenance of uniform standards of eligibility in all hospitals and the provision of assistance to hospitals in training admitting staff.

The handling of applications to the Health Insurance Supplementary Fund.

Third-party Liability

The review of all hospitalization reports for patients admitted to hospitals with accidental injuries.

The processing and verification of the reimbursement from public liability companies for hospital expenses paid on behalf of accident victims. During the year ending March 31, 1976, a total of over $2 million was recovered through the process.

APPROVED HOSPITALS

Hospitals as Defined Under the Hospital Insurance Act Designated by Order in Council 1391/1958 (Revised to November 30, 1976)

(Hospitals defined as such under section 2 of the *Hospital Act*)

PART I

(a) Public Hospitals

A. Maxwell Evans Clinic, Vancouver.
Armstrong & Spallumcheen Hospital, Armstrong.
Arrow Lakes Hospital, Nakusp.
Ashcroft & District General Hospital, Ashcroft.
Bella Coola General Hospital, Bella Coola.
Boundary Hospital, Grand Forks.
Bulkley Valley District Hospital, Smithers.
Burnaby General Hospital, Burnaby.
Burns Lake & District Hospital, Burns Lake.
Campbell River & District General Hospital, Campbell River.
Cariboo Memorial Hospital, Williams Lake.
Castlegar & District Hospital, Castlegar.
Chemainus General Hospital, Chemainus.
Chetwynd General Hospital, Chetwynd.
Children's Hospital, Vancouver.
Chilliwack General Hospital, Chilliwack.
Cowichan District Hospital, Duncan.
Cranbrook & District Hospital, Cranbrook.
Creston Valley Hospital, Creston.
Dawson Creek & District Hospital, Dawson Creek.
Dr. Helmcken Memorial Hospital, Clearwater.
Enderby & District Memorial Hospital, Enderby.
Fernie District Hospital, Fernie.
Fort Nelson General Hospital, Fort Nelson.
Fort St. John General Hospital, Fort St. John.
Fraser Canyon Hospital, Hope.
G. R. Baker Memorial Hospital, Quesnel.
Golden & District General Hospital, Golden.
Grace Hospital, Vancouver.

(A) PUBLIC HOSPITALS—*Continued*

Kelowna General Hospital, Kelowna.
Kimberley & District Hospital, Kimberley.
Kitimat General Hospital, Kitimat.
Kootenay Lake District Hospital, Nelson.
Lady Minto Gulf Islands Hospital, Ganges.
Ladysmith & District General Hospital, Ladysmith.
Langley Memorial Hospital, Langley.
Lillooet District Hospital, Lillooet.
Lions Gate Hospital, North Vancouver.
McBride & District Hospital, McBride.
Mackenzie & District Hospital, Mackenzie.
Maple Ridge Hospital, Maple Ridge.
Mater Misericordiæ Hospital, Rossland.
Matsqui-Sumas-Abbotsford General Hospital, Abbotsford.
Michel-Natal District Hospital, Sparwood.
Mills Memorial Hospital, Terrace.
Mission Memorial Hospital, Mission City.
Mount Saint Joseph Hospital, Vancouver.
Nanaimo Regional General Hospital, Nanaimo.
Nicola Valley General Hospital, Merritt.
Ocean Falls General Hospital, Ocean Falls.
100 Mile District General Hospital 100 Mile House.
Peace Arch District Hospital, White Rock.
Penticton Regional Hospital, Penticton.
Port Alice Hospital, Port Alice.
Port Hardy Hospital, Port Hardy.
Pouce Coupe Community Hospital, Pouce Coupe.
Powell River General Hospital, Powell River.
Prince George Regional Hospital, Prince George.
Princeton General Hospital, Princeton.
Prince Rupert Regional Hospital, Prince Rupert.
Queen Charlotte Islands General Hospital, Queen Charlotte City.
Queen Victoria Hospital, Revelstoke.
Rest Haven General Hospital, Sidney.
Richmond General Hospital, Richmond.
Royal Columbian Hospital, New Westminster.
Royal Inland Hospital, Kamloops.
Royal Jubilee Hospital, Victoria.
R. W. Large Memorial Hospital, Waglisla.
St. Bartholomew's Hospital, Lytton.
St. George's Hospital, Alert Bay.
St. John Hospital, Vanderhoof.
St. Joseph's General Hospital, Comox.
Saint Mary's Hospital, New Westminster.
St. Mary's Hospital, Sechelt.
St. Paul's Hospital, Vancouver.
St. Vincent's Hospital, Vancouver.
Shaughnessy Hospital, Vancouver.
Shuswap Lake General Hospital, Salmon Arm.
Slocan Community Hospital, New Denver.
South Okanagan General Hospital, Oliver.
Squamish General Hospital, Squamish.
Stewart General Hospital, Stewart.
Stuart Lake Hospital, Fort St. James.
Summerland General Hospital, Summerland.
Surrey Memorial Hospital, North Surrey.
Tahsis Hospital, Tahsis.
Tofino General Hospital, Tofino.
Trail Regional Hospital, Trail.
University Health Service Hospital, University of British Columbia, Vancouver.
University of British Columbia, Health Sciences Centre Hospital, Vancouver.
Vancouver General Hospital, Vancouver.
Vernon Jubilee Hospital, Vernon.
Victoria General Hospital, Victoria.
Victorian Hospital, Kaslo.
West Coast General Hospital, Port Alberni.
Windermere District Hospital, Invermere.
Wrinch Memorial Hospital, Hazelton.

(B) OUTPOST HOSPITALS

Red Cross Outpost Nursing Station, Alexis Creek.
Red Cross Outpost Nursing Station, Atlin.
Red Cross Outpost Nursing Station, Bamfield.
Red Cross Outpost Nursing Station, Blue River.
Red Cross Outpost Nursing Station, Edgewood.
Red Cross Outpost Nursing Station, Kyuquot.

(C) FEDERAL HOSPITALS

Canadian Forces Station Hospital Holberg, San Josef.
Canadian Forces Station Hospital Masset, Masset.

PART II

(Private hospitals which are defined as such under section 7 of the *Hospital Act,* and with which the Province has entered into an agreement requiring the hospital to furnish the general hospital services provided under the *Hospital Insurance Act*)

Cassiar Asbestos Corporation Private Hospital, Cassiar.
Mica Creek Private Hospital, Mica Creek.

PART III

REHABILITATION HOSPITALS

(Hospital Act, Sec. 25)

G. F. Strong Rehabilitation Centre, Vancouver.
Gorge Road Hospital, Victoria.
Holy Family Hospital, Vancouver.
Pearson Hospital (Poliomyelitis Pavilion), Vancouver.
Queen Alexandra Hospital for Children, Victoria.
Shaughnessy Hospital, Vancouver.
Sunny Hill Hospital for Children, Vancouver.

PART IV

EXTENDED-CARE HOSPITALS

(Hospital Act, Sec. 25)

Fellburn Hospital, Burnaby.
Louis Brier Hospital, Vancouver.
Menno Hospital, Abbotsford.
Mount St. Francis Hospital, Nelson.
Mount St. Joseph Hospital, Vancouver (top floor).
Mount St. Mary Hospital, Victoria (excluding top floor).
Pearson Hospital, Vancouver (excluding facilities for tuberculosis patients).
Saanich Peninsula Hospital, Saanichton.
Juan de Fuca Hospital, Victoria.

PART V

DIAGNOSTIC AND TREATMENT CENTRES

Arthritis Centre of British Columbia, Vancouver.
Cumberland General Hospital, Cumberland.
Gold River Health Clinic, Gold River.
Houston Hospital, Houston.
Keremeos Diagnostic and Treatment Centre, Keremeos.

STATISTICAL DATA

The tables below represent statistical data compiled by the Hospital Finance Division, showing the extent of hospital coverage provided to the people of British Columbia through Hospital Programs.

In 1976 there were 103 public general hospitals as well as three diagnostic and treatment centres. In addition, care was also provided by six Red Cross outpost hospitals; two federal hospitals; two contract hospitals, five public rehabilitation hospitals, plus one rehabilitation hospital operated by the Provincial Government. There were also two specialized out-patient facilities which are the Canadian Arthritic Society at their Vancouver Centre, and the Narcotic Addiction Services, who provide services in several facilities throughout the Province. Hospital coverage under the *Hospital Insurance Act* for patients in the extended-care hospitals and units commenced December 1, 1965, and by the end of 1976 had increased to 54 extended-care units, which includes one facility operated by the Provincial Government.

Data for the year 1976 have been estimated, based on reports submitted by hospitals to August 31, 1976, and are subject to revision when the actual figures for the year are submitted.

Table 16 shows that 395,706 adult and children patients were discharged (separated) from British Columbia public hospitals in 1976, a decrease of 2,573 or 0.65 per cent less than 1975. This table also shows that 95.7 per cent of the total adult and children patients discharged (separated) from British Columbia public hospitals were covered by Hospital Programs. Table 17 indicates that, in 1976, Hospital Programs was responsible in British Columbia for 3,371,036 general

hospital days of care for adults and children, a decrease of 42,594 days or 1.25 per cent less than in 1975.

As shown in Table 18, the average length of stay for public hospitals adult and child patients in British Columbia during 1976 was 8.52 days and the days of care per 1,000 population was 1,474. These figures, which show a continuation of the trend of decreased length of stay, are a result of a more effective utilization of hospital beds and ambulatory services. For comparison purposes, the data for extended-care hospitals are not included in the above observations, although an additional 603 days of care per 1,000 population were provided for these patients.

Table 19 is supplemented by Table 20 because the number and volume of ambulatory services covered by Hospital Programs have been expanded considerably. It should be noted that psychiatric and diabetic day-care services are provided only in a limited number of hospitals. Services listed under "Other" are related to special out-patient services provided by the Cancer Control Agency of B.C., G. F. Strong Rehabilitation Centre, and the Narcotic Addiction Services. The growth of ambulatory services reflects a trend toward the broader provision of hospital-based services, providing greater patient convenience and reducing the pressure for construction and maintenance of in-patient beds, which is partially reflected by the reduction in incidence of patient-days noted above.

Table 16—Patients Separated and Proportion Covered by Hospital Programs, British Columbia Public General Hospitals[1] Only (Excluding Federal, Private, Extended-care, and Out-of-Province Hospitalization)

	Total Hospitalized in Public Hospitals			Covered by Hospital Programs		
	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total
Patients separated—						
1971	380,651	35,101	415,572	364,452	33,732	398,184
1972	391,732	34,774	426,506	375,373	33,595	408,968
1973	395,120	34,544	429,664	377,719	33,599	411,318
1974	412,500	35,566	448,066	394,507	34,665	429,172
1975[2]	415,805	36,538	452,343	398,279	35,700	433,979
1976[3]	413,397	36,392	449,789	395,706	35,630	431,336
Percentage of total patients separated—						
1971	.....	.....	.....	95.7	96.1	95.8
1972	.....	.....	.....	95.8	96.6	95.9
1973	.....	.....	.....	95.6	97.3	95.7
1974	.....	.....	.....	95.6	97.5	95.8
1975[2]	.....	.....	.....	95.8	97.7	95.9
1976[3]	.....	.....	.....	95.7	97.9	95.9

[1] Includes rehabilitation hospitals.
[2] Amended as per final report received from hospitals.
[3] Estimated, based on hospital reports to August 31, 1976.

Table 17—Total Patient-days and Proportion Covered by Hospital Programs, British Columbia Public General Hospitals[1] Only (Excluding Federal, Private, Extended-care, and Out-of-Province Hospitalization)

	Total Hospitalized in Public Hospitals			Covered by Hospital Programs		
	Adults and Children	Newborn	Total	Adults and Children	Newborn	Total
Patient days—						
1971	3,400,366	227,372	3,627,738	3,259,097	216,305	3,475,402
1972	3,462,509	219,158	3,681,667	3,323,252	210,764	3,534,106
1973	3,400,453	214,003	3,614,456	3,257,106	206,178	3,463,284
1974	3,582,774	213,439	3,796,213	3,400,873	206,376	3,607,249
1975[2]	3,565,532	213,846	3,779,378	3,413,630	207,471	3,621,101
1976[3]	3,514,514	206,795	3,721,309	3,371,036	200,671	3,571,707
Percentage of total, patient-days—						
1971	.....	.....	.....	95.8	95.1	95.8
1972	.....	.....	.....	96.0	96.2	96.0
1973	.....	.....	.....	95.8	96.3	95.8
1974	.....	.....	.....	94.9	96.7	95.0
1975[2]	.....	.....	.....	95.7	97.0	95.8
1976[3]	.....	.....	.....	95.9	97.0	96.0

[1] Includes rehabilitation hospitals.
[2] Amended as per final report received from hospitals.
[3] Estimated, based on hospital reports to August 31, 1976.

Table 18—Patients Separated, Total Patient-days and Average Length of Stay, According to Type and Location of Hospital for Hospital Programs Patients Only, and Days of Care per 1,000 of Covered Population

	Total (Excluding Extended Care)		B.C. Public Hospitals		Other B.C. Hospitals, Including Federal and Private		Institutions Outside British Columbia		Extended-care Hospitals
	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	Adults and Children	Newborn	
Patients separated—									
1971	379,144	34,192	364,452	33,732	8,654	109	6,038	351	1,495
1972	388,747	33,878	375,353	33,595	8,140	39	5,234	244	1,822
1973	392,550	33,962	377,719	33,599	8,092	34	6,739	329	2,293
1974	404,271	34,979	394,507	34,665	3,572	78	6,190	237	2,449
1975[1]	406,000	36,059	398,279	35,700	1,425	72	6,296	287	3,022
1976[2]	406,031	36,180	395,706	35,630	475	80	9,850	470	3,696
Patient-days—									
1971	3,486,671	218,971	3,259,097	216,305	167,339	442	60,235	3,224	672,099
1972	3,543,587	212,549	3,323,252	210,764	168,950	264	51,385	1,521	817,321
1973	3,474,733	208,154	3,257,106	206,178	155,150	172	62,477	2,164	1,044,529
1974	3,565,198	208,224	3,400,873	206,376	103,064	464	61,261	1,384	1,227,949
1975[1]	3,486,573	209,631	3,413,630	207,471	15,517	336	57,426	1,824	1,357,352
1976[2]	3,456,383	203,761	3,371,036	200,671	1,647	390	83,700	2,700	1,497,312
Average days of stay—									
1971	9.20	6.40	8.94	6.41	19.34	4.06	9.98	6.34	449.56
1972	9.12	6.27	8.85	6.27	20.76	6.77	9.82	6.23	448.58
1973	8.85	6.14	8.62	6.14	19.17	5.06	9.27	6.58	455.53
1974	8.81	5.95	8.62	5.95	28.85	5.95	9.90	5.84	501.41
1975[1]	8.59	5.81	8.57	5.81	10.89	4.67	9.12	6.36	449.16
1976[2]	8.51	5.63	8.52	5.63	3.47	4.88	8.50	5.74	405.12

[1] Amended as per final reports from hospitals.
[2] Estimated, based on hospital reports to August 30, 1976. Estimated patient-days (including newborn) per 1,000 of population covered by Hospital Programs: 1971, 1,696; 1972, 1,669; 1973, 1,600; 1974, 1,531; 1975, 1,512; 1976, 1,474. (Because the armed forces, Royal Canadian Mounted Police, and some other groups are not insured under the Provincial plan, the actual incidence of days would be somewhat higher than shown.) In addition, estimated patient-days per 1,000 population for extended care amounted to 308 in 1971, 372 in 1972, 454 in 1973, 502 in 1974, 555 in 1975, and 603 in 1976. Population figures according to latest census figures.

Table 19—Summary of the Number of Hospital Programs In-patients and Out-patients, 1971–76

	Total Adults, Children, and Newborn In-patients	Estimated Number of Emergency, Minor Surgery, Day Care, and Out-patients	Total Receiving Benefits
1971	414,831	292,850	707,681
1972	424,447	453,589	878,036
1973	428,805	792,367	1,221,172
1974	441,699	1,045,460	1,487,159
1975[1]	445,091	1,191,650	1,636,741
1976[2]	445,907	1,285,200	1,731,107

[1] Amended as per final reports received from hospitals.
[2] Estimated, based on hospital reports to August 31, 1976.

Table 20—Summary of Hospital Programs Out-patients Treatments by Category, 1971–76

	1971	1972	1973	1974	1975	1976
Psychiatry—						
Out-patient	5,012	7,955	8,943	12,771	17,915	22,300
Day care	7,536	8,131	9,277	19,737	34,219	40,000
Minor and emergency	191,113	267,203	408,925	503,492	571,055	600,000
Day-care surgery	40,259	44,633	50,089	55,920	62,019	65,000
Diabetic day care[1]	.....	167	885	1,493	2,354	3,300
Physiotherapy[2]	.....	.....	162,997	296,863	338,583	373,500
Dietetic counselling[3]	.....	.....	.....	.....	5,937	9,900
Other[4]	48,900	125,500	151,251	155,184	159,568	171,200
	292,850	453,589	792,367	1,045,460	1,191,650	1,285,200

[1] Commenced October 1972.
[2] Commenced April 1973.
[3] Commenced January 1975.
[4] Other includes (*a*) cancer out-patients, (*b*) rehabilitation day care, (*c*) narcotic addiction out-patients (1972–76 only).

Table 21—Patients Separated, Total Days' Stay, and Average Length of Stay in British Columbia Public Hospitals for Hospital Programs Patients Only, Grouped According to Bed Capacity, 1976[1] (Excluding Extended-care Hospitals)

	Bed Capacity					
	Total	250 and Over	100 to 249	50 to 99	25 to 49	Under 25
Patients separated—						
Adults and children	395,706	215,039	97,244	44,466	29,848	9,109
Newborn	35,630	16,991	9,541	5,752	2,421	925
Patient-days—						
Adults and children	3,371,036	1,941,212	762,229	412,831	203,133	51,631
Newborn	200,671	101,758	50,496	31,906	12,247	4,264
Average days stay—						
Adults and children	8.52	9.03	7.84	9.28	6.81	5.67
Newborn	5.63	5.99	5.29	5.55	5.06	4.61

[1] Estimated, based on hospitals reports to August 31, 1976.

Table 22—Percentage Distribution of Patients Separated and Patient-days for Hospital Programs Patients Only, in British Columbia Public Hospitals, Grouped According to Bed Capacity, 1976[1] (Excluding Extended-care Hospitals)

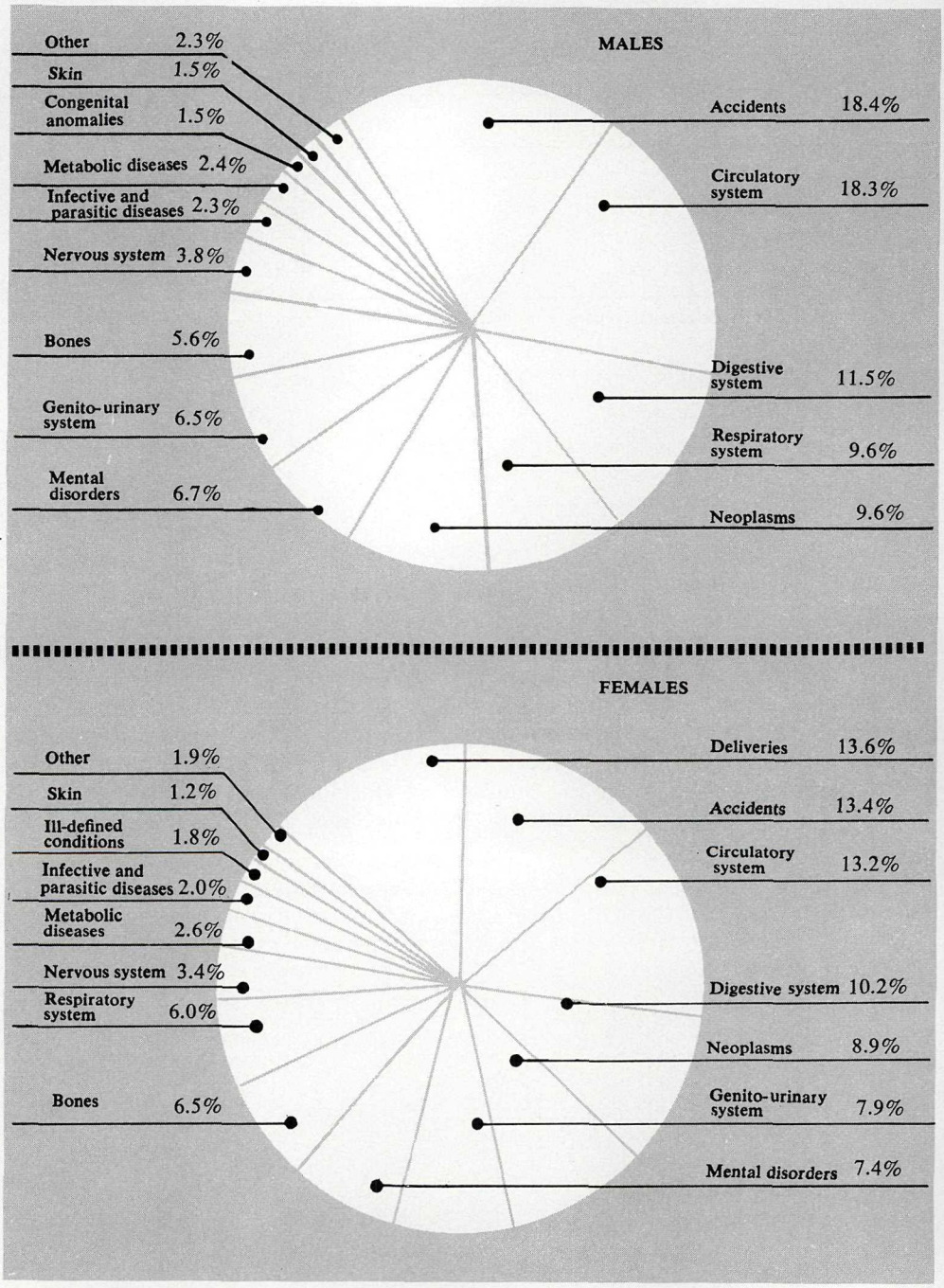
	Bed Capacity					
	Total	250 and Over	100 to 249	50 to 99	25 to 49	Under 25
Patients separated—	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Adults and children	100.0	54.34	24.57	11.24	7.54	2.31
Newborn	100.0	47.69	26.78	16.14	6.79	2.60
Patient-days—						
Adults and children	100.0	57.59	22.61	12.25	6.03	1.52
Newborn	100.0	50.72	25.16	15.90	6.10	2.12

[1] Estimated, based on hospitals reports to August 31, 1976.

CHARTS

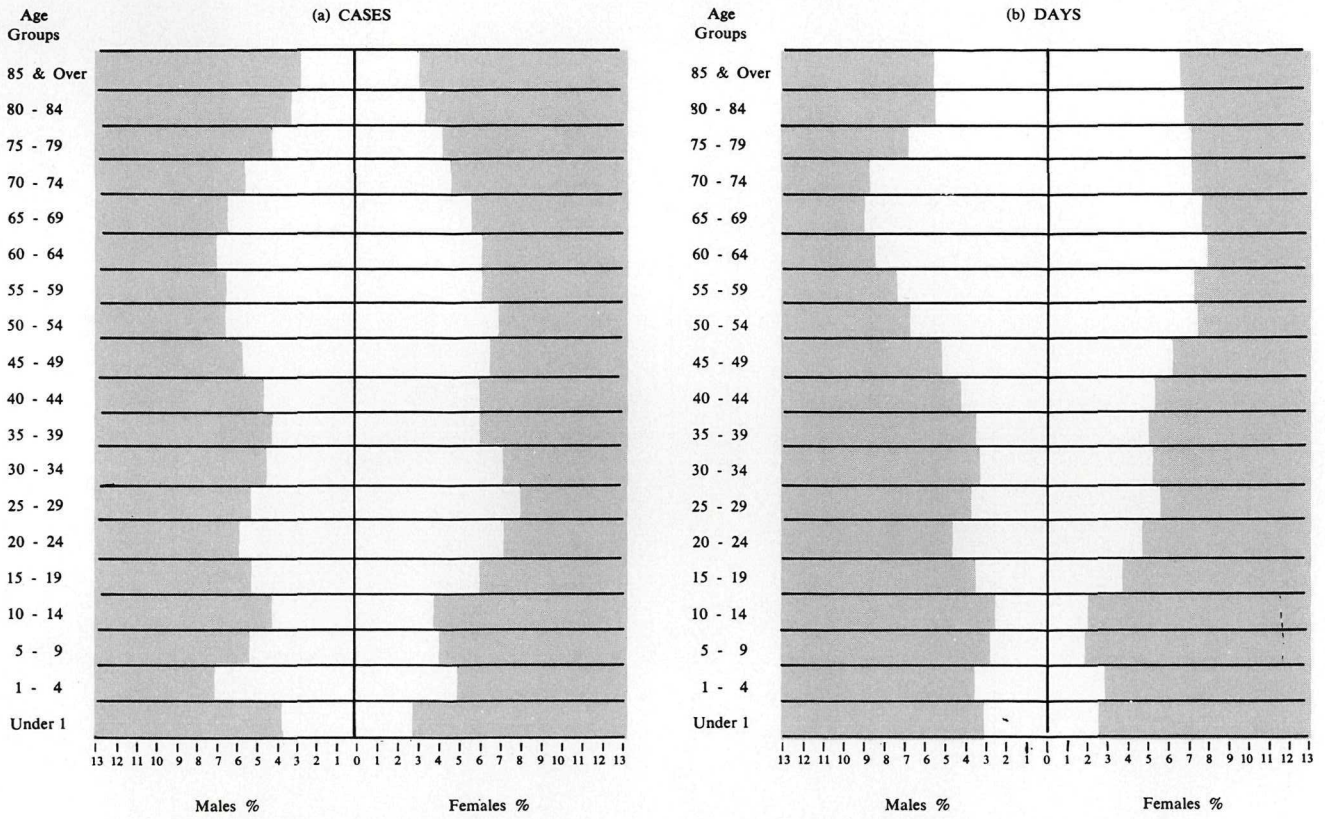
The statistical data shown in the following charts prepared by the Research Division are derived from admission/separation forms submitted to Hospital Programs. Readers interested in more detailed statistics of hospitalization in this Province may wish to refer to "Statistics of Hospital Cases Discharged During 1975" and "Statistics of Hospitalized Accident Cases, 1975," available from the Research Division.

CHART I—PERCENTAGE DISTRIBUTION OF DAYS OF CARE* BY MAJOR DIAGNOSTIC GROUPS, HOSPITAL PROGRAMS, 1975 (IN DESCENDING ORDER)



* Including rehabilitative care.

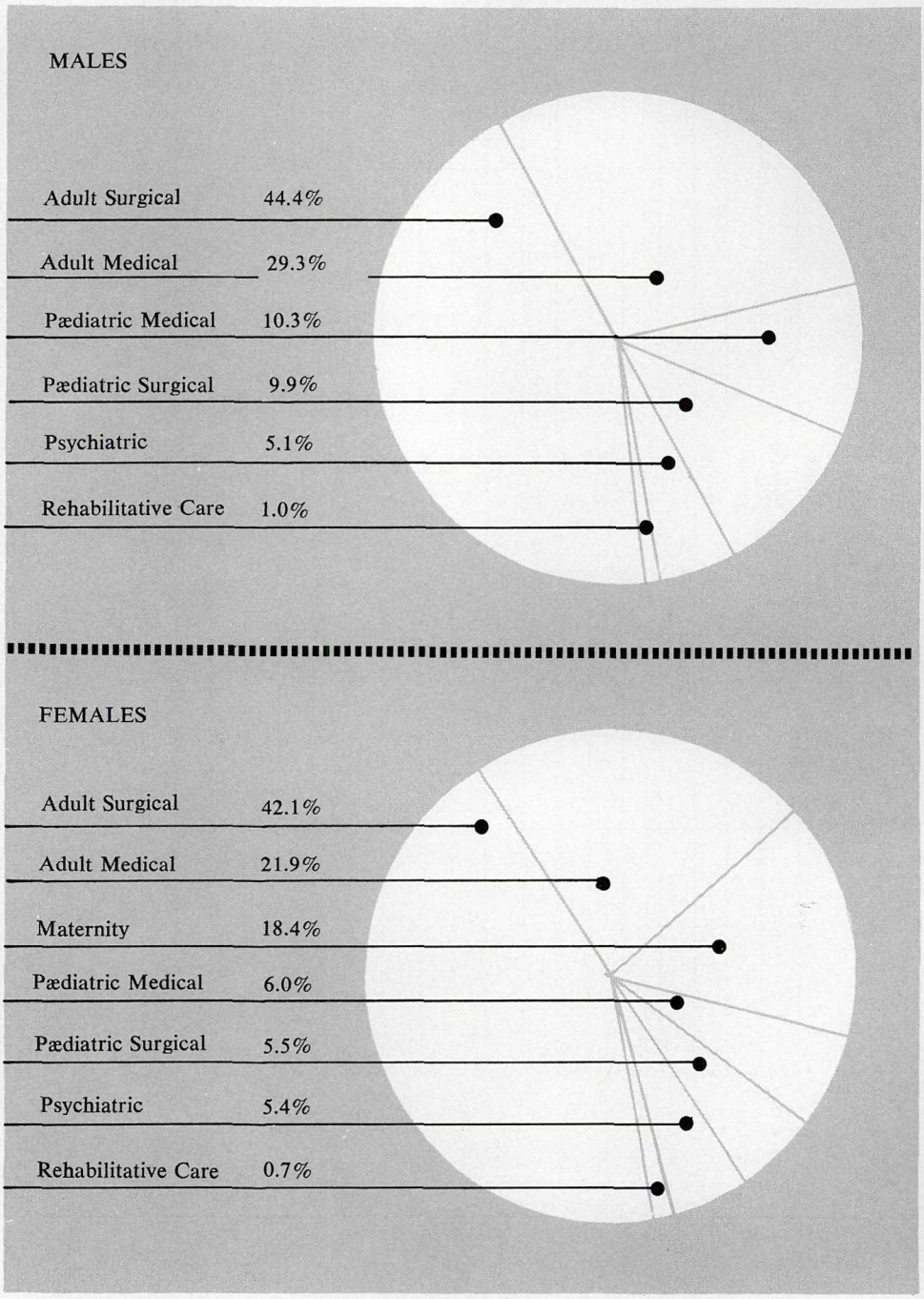
CHART II—PERCENTAGE AGE DISTRIBUTION OF MALE AND FEMALE* HOSPITAL CASES AND DAYS OF CARE,† HOSPITAL PROGRAMS, 1975



* Group XI (Deliveries and Complications of Pregnancy, Childbirth, and Puerperium) has been excluded so as to bring out more clearly the comparison between males and females in respect of hospitalization not connected with the natural process of childbirth.

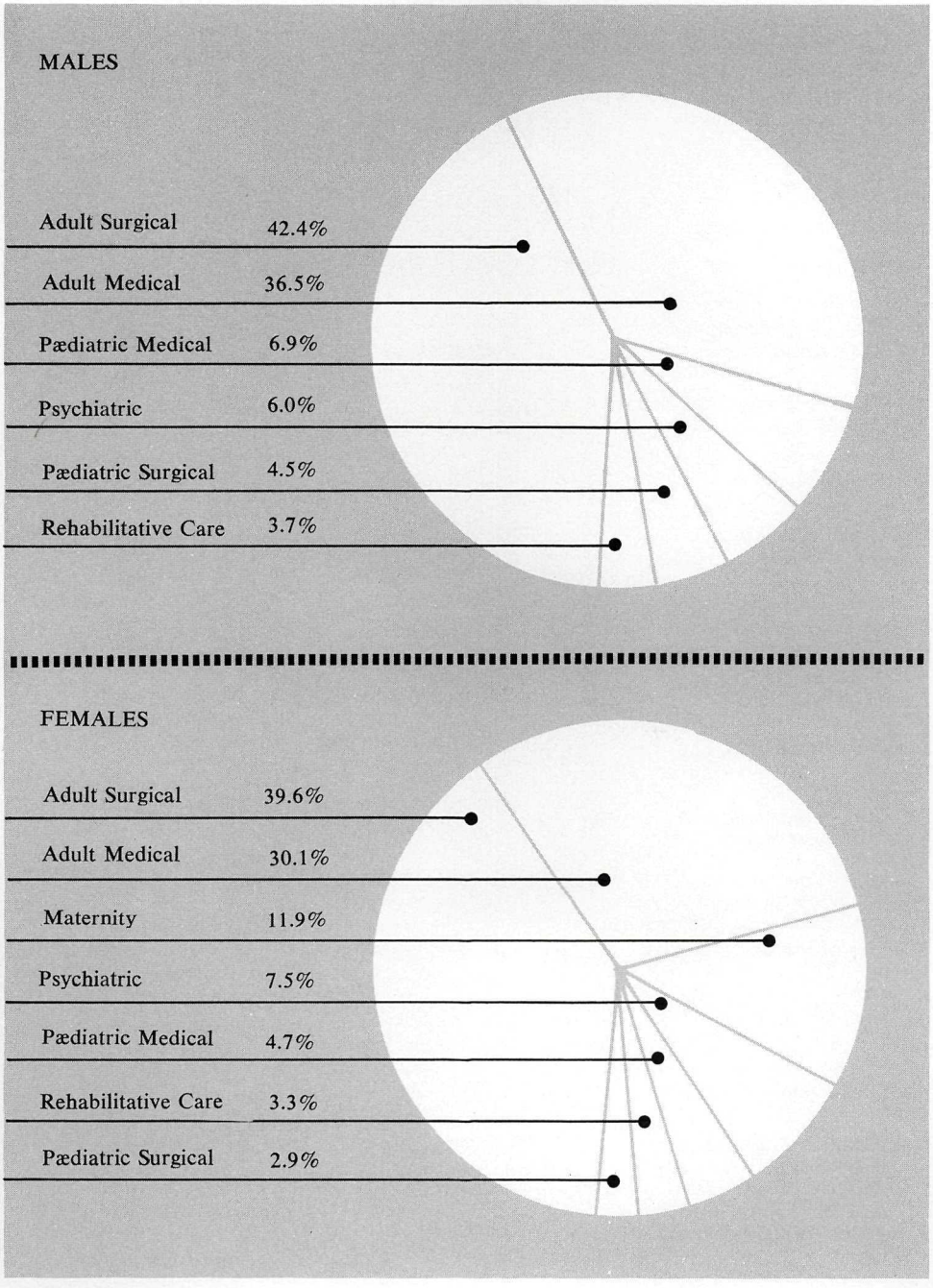
† Including rehabilitative care.

CHART III—PERCENTAGE DISTRIBUTION OF HOSPITAL CASES* BY TYPE OF CLINICAL SERVICE, HOSPITAL PROGRAMS, 1975



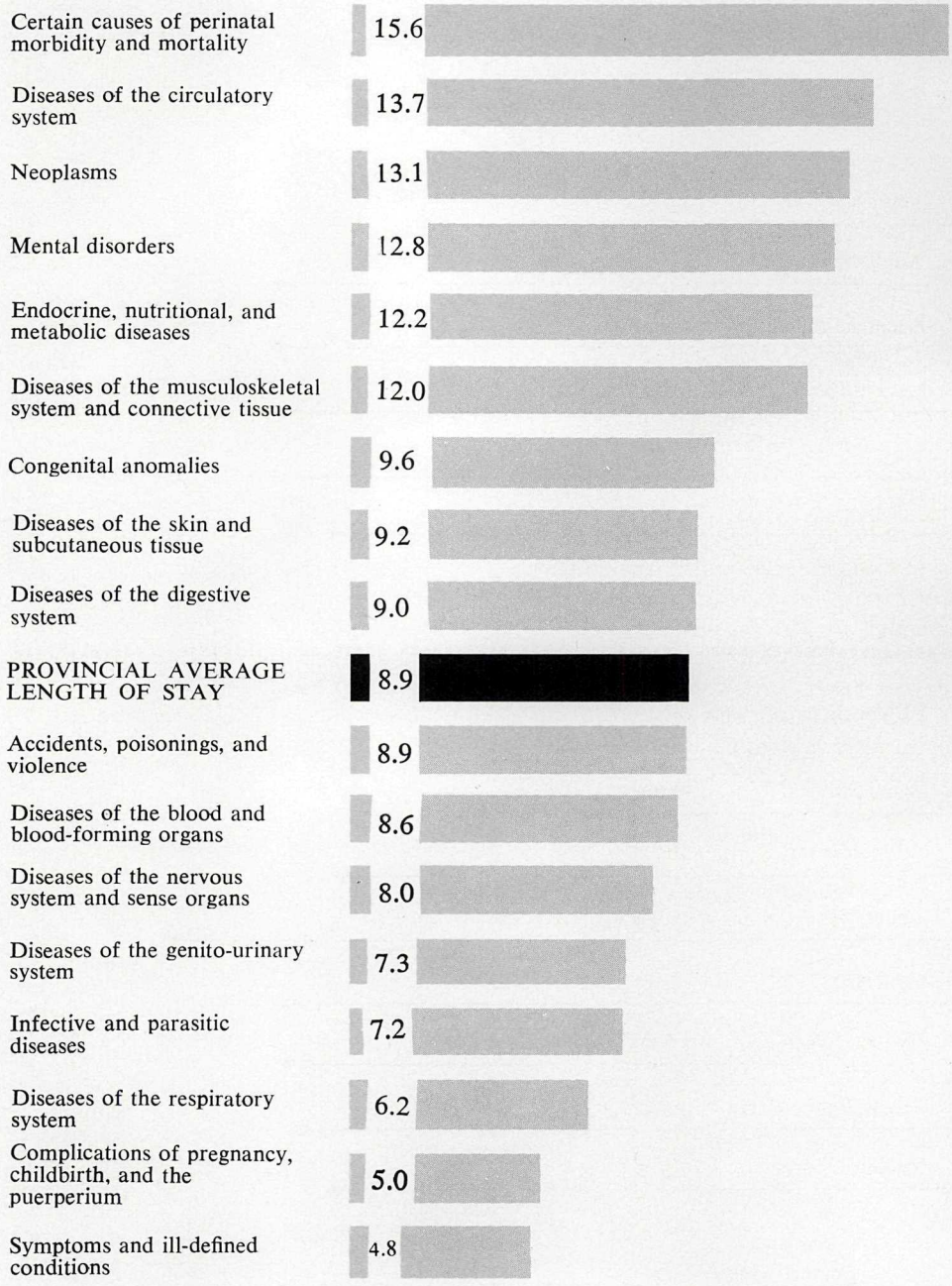
* Including rehabilitative care.

CHART IV—PERCENTAGE DISTRIBUTION OF HOSPITAL DAYS* BY TYPE OF CLINICAL SERVICE, HOSPITAL PROGRAMS, 1975



* Including rehabilitative care.

CHART V—AVERAGE LENGTH OF STAY OF CASES* IN HOSPITALS IN BRITISH COLUMBIA, BY MAJOR DIAGNOSTIC GROUPS IN DESCENDING ORDER, 1975 (EXCLUDING NEWBORNS)



* Including rehabilitative care.

Medical Services Commission

On July 1, 1968, the Government established an over-all Medical Services Plan, which is administered and operated in accordance with the *Medical Services Act* and regulations, under the supervision of the Medical Services Commission. The commission is empowered to function as the public authority appointed by the Government of the Province to be responsible to the Minister in respect of the administration and operation of the plan established under the regulations.

The Medical Services Plan of British Columbia provides a prepaid medical services plan upon uniform terms and conditions for all residents of the Province and their dependants. Insured services under the plan are paid for insured persons regardless of age, state of health, or financial circumstances, provided the premiums fixed by the commission are paid. Payment for the services provided is made, on a fee for services basis, according to a tariff of fees approved or prescribed by the commission, or by salaried, sessional, or contract basis at levels approved by the commission.

MEDICAL SERVICES COMMISSION HIGHLIGHTS

- Geoffrey A. Stewart retired as chairman of the Medical Services Commission in June 1976 after a number of years of distinguished service in the field of government health. Commencing with service as president of the Government Employees Medical Services, he later became the president of the British Columbia Medical Plan on its inception in 1965, continuing in that position until the dissolution of the society in 1974. When the Medical Services Commission was constituted in 1967 to develop and implement the present Medical Services Plan of British Columbia, Mr. Stewart became its first chairman, continuing in that position until his retirement. The successful implementation and operation of the plan was due in large measure to his efforts and guidance throughout that period.
- Premium rates had remained unchanged since the introduction of Medicare in 1968 when the premiums initially set for the British Columbia Medical Plan in 1965 were simply continued. The escalating costs of providing medical services in recent years resulted in expenditures substantially exceeding revenues. Because of this continuing trend a decision was made to increase premium rates to ensure that a larger proportion of the costs were paid in this manner. The premium rates established by the Medical Services Commission were increased 50 per cent, effective July 1, 1976.
- The planning stage of the new Health Services Building, at present under construction, generated a great deal of interest among the staff of the commission and the Medical Services Plan. An able team of planners regularly conferred with senior staff members and supervisors to assist in planning the furniture lay-out of every employee. The final lay-out sketches for each of the four floors were prominently displayed. Occupancy is expected early in 1977.
- The total expenditure for insured benefits under the Medical Services Plan rose 32.34 per cent to $280,509,129 in 1975/76 from $211,966,988 in 1974/75.
- The *per capita* cost of insured services shared by the Federal Government, including salaried and sessional costs, increased by 26.2 per cent to $104.53 in 1975/76 from $82.80 in 1974/75.
- The *per capita* cost of insured benefits not shared by the Federal Government rose 31.3 per cent to $6 in 1975/76 from $4.57 in 1974/75.
- Contributions to British Columbia Medical Services Commission under the *Medical Care Act* (Canada) and *Hospital Insurance Diagnostic Services Act* was $107,755,002, or 40.5 per cent of the shareable cost.
- Administration costs were 4.3 per cent of the total costs in 1975/76.
- The increased costs to the Medical Services Plan are a result of upward revisions to the fee schedule, increased utilization of benefits, changes in the practitioner/population ratio, increased population, and significant improvements in the claims processing time.

BENEFITS UNDER THE PLAN

BASIC MEDICAL SERVICES

The Medical Services Plan provides insurance coverage for all medically required services rendered by medical practitioners, including osteopathic physicians, in British Columbia, and certain surgical procedures of dental surgeons where

Medical Services Commission operates 120 keyboards as part of its computerized handling of claims for payment.

necessarily performed in a hospital as provided under the *Medical Care Act* (Canada). A contribution from the Federal Government is payable to the Province toward the cost of these insured services on the basis of 50 per cent of the national *per capita* cost of these services multiplied by the average number of insured persons in the Province during the 12-month period ending on March 31. Restrictions were placed by the Federal Government on the increase in the amount to be shared commencing in 1976/77.

ADDITIONAL BENEFITS

In addition to payment for the above services, additional benefits, when rendered in the Province, are provided without extra premium by the Government of British Columbia. The Federal Government does not share in these costs. All payments are paid only at a tariff of fees approved by the commission. "Year" means calendar year. A brief description of these additional benefits follows. For exact details, *see* the Medical Services Act Regulations.

Chiropractic—Payment for the services of a registered chiropractor is limited in any one year to a total of $75 per patient under the age of 65 years and $100 per patient 65 years of age or over. There is no payment for X-rays taken by a chiropractor.

Naturopathic—Payment for services of a naturopathic physician is limited in any one year to a total of $75 per patient under the age of 65 years and $100 per patient 65 years of age or over. There is no payment for X-rays taken by a naturopathic physician.

Orthoptic treatment—Payment for orthoptic treatment is limited to $50 per patient in any one year and a maximum of $100 per family in any one year when rendered to an insured person on the instructions of, or referral by, a medical practitioner.

Physiotherapy—Payment for the services of a registered physiotherapist on the instructions of, or referral by, a medical practitioner where performed other than in general or rehabilitative hospitals, is limited in any one year to a total of $75 per patient under the age of 65 years and $100 per patient 65 years of age or over. Out-patient physiotherapy services in general hospitals or in rehabilitative hospitals on referral by a medical practitioner are benefits provided by the British Columbia Hospital Programs.

Podiatry—Payment for services of a registered podiatrist is limited to $50 per patient in any one year and a maximum of $100 per family in any one year when rendered other than on the instructions of, or referral by, a medical practitioner within the year. There is no payment for X-rays taken by a podiatrist.

Optometry—Services of registered optometrists are approved for required diagnostic optometric services to determine the presence of any observed abnormality in the visual system. The plan does not pay for the fitting or cost of lenses.

Orthodontic—Service provided by a dental surgeon for an insured person 20 years of age or younger and which is consequentially necessary in the care of a cleft lip and (or) cleft palate is paid only where that service arises as part of or following plastic surgery repair performed by a medical practitioner. There is no payment for dentures, appliances, prostheses, or for general dental services other than those referred to under basic medical services involving certain medical procedures of dental surgeons, where necessarily performed in a hospital.

Special nursing—Special nursing services of a registered nurse shall be paid, including the cost of board, to a maximum of $40 per patient in any one year, but only where such services are deemed advisable by a medical practitioner.

Under existing arrangements, the services of a member of the Victorian Order of Nurses, acting under or with an attending medical practitioner, shall be paid under the plan at a rate of $2 net per visit to a maximum of $40 per patient per year, but this limit will not apply to the administering of injections on the instructions of a physician.

No payment is made for any of the additional benefits performed outside the Province of British Columbia.

SERVICES EXCLUDED UNDER THE PLAN

Services which are provided under other federal or Provincial Acts such as the *National Defence Act* (Canada), the *Hospital Insurance Act,* and the *Workers' Compensation Act* of the Province.

Pathology, radiology, and (or) electrodiagnostic services performed within the Province at a laboratory that, at the time the service is rendered, is not an approved laboratory for the performance of the service.

Services which are not considered to be medically required by the patient, e.g., cosmetic services, examinations at the request of a third party, medico-legal services, advice by telephone, travel charges of a practitioner.

While unexpected medical services arising when an insured person is temporarily absent from British Columbia are covered at British Columbia rates, prior authorization in writing from a medical director of the plan is required where the insured person elects to seek medical attention outside the Province, otherwise payment may not be made under the plan.

PREMIUM RATES AND ASSISTANCE

For those persons having maintained a permanent residence in British Columbia for the 12 consecutive months immediately prior to making application, and who otherwise qualify as eligible under the Medical Services Act Regulations, premium assistance is available as follows:

(*a*) Applicants who were not liable to pay income tax in the 12 months ending December 31 of the previous year qualify for a subsidy of 90 per cent of the full premium rate:

(*b*) Applicants whose taxable income in the 12 months ending December 31 of the previous year did not exceed $1,000 qualify for a subsidy of 50 per cent of the full premium rate.

Monthly premiums payable by subscribers, effective July 1, 1976, are as follows:

	Full Premium	If Qualified for— 50 Per Cent Subsidy	90 Per Cent Subsidy
	$	$	$
One person	7.50	3.75	.75
Family of two	15.00	7.50	1.50
Family of three or more	18.75	9.37	1.87

(*c*) Temporary premium assistance is available for a three-month period under unusual circumstances which, by reason of illness, disability, unemployment, or financial hardship render an eligible person unable to pay his currently required premiums for coverage under the plan. Temporary premium assistance is at 90 per cent of the full premium rate.

LABORATORY APPROVAL

A six-member Advisory Board on Laboratories, appointed by the commission, continues to provide advice and recommendations to the commission pertinent to its determination of approval of laboratories for the performance of insured services under the regulations set down by the Lieutenant-Governor in Council in September 1971. The commission is responsible for ensuring the reasonable availability of quality laboratory services for insured persons throughout the Province, of controlling the expansion of facilities or provision of new facilities until there is reasonable utilization of existing facilities, and of requiring that, where approved public facilities provide service of equal quality and availability, priority consideration be given to the services provided by such approved public facilities.

PROFESSIONAL REVIEW COMMITTEES

As in the past, the commission has continued to work closely with the peer review committees of physicians and other practitioners providing services under the plan.

The commission provides data to the professional licensing authorities or other relevant practitioner bodies with respect to the volume and type of services rendered under the plan and various other statistical information on an annual basis, whenever feasible. The Commission also provides various statistical information to them on a request basis.

SALARIED AND SESSIONAL

While most medical services in British Columbia are paid for on a fee-for-service basis, there is, nevertheless, a substantial volume of services paid on a salary or sessional fee basis.

Apart from the Provincial Government, which employs physicians in this way, there are many other organizations within the Province which make arrangements with physicians to provide insured services on this basis and arrange with the Medical Services Commission for reimbursements of their costs.

When the Medical Services Commission reimburses an organization which employs a doctor performing insured services on a salaried basis, a payment is made to the organization for the shareable portion of the doctor's salary, that is, the proportion of the salary which represents the time he spent on providing insured services to individuals. An additional amount is paid to cover the relevant overhead costs of the organization employing the doctor.

A sessional fee is a payment of a set amount of money for the part-time services of a physician for half a day (three and one-half hours) and the sessional fee includes, where pertinent, a payment for overhead, which goes to the physician because of his continuing overhead costs in his additional private practice.

In the year 1975/76 the total expenditure on medical services by the Medical Services Commission was $280,509,129, which was made up of $265,071,609 in the form of fee-for-service payments and $15,437,520 for salary and sessional payments.

STATISTICAL TABLES

STATISTICAL HIGHLIGHTS

The total expenditure for insured benefits under the Medical Services Plan rose 32.34 per cent to $280,509,129 in 1975/76 from $211,966,988 in 1974/75 (*see* Table 31).

The *per capita* cost for insured benefits rose 29.64 per cent (population October 1, 1974=2,408,000; October 1, 1975=2,458,000).

The *per capita* cost of insured benefits shared by the Federal Government rose 26.2 per cent to $104.53 in 1975/76 from $82.80 in 1974/75 (*see* Table 31 "Medical Fee-for-service" and "Salaried and Sessional").

The *per capita* cost of insured benefits not shared by the Federal Government rose 31.3 per cent to $6 in 1975/76 from $4.57 in 1974/75 (*see* Table 31 "Additional Benefits").

Contributions to the Medical Services Commission under the *Medical Care Act* (Canada) and *Hospital Insurance Diagnostic Services Act* was $107,755,002 or 40.5 per cent of the shareable cost (*see* Table 31).

Administration costs were 4.3 per cent of the total costs in 1975/76 (*see* Table 31).

The increased costs to the Medical Services Plan are a result of upward revisions to the fee schedule, increased utilization of benefits, changes in the practitioner/population ratio, and increased population. During the year a significant improvement was made in the speed with which fee-for-service accounts were paid and this also contributed to the actual total payments made during 1975/76.

SUBSCRIBER STATISTICS

Table 23—Registrations and Persons Covered[1] by Premium Subsidy Level at March 31, 1976

Subsidy (Per Cent)	Subscribers	Persons
90	231,183	373,758
50	29,140	54,637
Nil	815,828	2,060,331
Totals	1,076,151	2,488,726

Table 24—Persons Covered by Age-group at March 31, 1976

Age-groups	Persons
Under 1	31,349
1–4	144,689
5–14	435,661
15–24	477,983
25–44	661,194
45–64	479,855
65–69	81,975
70–79	101,921
80–89	44,537
90 and over	7,731
Unknown	21,831
Total	2,488,726

[1] Coverage data do not include members of the Canadian Armed Forces, RCMP, and inmates of federal penitentiaries.

FIGURE 1—COVERAGE BY AGE-GROUP AT MARCH 31, 1976

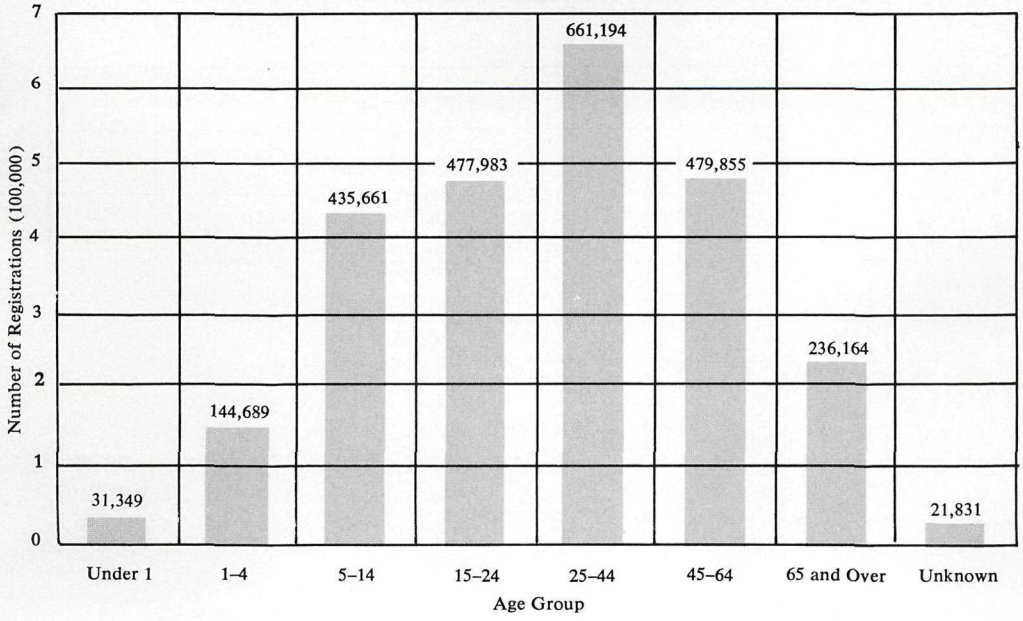
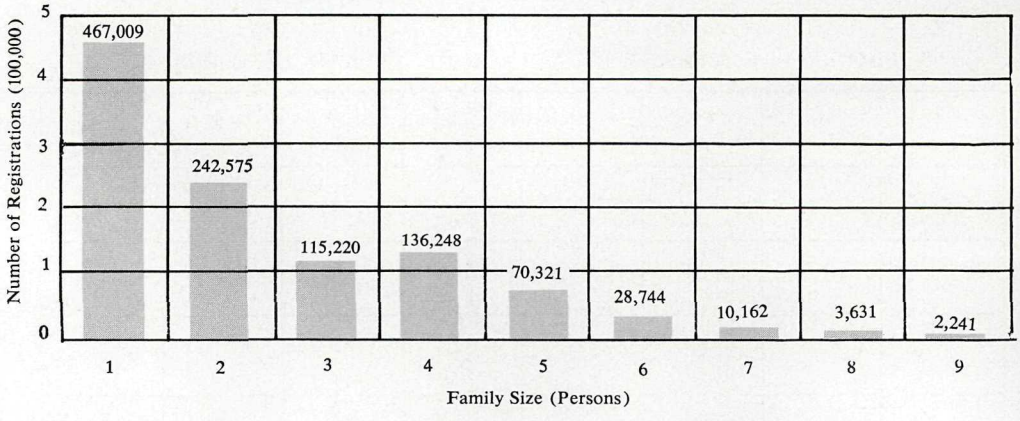


Table 25—Coverage by Family Size at March 31, 1976

Family Size (Persons)	Number of Families
1	467,009
2	242,575
3	115,220
4	136,248
5	70,321
6	28,744
7	10,162
8	3,631
9 or more	2,241
Total	1,076,151

FIGURE 2—COVERAGE BY FAMILY SIZE AT MARCH 31, 1976



FEE-FOR-SERVICE PAYMENTS

MEDICAL PRACTITIONERS AND DENTAL SURGERY IN HOSPITAL

(Shareable under *Medical Care Act* (Canada) and *Hospital Insurance Diagnostic Services Act*)

Table 26—Distribution of Fee-for-service Payments for Medical Services (Shareable)

Specialty	Amount Paid[1]		Percentage of Total		Cost per Person[2]	
	1974/75	1975/76	1974/75	1975/76	1974/75	1975/76
	$	$				
General practice	82,177,788	105,060,418	43.44	42.83	34.1270	42.7422
Dermatology	1,967,399	2,863,102	1.04	1.17	0.8170	1.1648
Neurology	1,330,210	1,879,674	0.70	0.77	0.5524	0.7647
Psychiatry	5,707,746	7,241,146	3.02	2.95	2.3703	2.9460
Neuropsychiatry	196,666	255,350	0.10	0.10	0.0817	0.1039
Obstetrics, gynæcology	7,040,645	9,423,996	3.72	3.84	2.9239	3.8340
Ophthalmology	7,318,932	9,499,490	3.87	3.87	3.0394	3.8647
Otolaryngology	79,167	4,378,720	0.04	1.79	0.0328	1.7814
Eye, ear, nose, throat	3,369,209	67,808	1.78	0.03	1.3992	0.0276
General surgery	13,327,682	16,236,333	7.05	6.62	5.5348	6.6055
Neurosurgery	1,113,838	1,487,416	0.59	0.61	0.4626	0.6051
Orthopædic surgery	4,386,095	6,100,443	2.32	2.49	1.8215	2.4819
Plastic surgery	1,329,294	1,924,550	0.70	0.78	0.5520	0.7830
Thoracic surgery	1,200,697	1,534,638	0.64	0.63	0.4986	0.6243
Urology	3,216,603	4,234,210	1.70	1.72	1.3358	1.7226
Pædiatrics	4,055,096	5,207,397	2.14	2.12	1.6840	2.1186
Internal medicine	11,272,817	14,729,605	5.96	6.00	4.6814	5.9925
Radiology	14,428,831	18,791,569	7.63	7.66	5.9920	7.6451
Pathology	12,957,618	18,512,358	6.85	7.55	5.3811	7.5315
Anæsthesiology	7,371,601	9,562,753	3.90	3.90	3.0613	3.8905
Physical medicine	308,232	349,134	0,16	0.14	0.1280	0.1420
Public health	72,989	37,125	0.04	0.02	0.0303	0.0151
Dental surgery in hospital	403,906	797,895	0.21	0.33	0.1677	0.3246
Osteopathy	206,284	267,524	0.11	0.11	0.0857	0.1088
Unclassified	4,323,452	4,839,927	2.29	1.97	1.7955	1.9691
Totals	189,162,797	245,282,581	100.00	100.00	78.5560	99.7895

[1] Includes only those services which have been paid during the respective fiscal periods.

[2] Based on population as at October 1, as provided by Statistics Canada (October 1, 1974=2,408,000; October 1, 1975=2,458,000.

Table 27—Distribution of Medical Fee-for-service Payments and Type of Service

	Number of Services[1]		Amount Paid[1]	
	1974/75	1975/76	1974/75	1975/76
			$	$
General Practitioners				
Complete examination	694,421	840,991	10,343,599	14,755,705
Partial examination	4,245,887	4,750,866	32,489,645	41,781,369
Subsequent office visit	2,011,831	2,015,474	9,684,592	11,165,550
Night, Sunday, holiday, or emergency visit	450,746	504,508	8,519,867	11,130,950
First house visit	117,812	117,426	1,704,113	1,949,202
Subsequent house visit	55,845	52,857	640,493	696,007
Hospital visit	1,594,119	1,588,357	6,376,835	7,285,156
Subtotals	9,170,661	9,870,479	69,759,144	88,763,939
Specialists				
Consultation	693,882	818,317	19,715,426	27,138,260
House visit	5,516	7,101	149,076	219,769
Office visit	357,088	410,533	2,224,673	3,032,591
Hospital visit	425,857	511,561	2,962,854	4,052,763
Subtotals	1,482,343	1,747,512	25,052,029	34,443,383
Other Medical				
Anæsthesia	1,741,178	1,972,565	9,601,240	12,428,983
Obstetrics	47,683	52,326	6,109,361	7,533,653
Surgery	411,828	455,903	26,542,660	34,101,129
Special procedures	600,370	678,922	7,721,035	10,080,800
X-ray	1,072,759	1,196,817	14,333,678	18,418,583
Laboratory	4,961,588	5,888,239	16,966,158	24,042,481
Common office procedures	1,196,042	1,279,209	5,352,581	6,661,863
Psychotherapy	201,022	208,876	4,474,470	5,597,453
Electrodiagnosis	14,294	16,173	381,530	2,682,477
Miscellaneous	11,802	12,602	2,868,910	527,837
Subtotals	10,258,566	11,761,632	94,351,623	122,075,259
Totals	20,911,570	23,379,623	189,162,796	245,282,581

[1] Includes only those services which have been paid during the respective fiscal periods.

Table 28—Average Fee-for-service Payments by Type of Practice[1]

Type of Practice	Number of Active Practitioners		Average Payment[2]		Median Payment[2]	
	1974/75	1975/76	1974/75	1975/76	1974/75	1975/76
			$	$	$	$
General practice	1,395	1,461	53,620	63,680	52,872	63,991
Dermatology	30	33	59,920	80,513	57,808	76,170
Neurology	21	23	64,124	82,550	63,689	82,485
Psychiatry	94	104	51,293	60,483	50,989	61,883
Neuropsychiatry	2	2	93,901	127,108	93,901	127,108
Obstetrics, gynæcology	100	102	67,420	87,414	67,167	85,142
Ophthalmology	107	115	67,476	82,783	65,310	81,112
Otolaryngology	48	51	72,319	88,011	69,659	86,383
General surgery	144	161	66,650	81,268	65,321	77,791
Neurosurgery	18	19	60,773	77,072	57,404	71,803
Orthopædic surgery	70	76	61,700	79,121	58,712	75,735
Plastic surgery	21	24	60,954	79,901	60,991	75,861
Thoracic and cardiovascular surgery	13	13	103,025	126,949	112,629	137,141
Urology	47	46	67,036	91,589	64,896	86,612
Pædiatrics	48	53	55,210	66,544	54,001	61,754
Internal medicine	128	143	66,357	79,408	60,483	77,143
Anæsthesia	157	170	46,826	57,721	46,986	56,978
Physical medicine	4	5	52,417	58,352	49,283	60,640
Osteopathy	3	4	58,759	62,781	46,126	47,240
Surgery, general practice[3]	18	43	48,507	59,124	49,848	60,737
Pædiatrics, general practice[3]	20	22	54,483	63,241	46,815	57,400
Internal medicine, general practice[3]	18	18	41,060	52,311	36,718	48,158

[1] Type of practice is based on practice being carried out, rather than on certification.
[2] Includes only those physicians whose services on a fee-for-service basis grossed $20,000 or more.
[3] These are special classifications created for statistical purposes. Physicians in these categories are certified specialists, but derive 50 per cent or more of their income from general practice services.

ADDITIONAL BENEFITS

FEE-FOR-SERVICE PAYMENTS, NONSHAREABLE BY FEDERAL GOVERNMENT

Table 29—Distribution of Fee-for-service Payments for Insured Services, Nonshareable Additional Benefits

Type of Service	Amount Paid[1 2]		Percentage of Total		Cost per Person[3]	
	1974/75	1975/76	1974/75	1975/76	1974/75	1975/76
	$	$			$	$
Special nursing	4,721	2,869	0.04	0.02	0.0020	0.0012
Victorian Order of Nursing	75,565	24	0.69	0.00	0.0314	0.0000
Red Cross	12,798	14,180	0.12	0.10	0.0053	0.0058
Chiropractic	5,747,051	6,948,718	52.17	47.11	2.3866	2.8270
Naturopathic	191,174	282,599	1.74	1.92	0.0794	0.1150
Physiotherapy (office)	1,290,244	2,458,833	11.71	16.67	0.5358	1.0003
Physiotherapy (hospital)	829	81	0.01	0.00	0.0004	0.0000
Orthoptic	3,928	4,448	0.04	0.03	0.0016	0.0018
Podiatry	1,014,628	1,279,644	9.21	8.67	0.4214	0.5206
Optometric	2,671,380	3,632,256	24.25	24.63	1.1094	1.4777
Orthodontic	6,984	73,830	0.06	0.50	0.0029	0.0300
Unclassified	—4,472	52,048	—0.04	0.35	—0.0019	0.0212
Totals	11,014,830	14,749,530	100.00	100.00	4.5743	6.0006

[1] These amounts are fee-for-service payments made under the plan only and in no way reflect the total for the services of these practitioners.
[2] Includes only those services which have been paid during the respective fiscal periods.
[3] Based on insured population at October 1, as provided by Statistics Canada (October 1, 1974=2,408,000; October 1, 1975=2,458,000).

Table 30—Average Fee-for-service Payments by Type of Practice, Nonshareable Additional Benefits

Type of Practice	Number of Active Practitioners[1]		Average Payment[1]		Median Payment	
	1974/75	1975/76	1974/75	1975/76	1974/75	1975/76
			$	$	$	$
Chiropractic	158	174	34,702	38,476	33,158	36,267
Naturopathic	7	8	23,989	32,514	23,216	32,254
Physiotherapy	38	62	27,626	33,276	27,127	27,519
Podiatry	24	27	38,543	42,384	40,064	45,592
Optometry	122	132	20,691	26,354	18,658	25,401

[1] Includes only those practitioners whose payments from the British Columbia Medical Services Commission grossed $10,000 or more. It must be emphasized that these payments in no way represent the practitioners' total income or net income.

Table 31—Summary of Expenditures, 1969/70 to 1975/76

	Medical Fee-for-Service	Salaried and Sessional	Additional Benefits	Administration	Total
	$	$	$	$	$
1969/70	105,700,011	3,677,387	6,929,779	5,687,035	121,944,212
1970/71	122,818,267	4,375,798	6,611,815	6,030,059	139,835,939
1971/72	127,000,505	4,788,365	5,534,520	6,567,847	143,891,237
1972/73	139,532,341	6,022,920	7,897,244	7,320,137	160,772,642
1973/74	159,614,356	7,991,062	8,963,080	8,581,794	185,150,292
1974/75	190,452,494	10,424,602	11,089,892	12,501,015	224,468,003
1975/76	250,026,093[1]	15,437,520[1]	15,045,516	12,659,521	293,168,650

[1] The federal contribution applicable to 1975/76 is projected to be $107,775,002 or 40.5 per cent of total payments for shareable costs.

Government Health Institutions

Although the emphasis in mental health care is on community-based services, there will continue to be a need for specialized facilities to accommodate those whose treatment cannot be adequately taken care of at the community level. Facilities for specific types of care have been developed under Government agencies. These include facilities and services for those of the mentally ill, the emotionally disturbed, and the senile aged, as well as the tubercular and the profoundly physically disabled whose condition requires admission to a specialized treatment unit.

Effective December 1, 1975, J. Bainbridge was appointed as Director of Government Health Institutions. These institutions comprise Riverview Hospital and Valleyview Hospital (Essondale), Dellview Hospital (Vernon), Pearson Hospital, and the Willow Chest Clinic (Vancouver). A brief report of these facilities follows:

ADMINISTRATION

The administration of Government hospitals was taken over by Medical and Hospital Programs at the end of 1975. The organizational structure remained much the same as it had been under the previous administration, namely, central administrative offices are located in Victoria, with a Central Accounting Division, Central Stores, and Central Pharmacy in Vancouver.

The Central Stores supplies a wide variety of dietary items to the hospital complex, as well as clothing and other supplies. The items are bought through the Government's Purchasing Commission and held in inventory for distribution to the various Government institutions.

Similarly, the Central Pharmacy stores and distributes pharmaceuticals and medical and surgical supplies for Government hospitals, as well as the institutions for the mentally retarded operated by the Department of Human Resources and the mental health clinics throughout the Province. The Central Accounting Division takes care of the accounting functions connected with these centrally administered operations, as well as providing central accounting functions for financial control throughout the Government-operated hospitals.

RIVERVIEW HOSPITAL

In 1976 the patient population at Riverview declined at a slower rate than was experienced in the past few years. In January 1976 there were 1,298 patients which decreased to approximately 1,240 toward the end of the year. While the number of patients admitted declined, an increasing proportion were more seriously ill, including an increase in male patients being admitted with schizophrenia, on an involuntary basis.

Plans to accommodate these changes in the patient population progressed during the year, and in May a conference on the role of Riverview Hospital was held. Mental health workers and other interested professionals from all parts of the Province contributed their ideas, following an encouraging address from the Minister on the important role which Riverview has to play in delivery of health care in the future. The Minister also endorsed the aim of full accreditation by the Canadian Council on Hospital Accreditation by 1977.

The Crease Unit was designated to be the acute admitting unit, and Centre Lawn the unit offering special programs such as Organic Brain Syndrome, Behaviour Modification, and Young Adults. Organizational changes to effect these programs were under way during the latter half of the year, including arrangements with other hospitals to provide surgical services which can no longer be provided safely and economically at Riverview because of the reduced surgical volume.

Delivery of service at the beginning of the year was severely hampered by a shortage of psychiatrists on hospital staff. With the formulation of a more clear-cut future role for Riverview Hospital, and agreement being reached between the British Columbia Medical Association and the Government with regard to remuneration for physicians, advertisements were placed in the professional journals toward the latter part of the year, and medical staffing improved, although shortages continued to exist. During the year the hospital experienced a shortage of beds for male patients.

Closer co-operation with the Greater Vancouver Mental Health Service was achieved through informal meetings among the respective medical and administrative staffs, and with staffs of general hospital psychiatric units.

The Department of Nursing revised the nursing care standards and at the year-end was reviewing the nursing policies and nursing care plans, as well as conducting an audit of nursing activities and reviewing the organizational structure.

New appointments in the year included George Schwartzenhauer, Director of Personnel, succeeding Mrs. Anne Allen, who moved to the Liquor Control Board, and Ian Manning, Executive Director, succeeding Dr. J. C. Johnston, who became a special study director with the Ministry of Health.

Communication between the administration and the employees was maintained through various joint committees which were enhanced by multidisciplinary meetings in each unit, and by an employees' liaison group meeting regularly with administration. Also, discussions were held with the Canadian Mental Health Association and other interested persons on the protection of patients' rights and related matters.

Volunteers from the Canadian Mental Health Association continued in their dedicated work of extending a friendly hand to the patient.

VALLEYVIEW HOSPITAL

The year 1976 was very active at Valleyview Hospital with referrals up to 8½ per cent and a similar increase in numbers accepted for admissions.

As part of a general program of improvement, 36-inch beds have been introduced, bringing the number of patient beds available to 618. This in turn reduced beds available for admissions from the community and, along with a mid-year increase in applications, temporarily lengthened the waiting list.

The hospital added a 35-bed ward, increasing to 70 the beds devoted to active psychiatric care. This improved the hospital's capacity to prepare patients to return to suitable community accommodation (whether it be home or a health care facility). The problems of finding this type of accommodation for the more ambulatory patients became more of a problem during 1976, because of the change in use of some of the community beds previously available, and the closing of some of the private hospitals.

A valuable meeting was held in June when the medical consultation staff of Hospital Programs spent a day at Valleyview. There appeared to be a prospect that patients in this hospital needing extended care, without psychiatric management, might be accepted in large numbers when the UBC and Queen's Park units, each of 300 beds, open during the next 12 months.

The Nursing Department had more involvement with surgical cases since mid-year, when patients commenced leave to general hospitals in the community. Nursing escorts must accompany them for each shift in the majority of cases.

The changes in the administrative set-up at Valleyview had a fairly far-reaching effect on the hospital's operation. Dr. W. W. Black, who served as Director, had, for the past several years, recommended the appointment of a non-medical Executive Director to free the senior Medical Officer to pursue the important clinical aspect of the hospital operation. In July, T. Acton Kilby was appointed Executive Director of Valleyview with Dr. Black becoming Clinical Director. A program was started to prepare the hospital for an initial informal accreditation survey in the spring of 1977, and a formal survey one year later. Various administrative and professional committees were struck to help restructure the hospital to improve its operations and lead up to accreditation.

DELLVIEW HOSPITAL

Dellview Hospital is a special care facility located in the City of Vernon, and was decertified as a mental health facility under the *Mental Health Act* on April 1, 1975. Its function is to provide for the needs of geriatric patients who also suffer from mental disability.

Admissions for the year totalled 98, with a minimal waiting list at any time. The question of the age-limit for admission is currently under study.

During the year the Eligibility Committee, which reviews all patient admissions, met on a regular weekly basis with the Patient Program Co-ordinating Committee. The purpose of the over-all program was to better meet the patients' needs by providing input from all disciplines.

The Volunteer programs were most successful this year, and involved a total of 150 Vernon residents ranging from junior high school students to senior citizens.

Under the direction of an activity work, the recreational and occupational therapy programs increased tremendously, and a total of approximately 1,100 patients were involved in the following programs: Remedial exercises, occupational therapy, bowling (indoor); activation and dance class, bingo, musical sing-a-longs, pub therapy, birthday parties, outdoor barbecues, shopping trips, and outings to local areas of interest.

Medical services were provided through the part-time services of a physician, with dental services available through a local dentist using the hospital's dental suite. Psychiatric services were available through the Vernon Mental Health Centre, while physiotherapy, pharmaceutical, radiological, and regional laundry services were available through the Vernon Jubilee Hospital.

During the year the Okanagan College assessed Dellview's nursing program with the possibility of providing geriatric nursing experience for registered and licensed practical nursing students to commence in early 1977. The Nursing Department was eagerly anticipating this new program as it would provide new incentives to nursing staff to raise and maintain high standards of patient care.

Dellview's in-service education was active with a total of 127 programs, involving the presenting of 525 sessions. Films, filmstrips, cassette, and lectures were well utilized to present a complete range of subjects, including safety, fire, dietary, housekeeping, nursing diagnostic procedures, supervision, and administration.

During the year the female annex ward underwent necessary repairs by the Department of Public Works, which contracted out the installation of a new air-circulating system and emergency-lighting system. The wiring of the hospital's fire alarm system into the city system and the installation of a new telephone and paging system were also completed.

PEARSON HOSPITAL AND WILLOW CHEST CLINIC

Pearson Hospital is presently providing in-hospital care for tuberculosis patients, persons with severe respiratory disabilities from poliomyelitis, and extended-care patients, with emphasis on the younger age-group.

The early part of 1976 saw a major reorganization within Public Health Programs, and Pearson Hospital was transferred from the Bureau of Special Health Services to a new organization, under Hospital Programs, known as Government Health Institutions.

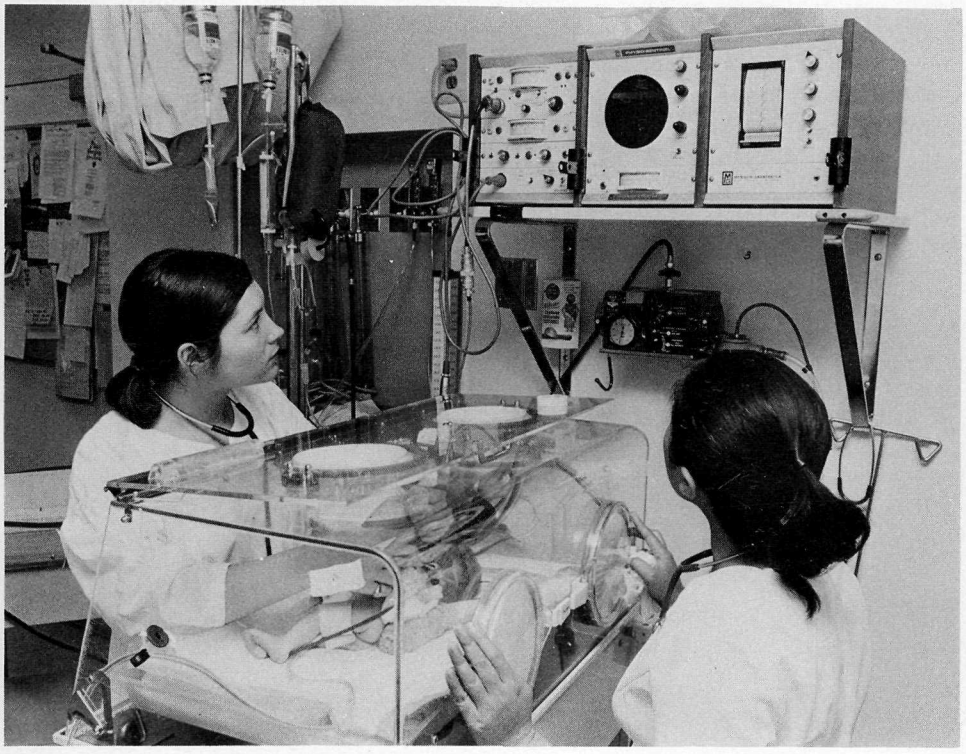
At year-end there were no patients in residence at the Willow Chest Centre, pending completion of renovations to the entire physical plant.

One of the major improvements in the delivery of patient care during the year was the development of a team approach not only within senior management but in particular at the ward level in the actual planning of patient care. Inter-professional teams were working on all extended-care wards as well as on the polio unit. Both staff morale and patient care appeared to have improved.

During the year the Nursing Department completed their procedure manuals, policy manuals, and a forms manual. The removal, to a large extent, of the dichotomy in the assignment of duties between male and female nurses, and the careful commencement of this in the assignment of auxiliary nursing staff, was accomplished. Of major significance was a decision to review the organizational structure within the Nursing Department.

Within the activity services the occupational therapists, physiotherapists, recreation and teaching staff were most enthusiastic about their team activities on the wards, and relationships with the Nursing Department have improved considerably. A small out-patient program was commenced and it was expected that it would be expanded, in an endeavour to teach skills to disabled people that will delay their need for direct hospital in-patient care.

During 1976 a number of changes took place in the Dietetics and Food Service Department. A new system of portion control was implemented and a major revision was made of staff work schedules and assignments in order to offset increased food costs as well as a reduced work week. In January, staff meals were provided for the first time. Hospital-prepared food was being dispensed on a 24-hour basis through vending machines and microwave oven.



Nurses monitor newborn in Vancouver General Hospital's cardiothoracic unit in the Willow Chest Centre.

During the year decisions were made in conjunction with the Consultation Division of Hospital Programs, on the need for, and general location of, a new centralized main kitchen.

The Director of the Social Service Department was given more responsibility for co-ordinating extended-care programs, with the individual workers becoming more involved through team activity on the wards.

A Pharmacy Manual was completed and a Pharmacy and Therapeutics Committee was established. Emergency drug boxes were set up in co-operation with the nursing and medical staff, and were placed on each ward. Individual patient drug profiles were started during the year.

The laboratory participated in the B.C. laboratory accreditation program. This was accompanied by the introduction of a quality control program involving consultative input from the Clinical Laboratory at Shaughnessy Hospital, and use of the American Pathology Association's quality control kits with computerized performance reports.

The hospital's in-service training program was expanded to include instruction to staff from other health care facilities. At year-end two community facilities were attending lectures and demonstrations in such subjects as body mechanics, fire safety and aseptic techniques, as well as alcohol counselling sessions related to management of problem patients.

The Public Works Department continued to provide building repair services during the year, including considerable reroofing as well as replacement of water pipes throughout the hospital.

To improve communications, monitor standards, and move closer to accreditation requirements, a number of committees were established, including a Management Committee, a Bed Utilization Committee, an Infection Control Committee, and a form of Medical Advisory Committee. The hospital was without a Medical Co-ordinator for most of the year, but recruitment to the position was under way at year-end.

EMERGENCY HEALTH SERVICES COMMISSION

EMERGENCY HEALTH SERVICES COMMISSION

The commission was established pursuant to an Act of the Legislature effective July 1, 1974, with the following powers and authorities:

- to provide emergency health services in the Province;
- to establish, equip, and operate emergency health centres and stations in such areas of the Province that the commission considers advisable;
- to assist hospitals, other health institutions and agencies, municipalities, and other organizations and persons to provide such services, and to enter into agreements or arrangements for that purpose;
- to establish or improve communication systems for emergency health services in the Province;
- to make available the services of medically trained persons on a continuous, continual, or temporary basis to those residents of the Province who are not, in the opinion of the commission, adequately served with existing health services;
- to recruit, examine, train, register, and license emergency medical assistants;
- to provide ambulance services in the Province; and
- to perform any other function related to emergency health services as the Lieutenant-Governor in Council may order.

To these functions has been added the responsibility for the medical aspects of the Provincial Emergency Programme such as medical involvement in disaster planning, responsibility for federal stores stockpiled around the Province, and involvement when actual disasters occur.

Further development of the Provincial ambulance service has involved the establishment of new services in the communities of Port Renfrew, Madeira Park, Lumby, and Clinton.

Although basic training programs were temporarily suspended during the year, the advanced "paramedic" program provided at the Royal Columbian Hospital was continued and a further nine crew members were expected to graduate by year-end as Emergency Medical Assistants Grade III. In addition, in co-operation with the Continuing Medical Education Department, University of British Columbia, two emergency physicians and one emergency department nurse were sent to the communities of Smithers, Terrace, and Kitimat to provide instruction to emergency department personnel, and local physicians and dentists, in basic cardiopulmonary resuscitation, and in the care of patients who have suffered multiple trauma. These programs proved very popular and were oversubscribed 100 per cent in the areas in which they were offered.

Two meetings were held in 1976 with representatives of the Province of Alberta, Saskatchewan, and Manitoba responsible for ambulance services. The Executive Director of the commission also participated in the following meetings: Highway safety, organized by the Insurance Corporation of British Columbia; a large international meeting held in Baltimore, Maryland, attended by representatives from 14 foreign countries to consider emergency medical services; and the annual meeting of the American Association for Automotive Medicine, where much interest was shown in the functions of the commission in British Columbia.

The Executive Director also acted as chairman of a committee set up by the Emergency Measures Organization of the Federal Government to design a first aid kit suitable for use at all federally operated airports across Canada. The assistance

of emergency physicians and general surgeons was sought within British Columbia, and the final makeup of the kit was presently under consideration at year-end by representatives of the Federal Government.

Arrangements were made for the St. John Ambulance Society to administer a plan to teach basic cardiopulmonary resuscitation (life support) to selected groups of individuals in this Province, with the support of the commission.

The commission continued to produce its own ambulances at a reduced rate during the year, but still at a considerable saving over commercially available vehicles.

As in 1975, a physician was employed by the commission to provide medical attention for the fishing fleet for one month at Rivers Inlet, and a subsequent month at Port Renfrew.

During the past year the Executive Director travelled over 5,000 miles around the Province visiting commission personnel and, on occasion when time allowed, visiting administrators of local hospitals and some local physicians.

The number of employees within the commission remained approximately the same as last year. It was anticipated that the volume of calls experienced by December 31, 1976, would be approximately 142,000, compared with 124,822 for 1975, an increase of 14 per cent.

Emergency Health Services Commission continued to build its own ambulances during 1976, at a considerable saving over commercially manufactured units.

AUDITOR'S REPORT

To the Members of the
Emergency Health Services Commission,
Province of British Columbia

I have examined the statement of financial position of the Emergency Health Services Commission as at March 31, 1976, and the statement of operations and surplus (deficit) for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion these financial statements present fairly the financial position of the Emergency Health Services Commission as at March 31, 1976, and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding period.

K. M. LIGHTBODY
Acting Comptroller-General

Victoria, B.C., November 17, 1976

Table 32—Statement of Operations and Surplus (Deficit), Emergency Health Services Commission

	Year Ended March 31, 1976	Ten-month Period Ended March 31, 1975
	$	$
Income:		
Emergency service fees	1,068,742	716,256
Province of British Columbia	16,486,599	6,097,477
	17,555,341	6,813,733
Expenditure:		
Operations—		
Salaries, wages, and benefits	10,205,950	4,218,920
General expenses	1,083,526	1,201,262
Vehicle expenses	927,995	164,697
Training	621,934	258,467
Supplies	551,316	171,875
Land and buildings purchased	53,640	—
Vehicles and equipment purchased	1,702,549	653,885
	15,146,910	6,669,106
Administration—		
Salaries and benefits	623,444	373,880
General office expenses	110,774	129,944
Public education program	1,701	73,578
Office furniture and equipment purchased	2,579	52,079
	738,498	629,481
	15,885,408	7,298,587
Excess of income over expenditure (expenditure over income) for the year	1,669,933	(484,854)
Deficit, beginning of the year	484,854	—
Surplus (deficit), end of the year	1,185,079	(484,854)

NOTE TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED MARCH 31, 1976

Significant accounting policies—Land and buildings, operator vehicles and equipment, and office furniture and equipment are charged to operations at the time of acquisition, and concurrently are recorded in the Capital Fund. The original cost of the assets is removed from the Capital Fund upon disposal.

Table 33—Statement of Financial Position, Emergency Health Services Commission

ASSETS

	March 31 1976	March 31 1975
	$	$
Operating Fund:		
Cash	92,348	512
Accounts receivable—		
Province of British Columbia	1,575,000	—
Service fees and other	303,102	616,596
Operator advances	308,903	230,067
Prepaid expenses	82,486	—
	2,361,839	847,175
Capital Fund:		
Fixed assets at cost (note)—		
Land and buildings	53,640	—
Vehicles and equipment	2,356,434	653,885
Office furniture and equipment	54,658	52,079
	2,464,732	705,964

LIABILITIES AND SURPLUS (DEFICIT)

Operating Fund:		
Accounts payable and accrued liabilities	1,163,660	1,126,929
Accountable advance—Province of British Columbia	13,100	205,100
Surplus (deficit)	1,185,079	(484,854)
	2,361,839	847,175
Capital Fund: Net investment in fixed assets	2,464,732	705,964

Approved on behalf of the Commission:

D. H. WEIR

Chairman, Emergency Health Services Commission

FORENSIC PSYCHIATRIC SERVICES COMMISSION

FORENSIC PSYCHIATRIC SERVICES COMMISSION

During the year the commission continued to expand and improve the quality of forensic psychiatric services in the Province. In May a forensic clinic was opened in Victoria with an establishment of four professional staff. This unit, which is housed in the Victoria Mental Health Centre, will initially serve the southern end of Vancouver Island. In August a forensic clinic was opened in Vancouver to serve the Lower Mainland. This unit, which incorporates the former forensic clinic situated at Vancouver General Hospital, will provide in common with the Victoria unit, assessment, treatment, consultation and follow-up for mentally ill offenders who can be cared for in an out-patient setting. The Vancouver Clinic, situated at 805 West Broadway, also provides office accommodation for the commission and the administrative staff.

In July, 21 new positions were approved by the Treasury Board, bringing the Forensic Psychiatric Service's establishment to 161 positions. The additional staff were required in order to set up a small administrative staff, inaugurate the two forensic clinics, and meet the increased demands upon the Forensic Psychiatric Institute.

The development of an in-service education program in the highly specialized field of forensic psychiatric medicine was a necessity which continued to be the object of intensive study and development.

The work load of the Forensic Institute greatly increased during the year as a result of more admissions. It appeared that there would be at least a 20-per-cent increase in admissions.

The development of new programs included supervised holidays for patients at selected camps operated by the Corrections Branch, and increasing involvement in pre-release planning for patients. In-patient units at the Shaughnessy Hospital and Eric Martin Institute, Victoria, had not come into operation by year-end and it was possible that recent amendments to the *Criminal Code* permitting the greater use of community facilities would obviate the need of these developments.

The commission was studying the forensic psychiatric needs of centres outside the Lower Mainland, and discussions had taken place with regard to the level of service to be provided by the commission in the fields of mental retardation and juvenile delinquency. The lack of services in this latter field are of particular concern. Provincial/federal co-operation in the forensic psychiatric field remained at a very high level and planning continued for projected joint programs.

ALCOHOL AND DRUG COMMISSION

ALCOHOL AND DRUG COMMISSION

The philosophy of the Alcohol and Drug Commission (ADC) is to become actively involved with regional and community agencies in determining regional and community needs, and with the Department of Health in providing a direct service to the public, where it is more economical and effective to do so.

On July 1, 1976, the Narcotic Addiction Services, the Alcohol and Drug Counselling Services, and the Youth and Family Counselling Services were transferred from the Vancouver Resources Board to the ADC. In addition to its own service, the commission provides financial support to 42 service agencies throughout the Province.

The commission has developed its system of care for the problem drinker and alcoholic, and is undertaking to bring this total system of care to an acceptable level in the four operational regions of the Province. Still to be developed is the system of care for the heroin abuser, and at year-end this was being studied by the commission and its Advisory Council.

In the field of education, because post-educational programs have been less than effective and no adequate monitoring and evaluation techniques have been developed, the commission, in conjunction with the Department of Education and other appropriate organizations, was discussing the development of an effective school program with a built-in monitoring and evaluation component.

REGIONALIZATION

The commission decided that, in order to have an effective and equitable distribution of services in the Province, it was necessary to plan on a regional rather than Province-wide basis. Residential treatment centres, for instance, are best conceived of as serving a geographical area and working in close co-operation with other services in the area.

During the year, approval was obtained to divide the Province initially into four regions—Northern B.C., Central and Southeastern B.C., Vancouver Island and West Coast, and Lower Fraser Valley.

It is proposed that the regions will become planning and administrative units. Eventually each region will have a regional director who will be an employee of the commission and who will be responsible for program and program co-ordination in the region. Each region will also have an advisory committee appointed from well-informed and interested professionals and citizens in the region. The committee will advise the commission on what services are required, and the appropriateness of the services that are provided.

While full implementation of this plan will take some time, at year-end the commission was planning to hold regional workshops to orient program workers to the system of care in Prince George, Kamloops, Nanaimo, and Vancouver.

SYSTEM OF CARE

The system of care developed by the ADC for problem drinkers refers to the continuation of services which, it is felt, should be available to the chemically dependent person seeking help within each region of the Province.

The elements of the system are as follows:

- Detoxification facilities.
- Out-patient counselling assessment and referral clinics.
- Residential treatment centres.
- Residential support facilities, i.e., recovery homes/halfway houses, etc.

It is vital to the system that close co-operation exist between the individual services, and that appropriate referrals from one to the other are easily arranged.

It is anticipated that each of the four regions of the Province will have one major residential treatment centre, one or more residential support facilities, one or more detox units, a number of out-patient clinics strategically located in population centres to provide entry into the system, ongoing nonresidential treatment where appropriate, and follow-up care for clients leaving a residential setting.

At year-end all or some of these facilities were available in each region, and priority was being given where possible to filling the gaps, on a regional basis.

DIRECT SERVICES

One of the commission's policies is that, where appropriate, services may be provided directly by the commission, with the staff being employees of the Provincial Government. It is felt that this will give the commission more direct control over the type and quality of services provided.

Until June 1976 the only direct service of the commission was the downtown detoxification centre in Vancouver. On July 1, 1976, however, the drug services formerly administered by the Vancouver Resources Board were transferred to the commission. The employees became Provincial public servants, and the commission assumed responsibility for all aspects of the operation of the program.

This added three programs to the direct services of the commission. The Narcotic Addiction Services operates five clinics, offering treatment to heroin addicts where methadone maintenance is a major component of the program. There are also pharmacy and laboratory services needed to support a methadone program.

The Alcohol and Drug Counselling Service provides out-patient counselling and assessment for individuals with alcohol-related problems. This service has a large case load and a sizeable proportion of it represents referrals from business and industry.

The youth services program provides a range of services aimed at young people and families, where the primary problem is some type of drug involvement. This service ranges from crisis intervention to long-term intensive individual or family counselling, aimed at reorienting the individual to more acceptable behaviour or helping the family to take a more constructive approach to the problems of its members.

ALCOHOL SERVICES

Several types of services are required to deal adequately with this problem.

The commission provides some of these services either directly or through funded agencies. The commission operates one detox and one alcohol out-patient counselling service. Residential treatment is offered in four locations by funded agencies, and there are five supportive after-care residences. In addition to Vancouver, out-patient counselling is offered in 11 communities throughout the Province, and there are four other detoxification centres. There are also counsellors in 11 communities who are more oriented to problems of alcoholism in the native Indian community.

The commission is assessing the effectiveness of these services, and their responsiveness to the needs of the communities in which they are located. It hopes to develop the quality of these services and to expand them into other communities and regions of the Province which require services.

These services emphasize a professional approach to the client, based on the belief that through professional counselling people can accept responsibility for their behaviour, and learn more acceptable ways of dealing with life situations rather than resorting to alcohol. The commission recognizes the valuable past and ongoing role of Alcoholics Anonymous. Clients in the programs are made aware of the Alcoholics Anonymous Fellowship and are encouraged to attend meetings if they feel it will be helpful to them.

NARCOTIC SERVICES

The principal treatment approach to narcotic dependency over the past decade has been voluntary methadone maintenance. The commission operates five methadone clinics in Vancouver directly, and funds a further seven in various locations in the Province. While methadone maintenance is a controversial form of treatment, where it has been well managed within the commission protocols it has been successful in greatly reducing the illicit drug use of a significant number of heroin addicts.

The commission funds one small drug-free program for heroin addicts in Kamloops, modelled on the therapeutic community.

At year-end the commission was actively investigating a number of the approaches to narcotic dependency, and hoped to have a much broader range of treatment programs available in the future.

The commission was also studying over-all approaches to the problem of narcotic dependency, with a view to recommending a comprehensive program for consideration by March 31, 1977.

NEW PROGRAMS

In the last quarter of the year the commission was planning and implementing a number of new programs:

Residential Treatment Centre

A model residential treatment centre was planned for the Lower Fraser Valley Region. The centre would be a treatment resource for the Lower Mainland, a model for developing programs throughout the Province, and a training centre for professionals working in this field.

The facility will have a capacity of about 30 beds and will have an intensive therapy program of about four weeks' duration.

Maple Cottage Detox

At year-end detailed planning was under way for a detoxication centre at New Westminster, which will service the South Burnaby, New Westminster, Surrey, Richmond, Delta, and Coquitlam area. Its initial capacity will be 20 beds with possible further expansion to an additional 15–20 beds when required.

RESEARCH

One of the priority items of the ADC was the build-up of its Research Department. The department had three sections—monitoring, planning, and evaluation. The evaluation section was not yet operational.

All direct service (commission) and indirect service (funded) agencies participate in the client monitoring system, as do two nonfunded agencies. The

system will provide information on client drug use, referral pattern within the system of care, and client profiles for each program. The first data from the monitoring system covering the period from April 1, 1975, to September 30, 1975, had been processed and all participants had received individual reports. The program will be up to date by March 31, 1977, and will be the first such extensive overview of Government-funded agencies in any Canadian province.

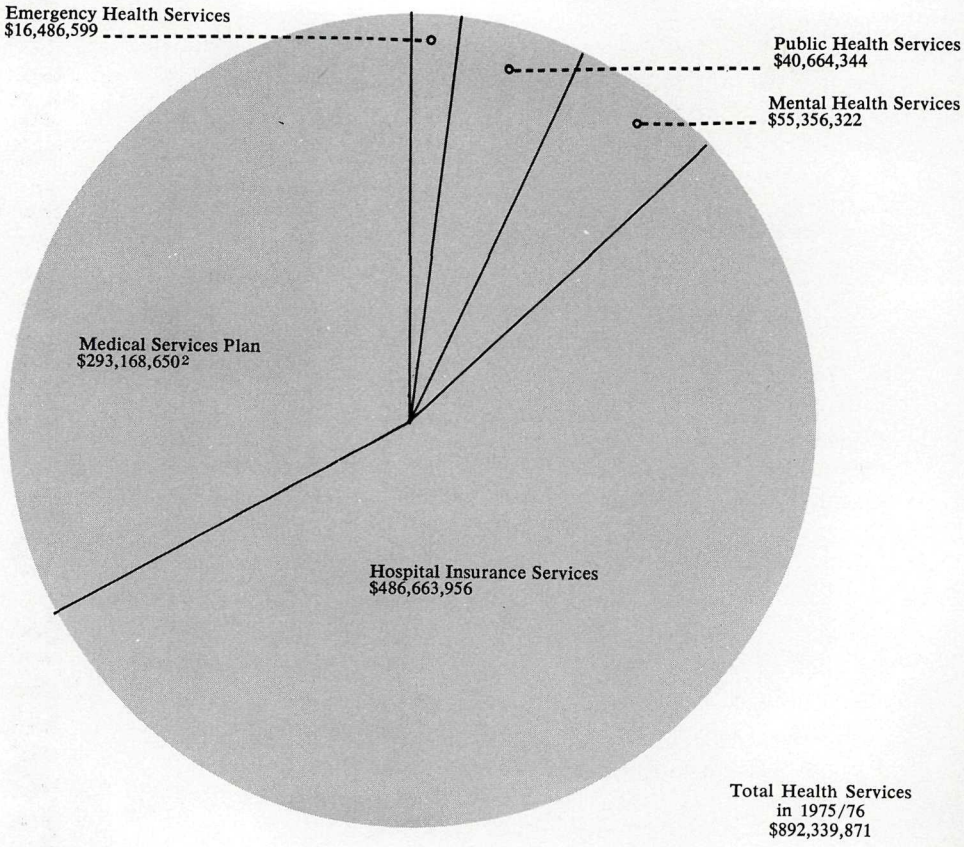
The monitoring system will provide some of the basic data for the planning and evaluation sections. The planning component will study the needs and services of an area as it relates to the system of care for the chemically dependent. All available data will be considered in analysing the needs and resources of a community or region. Such data will provide a basis for future development of services and funding decisions on existing programs. The evaluation section was not yet in operation by year-end.

DEPARTMENT OF HEALTH EXPENDITURES, 1975/76

Table 34—Expenditure by Principal Categories in the Department of Health for the Fiscal Year 1975/76[1]

	Total Expenditure in Fiscal Year Ended March 31, 1976
	$
Public Health Services	40,664,344
Mental Health Services	55,356,322
Hospital Insurance Services	486,663,956
The Medical Services Plan of British Columbia	293,168,650[2]
Emergency Health Services	16,486,599
Total Health Services	892,339,871

CHART VI—EXPENDITURE BY PRINCIPAL CATEGORIES IN THE DEPARTMENT OF HEALTH FOR THE FISCAL YEAR 1975/76[1]



[1] Data are shown in accordance with the 1975/76 Public Accounts of British Columbia.

[2] The expenditure of $293,168,650 shown for the Medical Services Plan is the gross operating cost as shown in the detailed statements in Section F of the Public Accounts. The actual charge to Vote 82 was $145,800,000 and covered the return of the Federal sharing under the *Medical Care Act* (Canada) and *Hospital Insurance and Diagnostic Services Act,* subsidy by the Province for low-income residents, and the estimated deficits not covered by premiums and other revenues. Similarly the total for the Department of Health is shown as $892,339,871, whereas the net total is $744,971,221. This latter figure agrees with the total shown in Section D of the Public Accounts.

Table 35—Detailed Expenditure by Principal Categories in the Department of Health for the Fiscal Year 1975/76[1]

	Total Expenditure in Fiscal Year Ended March 31, 1976
	$
Public Health Services:	
Minister's office	83,964
Office of Consultant to the Minister	57,930
Health Advisory Council	*Nil*
Accounting Division	796,584
General services	2,166,010
Home dialysis service	470,604
Division of Occupational Health	431,338
Division for Aid to Handicapped	1,103,361
Development of alternative care facilities	350,263
Hearing-aid Regulation Act	11,963
Grants for health agencies	2,571,519
Community health services development	264,704
Local health services	20,009,684
Division of Laboratories	1,798,217
Division of Vital Statistics	1,195,601
Division of Venereal Disease Control	396,339
Division of Tuberculosis Control	1,218,576
Division of In-patient Care	4,526,333
Action B.C.	275,000
Training in the expanded role of nurses	73,530
Salary contingencies	2,862,824
Subtotal, Public Health Services	40,664,344
Mental Health Services:	
General administration	6,290,677
Division of Nursing Education	290,364
Community services	3,493,454
In-patient care	41,781,184
Salary contingencies	3,500,643
Subtotal, Mental Health Services	55,356,322
Hospital Insurance Services:	
Administration	3,556,066
Payments to hospitals—	
Claims	469,946,696
Grants in aid of equipment	2,374,458
Capital and debt services	10,786,736
Subtotal, Hospital Insurance Services	486,663,956

[1] Data are shown in accordance with the 1975/76 Public Accounts of British Columbia.

Table 35—Detailed Expenditure by Principal Categories in the Department of Health for the Fiscal Year 1975/76[1]—Continued

The Medical Services Plan of British Columbia expenditure:		
Benefits—	$	
Medical care	256,933,126	
Additional benefits	14,759,859	
	271,692,985	
Adjustment of provision for unpresented and unprocessed benefit costs	8,816,144	
		280,509,129
Administration—		
Salaries and employee benefits	8,880,645	
General office expenses	3,778,876	
		12,659,521
Subtotal, The Medical Services Plan of British Columbia[2]		293,168,650
Emergency Health Services		16,486,599
Total Health Services		892,339,871

[1] Data are shown in accordance with the 1975/76 Public Accounts of British Columbia.

[2] The complete 1975/76 Financial Statements and notes for the Medical Services Plan are on pages 157 to 159.

MEDICAL SERVICES PLAN

Financial Statement

AUDITOR'S REPORT

I have examined the statement of working capital and financial position of the Medical Services Plan of British Columbia operating under the direction and control of the Medical Services Commission of British Columbia as at March 31, 1976, and the related statements of operations and changes in cash position for the year then ended. My examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as I considered necessary in the circumstances.

In my opinion these financial statements present fairly the financial position of the Medical Services Plan of British Columbia as at March 31, 1976, and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

K. M. LIGHTBODY
Deputy Comptroller-General

July 19, 1976
Victoria, B.C.

Table 36—Statement of Working Capital and Financial Position as at March 31, 1976, of the Medical Services Plan of British Columbia

	1976	1975
	$	$
Working capital (deficiency)—beginning of year	(1,544,256)	17,809,137
Excess of expenditure over revenue (Table 37)	(70,779,366)	(19,353,393)
	(72,323,622)	(1,544,256)
Payments from the Consolidated Revenue Fund, Province of British Columbia (Note 2)	17,628,556	—
Working capital deficiency—end of year (Note 2)	(54,695,066)	(1,544,256)
Represented by (financial position):		
Liabilities—		
Estimated liabilities for unpresented and unprocessed benefit costs—		
Medical care	44,653,300	36,263,808
Additional benefits	2,446,700	2,020,048
	47,100,000	38,283,856
Premiums paid in advance	11,373,175	9,048,304
	58,473,175	47,332,160
Less assets—		
Cash	3,778,109	4,787,904
Bank deposit receipts	—	41,000,000
	3,778,109	45,787,904
Working capital deficiency	54,695,066	1,544,256

Approved on behalf of the Commission:

D. H. WEIR

Chairman pro tem., Medical Services Commission of British Columbia

See accompanying notes to financial statements.

Table 37—Statement of Operations for the Year Ended March 31, 1976, of the Medical Services Plan of British Columbia

	1976	1975
	$	$
Revenue:		
Premiums—		
Subscribers' premiums	95,316,199	88,930,257
Adjustment of provision for prepaid premiums	(2,324,871)	279,738
	92,991,328	89,209,995
Government of British Columbia—premium assistance	19,851,008	19,175,882
	112,842,336	108,385,877
Interest income	1,791,946	5,323,636
Government of Canada contributions—		
Medical Care Act	86,368,370	81,541,066
Hospital Insurance and Diagnostic Services Act	21,386,632	9,864,031
	107,755,002	91,405,097
	222,389,284	205,114,610
Expenditure:		
Benefits—		
Medical care	256,933,126	199,371,953
Additional benefits	14,759,859	11,014,830
	271,692,985	210,386,783
Adjustment of provision for unpresented and unprocessed benefit costs	8,816,144	1,580,205
	280,509,129	211,966,988
Administration (Note 3)—		
Salaries and employee benefits	8,880,645	6,868,010
General office expenses	3,778,876	3,524,534
	12,659,521	10,392,544
Amalgamation administration expenses	—	2,108,471
	293,168,650	224,468,003
Excess of expenditure over revenue	70,779,366	19,353,393

See accompanying notes to financial statements.

Table 38—Statement of Changes in Cash Position for the Year Ended March 31, 1976, of the Medical Services Plan of British Columbia

	1976 $	1975 $
Cash provided:		
Subscribers' premiums	95,316,199	88,930,257
Government of British Columbia—		
Premium assistance	19,851,008	19,175,882
Operating cash requirements	17,628,556	—
	37,479,564	19,175,882
Government of Canada	107,755,002	91,405,097
Interest income	1,791,946	5,323,636
	242,342,711	204,834,872
Cash applied:		
Medical Plan benefits	271,692,985	210,386,783
Administration	12,659,521	12,501,015
	284,352,506	222,887,798
Decrease in cash	42,009,795	18,052,926
Cash assets:		
Beginning of year	45,787,904	63,840,830
End of year	3,778,109	45,787,904

See accompanying notes to financial statements.

NOTES TO FINANCIAL STATEMENTS FOR THE YEAR ENDED MARCH 31, 1976

1. ACCOUNTING POLICIES

Income determination—The Commission recognizes premium income as it is received. Premiums paid in advance are shown as a liability until the month in which they are earned. Interest and Government contributions are recognized as income when received.

Benefit costs—The Commission provides for unpresented and unprocessed benefit costs. These costs are charged to income for the year on the basis of claims experience during the current year.

2. WORKING CAPITAL DEFICIENCY

Section 11 of the *Medical Services Act,* chapter 24, 1967, provides for the funding of any working capital deficiency from the Consolidated Revenue Fund, as required. During the year ended March 31, 1976, $17,628,556 was transferred from the Consolidated Revenue Fund to meet cash requirements.

The estimated cash operating requirements for the year ending March 31, 1977, have been provided for in the 1976/77 Estimates of Expenditure.

3. ADMINISTRATION

The public sector activities of the former licensed carriers, Medical Services Association and C.U. & C. Health Services Society, have now been amalgamated with the operations of the Medical Services Plan of British Columbia. The comparative figures for the year ended March 31, 1975, have been restated accordingly.

4. FINANCIAL STATEMENT PRESENTATION

For the purpose of a more informative presentation, the former Statement of Financial Position has been replaced by a Statement of Working Capital and Financial Position, and in addition a Statement of Changes in Cash Position is now included. Prior year figures have been restated accordingly.

ANNUAL REPORT ADVISORY COMMITTEE

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